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RENT-DSX

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RENT-CFP-QI

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RENT-T71

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DID YOU KNOW NETWORKS CENTRE OFFERS NEXT DAY DELIVERY?
➤ Atlas X1 QuickPort
➤ GigaPlus
➤ Cat6Plus
➤ 10GPlus
➤ System Accessories
➤ Copper Patch Leads
➤ Fibre Optic Patch Leads & Pigtails
➤ Fibre Optic Connectors
➤ Fibre Optic Adaptors
➤ Optical Patch Panels
➤ HDX Cassette System
➤ HI-DEX Cassette System
➤ Pre-Terminated Assemblies
➤ Fibre Optic Cable
➤ Railsafe Cables
➤ Blolite Air Blown Fibre System
➤ MicroBlo Air Blown Fibre System
ATLAS-X1™

The Atlas X1™ component rated unshielded and shielded copper connectivity brings a new flagship product to Leviton. Verified by independent testing labs, it is the first system to support shielded applications from Cat5e to 8 using the same RJ45 jack form factor, creating a smart and simple migration path. Designed for demanding mission critical networks, CAT8 will play a major role in Data Centres upgrading to 25/40GBASE-T.

The Atlas-X1 range uses the Leviton QuickPort® footprint jack which is compatible with existing Leviton panels, meaning you can take advantage of the advanced features of Atlas-X1™ even for your legacy Leviton installation.

**ATLAS-X1 SHIELDED QUICKPORT JACKS**

- Wide range of jack colours available (excluding CAT8)
- Innovative wire manager and door-release levers for quick, repeatable terminations
- Tool-free design requires no specialised termination tool
- Patented Retention Force Technology (RFT) protects against tine damage and increases system longevity
- Metal housing even in Unshielded jacks for PoE++ and heat dissipation
- Each jack includes interchangeable icons (voice, data, AV, and blank), colour-coded to match the jack face.
- Shielded jacks provide additional EMI/RFI protection, signal isolation, and alien crosstalk (AXT) suppression.
- Unified form factor and termination method, from Cat5e to CAT8.
- Compatible with all QuickPort panels and housings
- Optional shuttered versions for extra protection against dust, debris and contaminants.

**Standards:**

- Standards compliance TIA / ISO
  - ANSI/TIA-568-C.2
  - ISO/IEC 11801-1
- IEEE 802.3at (Type 1) PoE 15.4 watts
- IEEE 802.3at (Type 2) PoE 30 watts
- IEEE 802.3bt (Type 3) PoE+ 60 watts
- IEEE 802.3bt (Type 4) PoE+ 100 watts
- Cisco Universal PoE (UPOE) 60 watts
- Power over HDBaseT™ (POH) 100 watts
- AWG wire range: 26 to 22 gauge
- Mating cycles: 750 plug mating cycle & 20 re-terminations
- *Excludes Cat5e

**Part No:**  **Description:**

<table>
<thead>
<tr>
<th>BR-81SJK-R78</th>
<th>Cat8 ATLAS-X1 Shielded Quickport Jacks</th>
</tr>
</thead>
<tbody>
<tr>
<td>BR-6ASJK-R6</td>
<td>Cat6 ATLAS-X1 Shielded Quickport Jacks</td>
</tr>
<tr>
<td>BR-61SJK-R6</td>
<td>Cat6 ATLAS-X1 Shielded Quickport Jacks</td>
</tr>
<tr>
<td>BR-5ESJK-R5</td>
<td>Cat5e ATLAS-X1 Shielded Quickport Jacks</td>
</tr>
</tbody>
</table>

*Colour - W White; Y Yellow; O Orange; C Crimson; P Purple; B Blue; G Grey; E Black; B Brown; V Green; I Ivory

Shuttered version available in Cat6A, Cat6 and Cat5e (substitute ‘R’ for ‘S’).
➤ **ATLAS-X1 UNSHIELDED QUICKPORT JACKS**

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>BR-6AUJK-R*6</td>
<td>Cat6 ATLAS-X1 Unshielded Quickport Jacks</td>
</tr>
<tr>
<td>BR-61UJK-R*6</td>
<td>Cat6A ATLAS-X1 Unshielded Quickport Jacks</td>
</tr>
<tr>
<td>BR-5EUJK-R*5</td>
<td>Cat5e ATLAS-X1 Unshielded Quickport Jacks</td>
</tr>
</tbody>
</table>

*Colour - W White; Y Yellow; O Orange; C Crimson; P Purple; B Blue; G Grey; E Black; B Brown; V Green; I Ivory

Shuttered version available in Cat6A, Cat6 and Cat5e (substitute 'R' for 'S')

➤ **ATLAS-X1 QUICKPORT JACK ACCESSORIES**

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>BR-ICONS-IC*</td>
<td>Bulk icon pack of 72 x 2 sided icon, 24 of each DATA, VOICE, AV</td>
</tr>
<tr>
<td>BR-AXUJK-BWM</td>
<td>Atlas-X1 Unshielded Wire Managers, bag of 10, White</td>
</tr>
<tr>
<td>BR-AXUJK-BGM</td>
<td>Atlas-X1 Shielded Wire Managers, bag of 10, Grey</td>
</tr>
<tr>
<td>BR-AXUJK-BEM</td>
<td>Atlas-X1 Shielded Wire Managers for Cat6, bag of 10, Black</td>
</tr>
</tbody>
</table>

*Colour - W White; Y Yellow; O Orange; C Crimson; P Purple; B Blue; G Grey; E Black; B Brown; V Green; I Ivory

➤ **ATLAS-X1 QUICKPORT JACK ACCESSORIES**

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>BR-AB100-00</td>
<td>Commscope Jack Adaptor</td>
</tr>
</tbody>
</table>

  * Colours Available: White or Black

  * Allows Quick Port jacks to be installed into SYSTIMAX or Uniprise Wall plates and Surface Mount Boxes
  * Packaged individually and sold separately from jacks
✈ ATLAS-X1 SHIELDED PATCH PANELS

✈ Shielding protects against electromagnetic interference (EMI) and radio frequency interference (RFI), and provides excellent alien crosstalk (AXT) suppression
✈ Includes appropriate grounding hardware
✈ High-density 1U 48-port option maximises rack space and reduces costs in high-density applications
✈ Accepts any QuickPort jacks including Audio Visual (Call for details)

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BR-4S255-S24</td>
<td>1U 24 Port Flat Shielded Panels Unloaded</td>
</tr>
<tr>
<td>BR-4S256-S24</td>
<td>1U 24 Port Angled Shielded Panels Unloaded</td>
</tr>
<tr>
<td>BR-4S255-D48*</td>
<td>1U 48-Port Flat Shielded QuickPort Patch Panel</td>
</tr>
<tr>
<td>BR-4S256-D48</td>
<td>1U 48-Port Angled Shielded QuickPort Patch Panel</td>
</tr>
<tr>
<td>BR-49005-CMB</td>
<td>Cable Management Bar for flat panel</td>
</tr>
<tr>
<td>BR-49254-BC1</td>
<td>Angled panel transitional cover</td>
</tr>
</tbody>
</table>

* Cable management bar sold separately

✈ ATLAS-X1 UNSHIELDED PATCH PANELS

The QuickPort system, Leviton’s exclusive set of mix and match panels, connectors, wallplates, and surface-mount boxes, allows you to create the perfect mix of voice, data, video and audio, all in a single panel. Connectors sold separately.

✈ For Magnifying lens label holder option substitute ‘H’ with ‘L’

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BR-49255-H24</td>
<td>1U 24-Port Flat Unshielded QuickPort Patch Panel</td>
</tr>
<tr>
<td>BR-49256-H24</td>
<td>1U 24-Port Angled Unshielded QuickPort Patch Panel</td>
</tr>
</tbody>
</table>
Leviton®

➤ **FLAT COMPOSITE UNSHIELDED QUICKPORT PANEL & CABLE MANAGER**

- Stylish panel face can be customised to feature any design, colour or logo
- Patch lead managers prevent cables from obstructing view of port numbers
- Clear label holders create a window to easily view port numbers and custom designs

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>BR-C1255-H48</td>
<td>2RU 48-Port Flat Composite QuickPort Panel Unloaded</td>
</tr>
<tr>
<td>BR-C1253-2CM</td>
<td>2RU Blank Panel / Cable Manager</td>
</tr>
</tbody>
</table>

➤ **VERTIGO ZERO-U PATCH PANELS**

Patented VertiGO Zero-U Patch Panels offer unprecedented versatility for a wide range of installations. In data centres where left- or right-side cabinet installation is ideal, VertiGO can share mounting hardware with servers or other existing equipment. Where traditional cabinet space is lack, VertiGO can be mounted to a ladder tray, wire basket, directly to the wall, under a raised floor, or even onto modular furniture.

- Zero-U panels can be mounted to a ladder tray, wire basket, under a raised floor, or onto modular furniture
- QuickPort openings for copper and fibre installations
- Low-profile design fully covers connections
- Improves cabinet centre airflow by routing rear cable along outer edges
- Styles with 3-inch channels provide additional cable management space
- Hinged doors provide easy access to termination field
- Patented magnifying lens label holders facilitate easy reading

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>BR-C49280-QP0</td>
<td>12-Port Unshielded QuickPort VertiGO Panel, panel only, empty</td>
</tr>
<tr>
<td>BR-49280-QP3</td>
<td>12-Port Unshielded QuickPort VertiGO Panel, 3&quot; channel, empty Manager</td>
</tr>
</tbody>
</table>
➤ **ATLAS-X1™ CAT8 PATCH LEADS**

- Part of a complete Atlas-X1 Cat8 shielded system for 25/40GBASE-T networks
- Provides excellent alien crosstalk suppression and EMI/RFI protection
- Outside diameter of 6.2 mm ensures ease of management
- Independently tested and guaranteed to meet or exceed requirements as specified in ANSI/TIA-568-C.2-1 and ISO/IEC 11801 Class I
- Low-smoke halogen-free materials
- 26 AWG, S/FTP

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>BR-81Z10-SD5</td>
<td>CAT8 S/FTP, 0.5 M, GREY</td>
</tr>
<tr>
<td>BR-81Z10-S*</td>
<td>CAT8 S/FTP 1 TO 5M GREY</td>
</tr>
</tbody>
</table>

*Length: 01=1m, 02=2m, 03=3m, 04=4 m, 05=5m

For Atlas Cat6A, 6 or 5e patch leads please see configurator on page 26

➤ **ATLAS-X1™ CAT8 SHIELDED CABLE**

- Independently tested and verified to meet ANSI/TIA Cat8 and ISO 11801 Class I performance
- Bend radius: 4 x OD (without load), 8 x OD (with load)
- Mylar® tape and aluminium shield provide a high level of security
- Outer diameter 8.2mm
- Complies with: ISO/IEC 11801, IEC 61156-5, EN 50173-1, EN 50288-11-1
- EN 50575:2014 (Euroclass): Euroclass Dca
- IEEE Draft 802.3bt (Type 4) Power over Ethernet (PoE+) applications up to 100 watt
- Supports 25/40GBASE-T networks
- Construction: 22 AWG, S/FTP
- Storage Temperature: -40 ºC to +70 ºC & Operating Temperature: -10 ºC to +60 ºC

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>BR-126-SFS8D-5LS</td>
<td>Class I Cat8 S/FTP Cable, LSZH, Euroclass Dca, Blue, 500m Reel</td>
</tr>
</tbody>
</table>

Atlas X1 Cat6A, 6 and 5e jacks are fully compatible with 10GPlus, Cat6Plus and Gigaplus shielded and unshielded cables on pages 14, 17 & 20.
Surface-mount boxes have breakouts to match common trunking systems and cable entry.

- 1-, 2-, and 4-port surface-mount boxes

Mounts with screws or adhesive mounting tape (both provided)

4S089 products are designed to work with Leviton QuickPort shielded or UTP Cat6A connectors to allow proper bend-radius control.

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>BR-41089-12*</td>
<td>12-Port Surface-Mount Box, 193 W x 127 D x 28 H</td>
</tr>
<tr>
<td>BR-41089-6*P</td>
<td>6-Port Surface-Mount Box, 162 W x 81 D x 27 H</td>
</tr>
<tr>
<td>BR-41089-4*P</td>
<td>4-Port Surface-Mount Box, 121 W x 81 D x 27 H</td>
</tr>
<tr>
<td>BR-41089-2*P</td>
<td>2-Port Surface-Mount Box, 64 W x 56 D x 27 H</td>
</tr>
<tr>
<td>BR-41089-1*P</td>
<td>1-Port Surface-Mount Box, 36 W x 56 D x 27 H</td>
</tr>
<tr>
<td>BR-4S089-2WP</td>
<td>2-Port Surface-Mount Box extended depth**, 63 W x 76 D x 30 H</td>
</tr>
<tr>
<td>BR-4S089-4WP</td>
<td>4-Port Surface-Mount Box extended depth**, 142 W x 132 D x 30 H</td>
</tr>
</tbody>
</table>

* W = White, E = Black, G = Grey.
**For shielded connectors and large bend-radius cables.
## SHIELDED CABLE

GigaPlus F/UTP 100Ω 4x2xAWG 24/1 premium grade class D/ Cat5e cable to support Gigabit Ethernet protocol combined with good EMI/RFI protection for installations in horizontal and backbone areas.

The cable is compliant with: ISO/IEC 61156-5, EN 50288-2-1 and ANSI/TIA/EIA 568C. EN13501-6 Euroclass Eca (Violet) or Dca (Blue).

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>BR-GPF-HF1-ECA-500VT</td>
<td>GigaPlus 24 AWG F/UTP 4 Pair EN13501-6 Sheathed Cable, 500m Reel in Violet</td>
</tr>
<tr>
<td>BR-GPF-DCA-500BU</td>
<td>GigaPlus 24AWG F/UTP 4 Pair EN13501-6 Euroclass Dca Blue Sheathed 500m</td>
</tr>
</tbody>
</table>

## UNSHIELDED CABLE

GigaPlus U/UTP 100Ω 4x2xAWG 24/1 premium grade Class D/ Cat5e cable to support Gigabit Ethernet protocol for installation in horizontal and backbone areas.

The cable is compliant with: ISO/IEC 61156-5, EN 50288-3-1 and ANSI/TIA/EIA 568C. EN13501-6 Euroclass Eca (Violet) or Dca (Blue).

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>BR-GPU-HF1-ECA-RLX-305VT</td>
<td>GigaPlus 24 AWG U/ UTP 4 Pair EN13501-6 Sheathed Cable, 305m box in Violet</td>
</tr>
<tr>
<td>BR-GPU-DCA-500BU</td>
<td>GigaPlus 24AWG U/ UTP 4 Pair EN13501-6 Euroclass Dca Blue Sheathed 500m</td>
</tr>
</tbody>
</table>

## SNAP-IN SHIELDED JACKS

GigaPlus Shielded Snap-In-Jacks offer true Cat5e component performance. The jacks are compatible with all Leviton’s UK and Continental style faceplates and products. Each jack is supplied with a short form installation instruction and cable tie.

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>BR-GPCJAKF0K2</td>
<td>GigaPlus Snap-In-Jack Screened LSA IDC Universal Wiring, Black</td>
</tr>
<tr>
<td>BR-GPCJAKF012</td>
<td>GigaPlus Snap-In-Jack Screened 110 IDC Universal Wiring, Black</td>
</tr>
</tbody>
</table>

## LEAD FRAME SHIELDED JACK

GigaPlus shielded Snap-In-Jacks offer true Cat5e component performance. The jack is compatible with all Leviton’s UK and Continental style faceplates and products. Each jack is supplied with a short form installation instruction and stuffer cap.

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>BR-GPCJAKF013LF</td>
<td>GigaPlus Lead Frame Snap-In-Jack Screened 110 IDC 568A/B</td>
</tr>
</tbody>
</table>
The Tool-free Jack offers true Cat5e performance and is fully compatible with Leviton UK and continental UNI style faceplates and products. The jacks come singularly; termination instructions are supplied. No termination tool is required. Each jack has integral colour code wiring labels.

GigaPlus unshielded Snap-In-Jacks offer true Cat5e component performance. The jack is compatible with all Leviton’s UK and Continental style faceplates and products. Each jack is supplied with a short form installation instruction and stuffler cap.

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BR-GPCJAKU002</td>
<td>GigaPlus Snap-In-Jack Unscreened - Tool Free</td>
</tr>
<tr>
<td>BR-GPCJAK013LV</td>
<td>GigaPlus Lead Frame Snap-In-Jack Unscreened 110 IDC 568B Wired, White</td>
</tr>
</tbody>
</table>

GigaPlus slimline shuttered modules offer true Cat5e component performance and are fully compatible with all Leviton’s UK and Continental style faceplates and products, and are suitable for applications where internal back box space is limited. Each jack is supplied with a short form installation instruction and a cable tie to attach the cable to the cable anchor. Modules are supplied with a colour code wiring label.

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BR-GPCSL062UB02</td>
<td>GigaPlus 50x25 Slimline Shuttered Module - Unshielded, Black</td>
</tr>
<tr>
<td>BR-GPCSL062UB03</td>
<td>GigaPlus 50x25 Slimline Shuttered Module - Unshielded, White</td>
</tr>
<tr>
<td>BR-GPCSL06CUB02</td>
<td>GigaPlus 38x25 Slimline Shuttered Module - Unshielded, Black</td>
</tr>
<tr>
<td>BR-GPCSL06CUB03</td>
<td>GigaPlus 38x25 Slimline Shuttered Module - Unshielded, White</td>
</tr>
<tr>
<td>BR-GPCSLA62UB02</td>
<td>GigaPlus 50x25 Angled Slimline Shuttered Module - Unshielded, Black</td>
</tr>
<tr>
<td>BR-GPCSLA62UB03</td>
<td>GigaPlus 50x25 Angled Slimline Shuttered Module - Unshielded, White</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BR-GPCJAKU012</td>
<td>GigaPlus Snap-In-Jack Unscreened 110 IDC Universal Wiring, Black</td>
</tr>
<tr>
<td>BR-GPCJAKU013</td>
<td>GigaPlus Snap-In-Jack Unscreened 110 IDC Universal Wiring, White</td>
</tr>
<tr>
<td>BR-GPCJAKU0K2</td>
<td>GigaPlus Snap-In-Jack Unscreened LSA IDC Universal Wiring, Black</td>
</tr>
<tr>
<td>BR-GPCJAKU0K3</td>
<td>GigaPlus Snap-In-Jack Unscreened LSA IDC Universal Wiring, White</td>
</tr>
</tbody>
</table>
The GigaPlus 19" rack mounted patch panel offers true Cat5e component performance using patented state of the art printed circuit technology. Available in 24 port versions, these panels have a cable management / strain relief feature built into the rear mounted grounding bar. All outlets are numerically identified with an additional writable surface for ease of port naming. Each panel is supplied with cable ties, panel mounting accessories and short form installation instructions.

Part No: Description:
BR-GPCPNLF24012M GigaPlus 24 Port Screened Patch Panel 1U 110 IDC Universal Wiring, Black
BR-GPCPNLF240K2M GigaPlus 24 Port Screened Patch Panel 1U LSA IDC Universal Wiring, Black

The 19" GIGAPlus rack mounted patch panel offers a proven Cat5e performance using patented state of the art printed circuit technology. All outlets are numerically identified with an additional writable surface for ease of port naming. Each panel is supplied with cable ties, panel mounting accessories and installation instructions.

Part No: Description:
BR-GPCPNLU24002 GigaPlus 24 Port Unscreened Patch Panel 1U Universal Punchdown and Wiring, Black
BR-GPCPNLU48002 GigaPlus 48 Port Unscreened Patch Panel 2U Universal Punchdown and Wiring, Black
BR-GPCPNLU24012M GigaPlus 24 Port Unscreened Patch Panel 1U 110 IDC Universal Wiring with Cable Management, Black
Cat6Plus F/FTP, 100 Ω 23AWG premium grade Class E/Cat6 cable to support Gigabit Ethernet protocol for installation in horizontal and backbone areas.

The cable is compliant with: ISO/IEC 11801, ANSI/EIA/TIA 568C ISO/IEC 61156-5 and EN 50288-5-1. Meets EN13501-6 available in Euroclass Eca (Violet) & Cca (Green).

Part No: Description:
BR-C6F-FTP-HF1-ECA-500VT Cat6Plus 23 AWG F/FTP 4 Pair LSHF IEC 60332-1-2 EN13501-6 Euroclass Eca Violet sheath, 500m Cable
BR-C6F-FTP-CCA-500GN Cat6Plus 23 AWG F/FTP 4 Pair LSHF IEC 60332-1-2 EN13501-6 Euroclass Cca Green sheath, 500m Cable

Cat6Plus U/FTP, 100 Ω 23AWG premium grade Class E/Cat6 cable to support Gigabit Ethernet protocol for installation in horizontal and backbone areas.

The cable is compliant with: ISO/IEC 11801, ISO/IEC 61156-5, EN 50288-5-1 and ANSI/TIA/EIA 568C. Meets EN13501-6 available in Euroclass Eca (Violet) & Cca (Green).

Part No: Description:
BR-C6U-FTP-HF1-ECA-500VT Cat6Plus 23 AWG U/FTP 4 Pair LSHF IEC 60332-1-2 EN13501-6 Euroclass Eca Violet sheath, 500m Cable
BR-C6U-FTP-CCA-RLX-305GN Cat6Plus 23 AWG U/FTP 4 Pair LSHF IEC 60332-1-2 EN13501-6 Euroclass Cca Green sheath, 305m Box

Cat6Plus U/FTP 100 Ω 23AWG premium grade Class E/Cat6 cable to support Gigabit Ethernet protocol for installation in horizontal and backbone areas.

The cable is compliant with: ISO/IEC 11801, ISO/IEC 61156-5, EN 50288-5-1 and ANSI/TIA/EIA 568C. Meets EN13501-6 available in Euroclass Eca (Violet) & Cca (Green).

Part No: Description:
BR-C6UR-C-RIB-305GN Cat6Plus 23 AWG U/FTP 4 Pair EN13501-6 Euroclass Cca Green Sheathed 305m Box
The Leviton Cat6Plus Screened Snap-In-Jack offers true Cat6 component performance using a new patented contact array design. The jack is backward compatible and also fully compatible with all Leviton’s UK and continental style faceplates and products. Jacks are supplied with a short form installation instruction.

- Superior Performance – Guaranteed standards compliant and independently verified performance
- Ease of Use – Simple termination process
- Quick & Intuitive – Less preparation time and minimal rework resulting in reduced labour time
- Tool-free termination – No special tool and increased leverage ensures a low closing force
- Compact Design – Ideal for restricted and high density spaces
- Quick release function – easy to open and re-terminate
- Integrated rear cable management – To ease routing and prevent cable strain
- Universal Wire Management block – Superior wire retention on all Leviton shielded cables including stranded
- 360° spring loaded sliding screen – Guide removes potential interference with foils and closing mechanism while ensuring a good contact to the shield

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BR-C6CJAKF0K2</td>
<td>Cat6Plus Snap-In-Jack Screened LSA Universal Wired IDC, Black</td>
</tr>
<tr>
<td>BR-C6CJAKS000DC</td>
<td>Cat6Plus Snap-In-Jack Screened - Tool Free</td>
</tr>
</tbody>
</table>

The Tool-free Jack offers true Cat6 performance and is fully compatible with Leviton UK and continental UNI style faceplates and products. Termination instructions are supplied. No termination tool is required. Each jack has integral colour code wiring labels.

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BR-C6CJAK002</td>
<td>Cat6Plus Snap-In-Jack Unscrened - Tool Free</td>
</tr>
</tbody>
</table>

The Leviton Cat6Plus Snap-In-Jack offers true Cat6 component performance using a new patented contact array design. The jack is backward compatible and also fully compatible with all Leviton’s UK and continental style faceplates and products. Jacks are supplied with a short form installation instruction.

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BR-C6CJAKU012</td>
<td>Cat6Plus Snap-In-Jack Unscrened 110 IDC, Black</td>
</tr>
<tr>
<td>BR-C6CJAKU013</td>
<td>Cat6Plus Snap-In-Jack Unscrened 110 IDC, White</td>
</tr>
<tr>
<td>BR-C6CJAKU0K2</td>
<td>Cat6Plus Snap-In-Jack Unscrened LSA IDC, Black</td>
</tr>
<tr>
<td>BR-C6CJAKU0K3</td>
<td>Cat6Plus Snap-In-Jack Unscrened LSA IDC, White</td>
</tr>
</tbody>
</table>
The Cat6Plus 19” rack mounted patch panel offers a port density which delivers 48 terminations in a 1U height with true Cat6 component performance using a patented contact pin array design. The robust and easy to install patch panel employs a conventional termination method that affords the installer the maximum punch down accessibility for wire termination. To assure the optimum link performance the panel has been designed with integral rear cable management which provides easy routing and strain relief for the high performance cabling. This shielded version of the 0.5U patch panel introduces shielded mounting clips to ensure optimum earthing of the cable screens.

**Part No:** BR-C6CPNL240K2H  
**Description:** Cat6Plus 0.5U 24 Port Unscreened Patch Panel 1U 110 IDC 568A/B Wired Black with Cable Management

The Cat6Plus 19” rack mounted patch panel offers true Cat6 component performance using a new patented contact pin array design. All panels are backward compatible. In addition to this, each panel has been designed with a cable management/strain relief feature built into the rear. All outlets are numerically identified with an additional writable surface for ease of port naming. Each panel is supplied with cable ties, panel mounting accessories and short form installation instructions.

**Part No:** BR-C6CPNL240K2M  
**Description:** Cat6Plus 24 Port Screened Patch Panel 1U LSA IDC 568A/B Wired Black with Cable Management

**Part No:** BR-C6CPNL240K2H  
**Description:** 0.5U Cat6Plus 24 Port Unscreened Patch Panel LSA IDC 568A/B Wired Black with Cable Management
**SHIELDED CABLE**

10GPlus S/FTP 100 Ω, 23 AWG is a premium grade Class EA/Cat6A Cable to support 10 Gigabit Ethernet protocol for installation in horizontal and backbone areas.

The cable is compliant with: ISO 61156-5 and ANSI/TIA/EIA and EN50288-10-1 and are fully backwards compatible with Cat5e and Cat6 systems.

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>BR-AC6S-FTP-HF1-ECA-500VT</td>
<td>10GPlus 23 AWG 4 Par S/FTP EN130501-6 Euroclass Eca Violet sheathed, 500m Reel</td>
</tr>
<tr>
<td>BR-AC6S-FTP-CCA-500GN</td>
<td>10GPlus 23 AWG 4 Par S/FTP EN130501-6 Euroclass Cca Green sheathed, 500m Reel</td>
</tr>
</tbody>
</table>

10GPlus F/FTP 100 Ω, 23 AWG is a premium grade Class EA/Cat6A Cable to support 10 Gigabit Ethernet protocol for installation in horizontal and backbone areas.

The cable is compliant with: ISO 61156-5 ANSI/TIA/EIA 568C and EN50288-10-1 standards. These cables are also fully backwards compatible with Cat5e and Cat6 systems.

<table>
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<th>Part No:</th>
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</tr>
</thead>
<tbody>
<tr>
<td>BR-AC6F-FTP-HF1-ECA-500VT</td>
<td>10GPlus 23 AWG 4 Par F/FTP EN130501-6 Euroclass Eca Violet sheathed, 500m Reel</td>
</tr>
<tr>
<td>BR-AC6F-FTP-CCA-500GN</td>
<td>10GPlus 23 AWG 4 Par F/FTP EN130501-6 Euroclass Cca Green sheathed, 500m Reel</td>
</tr>
</tbody>
</table>

**UNSHIELDED CABLE**

10GPlus U/FTP, 100 Ω, 23 AWG is a premium grade Class EA/Cat6A cable to support 10 Gigabit Ethernet protocol for installation in horizontal and backbone applications.

The cable is compliant with: ISO 61156-6 ed 2, ANSI/TIA/EIA568C. It is also designed to be compliant with EN50288-10-2.

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>BR-AC6U-FTP-HF1-ECA-500VT</td>
<td>10GPlus 23 AWG 4 Par U/FTP EN130501-6 Euroclass Eca Green sheathed 500m reel</td>
</tr>
<tr>
<td>BR-AC6U-FTP-CCA-500GN</td>
<td>10GPlus 23 AWG 4 Par U/FTP EN130501-6 Euroclass Cca Green sheathed 500m reel</td>
</tr>
</tbody>
</table>

10GPlus U/FTP, 100 Ω, 23 AWG is a premium grade Class EA/Cat6A to support 10 Gigabit Ethernet protocol for use within the data centre environment. *up to 70 metres.*

The cable is compliant with: ISO 61156-6 ed 2, ANSI/TIA/EIA568C. It is also designed to be compliant with EN50288-10-2.

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>BR-AC6-DCZ-ECA-500VT</td>
<td>10GPlus 23 AWG 4 Par S/FTP EN130501-6 Euroclass Eca Violet sheathed 500m Reel</td>
</tr>
<tr>
<td>BR-AC6-DCZ-CCA-500GN</td>
<td>10GPlus 23 AWG 4 Par S/FTP EN130501-6 Euroclass Cca Green sheathed 500m Reel</td>
</tr>
</tbody>
</table>

10GPlus U/UTP, 100 Ω, 23 AWG is a premium grade Class EA/Cat6A cable to support 10 Gigabit Ethernet protocol for installation in horizontal and backbone applications. The cable is compliant with: ISO 61156-5, ANSI/TIA/EIA 568C and the draft standard EN 50288-11-1. The cable is fully backwards compatible with Cat5e and Cat6 systems.

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>BR-AC6U-HF1-ECA-D500VT</td>
<td>10GPlus 23 AWG 4 Par U/UTP EN130501-6 Euroclass Eca Violet sheathed 500m Reel</td>
</tr>
<tr>
<td>BR-AC6U-CCA-500GN</td>
<td>10GPlus 23 AWG 4 Par U/UTP EN130501-6 Euroclass Cca Green sheathed 500m Reel</td>
</tr>
</tbody>
</table>
The Leviton Cat6A fully screened snap-in jack is part of the 10GPlus cabling system:

- The jack offers exceptional Cat6A performance
- The Leviton Cat6A Shielded Jack requires no proprietary tool for termination
- Compact design ensures compatibility with Leviton 48 Port Cat6A Patch Panels
- Spring loaded sliding screen removes potential interference with foils and closed mechanisms
- Easy to open and re-terminate as required
- Fully compatible with all UK and continental style faceplates and patch panel products

### PARTS

<table>
<thead>
<tr>
<th>Part No: BR-AC6JAKS000DC</th>
<th>Description: 10GPlus Snap-In-Jack Screened - Tool Free</th>
</tr>
</thead>
</table>

The Leviton 10GPlus shielded Snap-In-Jack offers true Class EA/Cat6A component performance using a patented contact array design. The 10GPlus system is classified as a Class EA/Cat6A product set that is fully backwards compatible to Cat6 and Cat5e products. The jack is also fully compatible with all Leviton’s UK and Continental style faceplates and products.

### PARTS

<table>
<thead>
<tr>
<th>Part No: BR-AC6JAKF0K2</th>
<th>Description: 10GPlus Snap-In-Jack Screened LSA universal wired IDC, Black</th>
</tr>
</thead>
</table>

The Leviton 10GPlus Snap-In-Jack Unscreened offers industry leading electrical performance and is fully compatible with Leviton UK and continental UNI style faceplates and products. Termination instructions are supplied. No termination tool is required. Each jack has an integral colour code wiring labels.

### PARTS

<table>
<thead>
<tr>
<th>Part No: BR-AC6JAKU002</th>
<th>Description: 10GPlus Snap-In-Jack Unscreened - Tool Free</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Part No: BR-AC6JAKU0K2</th>
<th>Description: 10GPlus Snap-In-Jack Unscreened LSA IDC, Black</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Part No: BR-AC6JAKU0K3</th>
<th>Description: 10GPlus Snap-In-Jack Unscreened LSA IDC, White</th>
</tr>
</thead>
</table>
Features:
- 24 ports in 1U
- True Augmented Cat6/Class EA performance
- Suitable for 10Gigabit applications Ideal for use in the data centre
- Removable plug and play modular cassettes ideal for both on and off site termination assembly
- Integral cable management to provide strain relief
- Compatible with standard 19” racks and cabinets
- Flexible solution – panel can be deployed in either a conventional installation or the module used as a consolidation point
- Supplied with panel mounting accessory kit

Characteristics:
- Width: 19” (483mm)
- Height: 1U (44.45mm)
- Depth: 111mm
- Outlet Style: Unkeyed RJ45
- Outlets: 24 ports
- Colour: RAL 9005 black or RAL 7035 grey
- Punch down blocks: LSA style IDC
- Wiring Standard: EIA/TIA 568A/B
- Conformance: Augmented Cat6 and Class EA ISO/IEC 11801 Ed 2.2 Amm 2 EN 50173-1 TIA/EIA 568 C

The Leviton 10GPlus 19” rack mounted 1U 24 port patch panel delivers true Augmented Cat6/Class EA performance and is ideal for data centre applications. The robust patch panel features 4 easy to remove shielded modular units each comprising of 6 ports. To assure optimum link performance the panel has been designed with integrated rear cable management to provide easy routing and strain relief. Ports are numerically identified and offer maximum space for ease of port numbering and panels are supplied with cable ties, panel mounting kit and earth cable. All panels are also backward compatible.

The 10GPlus 19” rack mounted 1U 24 port patch panel delivers true Augmented Cat6/Class EA performance and is ideal for data centre applications. The robust patch panel features 4 easy to remove shielded modular units each comprising of 6 ports. To assure optimum link performance the panel has been designed with integrated rear cable management to provide easy routing and strain relief. Ports are numerically identified and offer maximum space for ease of port numbering and panels are supplied with cable ties, panel mounting kit and earth cable. All panels are also backward compatible.

Features:
- 24 ports in a 0.5U space
- True Class EA/Cat6A performance
- Suitable for 10Gigabit applications
- Ideal for the data centre and for server cabinets where space is at a premium
- Removable plug and play modular cassettes ideal for both on and off site termination assembly
- Integral cable management to provide strain relief
- Compatible with standard 19” racks and cabinets
- Flexible solution – panel can be deployed in either a conventional installation or the module used as a consolidation point
- Supplied with panel mounting accessory kit

Characteristics:
- Width: 19” (483mm)
- Height: 0.5U (44.45mm)
- Depth: 111mm
- Outlet Style: Unkeyed RJ45
- Outlets: 24 ports
- Colour: RAL 9005 black or RAL 7035 grey
- Punch down blocks: LSA style IDC
- Wiring Standard: EIA/TIA 568A/B
- Conformance: Class EA/Cat6A ISO/IEC 11801 Ed 2.2 Amm 2 EN 50173-1 TIA/EIA 568 C

The 10GPlus 0.5u patch panel offers true Class EA/Cat6A Performance and is ideal for applications where space is at a premium and a high density solution is required. the patch panel features 4 easy to remove shielded modular units each comprising of 6 ports. All panels are backward compatible and offer maximum space for ease of port numbering and panels are supplied with cable ties, panel mounting kit and earth cable. All panels are also backward compatible.

<table>
<thead>
<tr>
<th>Part No.</th>
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<tbody>
<tr>
<td>BR-AC6PNLF240K2M</td>
<td>10GPlus 1U Shielded 24 Port Patch Panel, Black</td>
</tr>
<tr>
<td>BR-AC6PNLF240K8M</td>
<td>10GPlus 1U Shielded 24 Port Patch Panel, Grey</td>
</tr>
<tr>
<td>BR-AC6CPF060K</td>
<td>10GPlus Replacement Panel Module, Metallic</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BR-AC6PNLF240K2H</td>
<td>10GPlus 0.5U Shielded 24 Port Patch Panel, Black</td>
</tr>
<tr>
<td>BR-AC6PNLF240K8H</td>
<td>10GPlus 0.5U Shielded 24 Port Patch Panel, Grey</td>
</tr>
<tr>
<td>BR-AC6CPF060K</td>
<td>10GPlus Replacement Panel Module, Metallic</td>
</tr>
</tbody>
</table>
The Leviton 10GPlus Consolidation point module offers true Class EA/Cat6A performance and is a flexible solution, ideal for use in the open office environment.

Each module comprises of 6 RJ45 ports and can be supplied as a low profile stand alone module or with mounting bracket. The mounting bracket option allows for secure fixing to walls, ceilings and under floors. It also features cable tie points for added security.

The cover can easily be removed to gain access to the IDA IDC’s for termination. An area on top of the cover is available for port identification.

All modules are backward compatible for Cat5e and Cat6 systems. The module base and cover are made from a lightweight construction which offers excellent shielding characteristics.

**Features:**
- 6 way shielded module
- True Class EA/Cat6A performance
- Suitable for 10Gigabit applications
- For use in horizontal cabling applications
- Low profile construction – ideal for use in false floors, ceilings and walls
- Removable cover to protect from dust particles

**Characteristics:**

**Without mounting bracket**
- Width: 107.2mm
- Height: 20.5mm
- Depth: 93.1mm

**With mounting bracket**
- Width: 132mm
- Height: 28mm
- Depth: 110mm
- Outlet Style: Unkeyed RJ45
- Outlets: 6 ports
- Colour: Metallic
- Punch down blocks: LSA style IDC
- Wiring Standard: EIA/TIA 568A/B
- Conformance: Class EA/Cat6A ISO/IEC 11801 Ed 2.2 Amm 2 EN 50173-1 TIA/EIA 568 C

<table>
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<tr>
<th>Part No.</th>
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</tr>
</thead>
<tbody>
<tr>
<td>BR-AC6CPF060K</td>
<td>10GPlus Consolidation Point Module – 6 way, Metallic</td>
</tr>
<tr>
<td>BR-AC6CPF060KM</td>
<td>10GPlus Consolidation Point Module with Mounting Bracket – 6 way, Metallic</td>
</tr>
<tr>
<td>BR-AC6PNLC240K2H</td>
<td>10GPlus 0.5U Patch Panel Chassis Only, Black</td>
</tr>
<tr>
<td>BR-AC6PNLC240K8H</td>
<td>10GPlus 0.5U Patch Panel Chassis Only, Grey</td>
</tr>
<tr>
<td>BR-AC6PNLC240K2M</td>
<td>10GPlus 1U Patch Panel Chassis Only, Black</td>
</tr>
<tr>
<td>BR-AC6PNLC240K8M</td>
<td>10GPlus 1U Patch Panel Chassis Only, Grey</td>
</tr>
</tbody>
</table>
The Leviton angled snap-in-jack patch panel is a 1U 24 port panel that facilitates cord routing directly into the rack vertical side management thus rendering horizontal cable managers redundant. The increased rack density not only saves valuable space but also offers a panel that eases bending stresses on the cord while maximising performance. The design accommodates a separate rear cable manager to provide a strain relief feature for the simple routing of horizontal cabling and also allows for colour coded labelling.

Part No: Description:
BR-MMCPNLX24SIJ2MAN 1U SU Angled Panel with Management Suitable up to 24 Snap-in-Jacks, Black

The Leviton 19" modular panel is a rack mounted snap-in-jack panel that has been designed with a double skin to provide flush mounted jacks. The rear of the panel has been plated for grounding to the chassis on shielded systems. All outlets are numerically identified with an additional writable surface for ease of port naming.

Part No: Description:
BR-MMCPNLX16SIJ2 16 Port Modular Snap-In-Jack Panel - Black
BR-MMCPNLX16SIJ8 16 Port Modular Snap-In-Jack Panel - Grey
BR-MMCPNLX24SIJ2 24 Port Modular Snap-In-Jack Panel - Black
BR-MMCPNLX24SIJ8 24 Port Modular Snap-In-Jack Panel - Grey
BR-MMCPNLX32SIJ2 32 Port Modular Snap-In-Jack Panel - Black
BR-MMCPNLX32SIJ8 32 Port Modular Snap-In-Jack Panel - Grey
BR-MMCPNLX48SIJ2 48 Port Modular Snap-In-Jack Panel - Black
BR-MMCPNLX48SIJ8 48 Port Modular Snap-In-Jack Panel - Grey

The Leviton 19" snap-in-jack patch panel that accommodates 24 ports within a 1U configuration and provides coloured inserts for individual port/service identification. The product is designed and supplied with a detachable rear cable manager and comes complete with black inserts with an integrated dust cover already loaded into the panel as standard. Optional coloured inserts are available for purchase separately in a variety of colours allowing for individual port/service identification.

Part No: Description:
BR-MMCPNLX24SIJ2DCI Coloured Insert Snap-in-Jack panel – Black
BR-MMCPNLX24SIJ8DCI Coloured Insert Snap-in-Jack panel – Grey
BR-MMCACCINSDC1 Insert with Dust Cover - Red
BR-MMCACCINSDC2 Insert with Dust Cover - Black
BR-MMCACCINSDC3 Insert with Dust Cover - White
BR-MMCACCINSDC4 Insert with Dust Cover - Blue
BR-MMCACCINSDC5 Insert with Dust Cover - Green
BR-MMCACCINSDC6 Insert with Dust Cover - Yellow
BR-MMCJAKBLK2 Snap-in-Jack Blank - Black
BR-MMCJAKBLK3 Snap-in-Jack Blank - White
BR-MMCIRT001 Retraction Tool
Leviton supplies a comprehensive range of plastic accessories to provide an outlet solution for wall, trunking and floorbox applications. These accessories have been designed to be used in conjunction with Leviton Snap-In Jacks. All UK style faceplates are supplied with M3.5 mounting screws and are available in both modular or low cost shuttered versions. Backboxes can also be supplied to allow for retrofit application where outlets are required to be surface mounted.

### FACE PLATES AND BACK BOXES

Leviton supplies a comprehensive range of plastic accessories to provide an outlet solution for wall, trunking and floorbox applications. These accessories have been designed to be used in conjunction with Leviton Snap-In Jacks. All UK style faceplates are supplied with M3.5 mounting screws and are available in both modular or low cost shuttered versions. Backboxes can also be supplied to allow for retrofit application where outlets are required to be surface mounted.

#### Part No: Description:
- **BR-MMCANGDK2453**: Dual Snap-In-Jack Faceplate Module - RAL9010
- **BR-MMCDGGBB32001**: 32mm Double Gang Back Box
- **BR-MMCSGBB32001**: 32mm Single Gang Back Box

#### MODULES

Floorbox and faceplate modules and blanks have been designed to clip into a 1.0 - 2.0mm thick plate with either a standard LJ6C 22 x 37mm floorbox cut-out or a standard Euromod faceplate 25 x 50mm cutout. All modules are designed to accept Leviton jacks.

#### Part No: Description:
- **BR-MMCANG0623**: 50mm x 25mm Shuttered Angled Module White
- **BR-MMCDGBK0603**: 38mm x 25mm 6C Blank Module White
- **BR-MMCDGBK0606**: 38mm x 25mm 6C Shuttered Module White
- **BR-MMCDGBK0606**: 25mm x 50mm Shuttered Module White
COPPER PATCH LEADS

HOW TO CREATE LEVITON COPPER PATCH LEAD PART NUMBERS

<table>
<thead>
<tr>
<th>BR</th>
<th>X</th>
<th>PC</th>
<th>X</th>
<th>X</th>
<th>X</th>
</tr>
</thead>
</table>

Populate this field with required cable construction:
- F = F-UTP (GigaPlus)
- U = U-UTP ONLY GigaPlus AND Cat6Plus
- S = Stranded
- G = SFTP 10GPlus

Populate this field with the required boot type:
- X = Crossover
- HBS solid (only for 10GPlus)
- S = Solid
- H = Standard
- HB = Blade style for GigaPlus only
- BB = Blade style for Cat6Plus only
- B = Blades style for 10GPlus only

Populate this field with the type of cable you require:
- AC6 = 10GPlus
- C6C = Cat6Plus
- GPC = GigaPlus

Populate this field with required length:
- 020 = 2 Metres
- 010 = 1 Metre
- etc...

EG: BR-GPCPCU030-888HB = GIGAPLUS 24 AWG U-UTP STRANDED BLADE LSZH PATCH LEAD 3M GREY

➤ CAT6PLUS AND GIGAPLUS

Leviton Cat6Plus and GigaPlus patch leads enable you to get the optimum performance from your cabling system. Leviton’s factory made and tested patch leads offer you guaranteed quality and ensure that your system avoids the performance degradation which inferior alternatives will give you at high data rates. All patch leads are supplied with boots and ID tags. Independent 3rd Party Certification (3P).

Packaging:
- Individually packed in branded easy tear bags

➤ 10GPLUS

The Leviton Augmented Cat6patch lead is part of the Leviton 10GPlus cabling system. The 10GPlus cabling system is comprised of high performance cables and connectivity which not only provides a reliable platform for all of today’s network applications, but is also designed to future-proof networks for the emerging, new higher speed protocols of tomorrow, such as 10GBASE-T. The 10GPlus system is classified as an Augmented Cat6Class EA product set that is fully backward compatible to Cat6(Class E) and Cat5e (Class D) products.

Packaging:
- Individually packed in branded easy tear bags
FIBRE PATCH LEADS

For use in connections between transmission equipment and patch panels or interconnect / cross-connect between panels. Patch Leads are pre-constructed with connectors. These include small form factors such as LC and MTRJ as well as SC, FC and ST. Based on 2.80mm sub units (1.9mm SFF) these ruggedised cables are sheathed with LSHF material making them suitable for internal use.

- Manufactured to comply with: ISO/IEC 11801, EN50173-1, ANSI TIA/EIA 568B
- All major connector types, various colours available
- Colour coded for identification
- Duplex patch leads feature ‘Crossover’

HOW TO CREATE OUR LEVITON FIBRE OPTIC PATCH LEAD PART NUMBERS

EG: BR-HOPCOM3010SC2 = SC-SC OM3 1 METRE FIBRE OPTIC PATCH LEAD IN AQUA
FIBRE OPTIC PIGTAILS

For use in permanent connections between patch panels and incoming cables / single blown fibres. Connector options include small form factors such as LC and MTRJ as well as SC, FC and ST. Based on 900μm tight buffered cores (600μm MTRJ) and suitable for internal use only within fibre management systems.

» Manufactured to comply with: ISO/IEC 11801, EN50173-1, ANSI TIA/EIA 568B
» Based on Tight Buffered Core
» 900μm and 600μm
» All major connector types
» All major fibre types
» Standard Buffer colours are:
  - OM1 - Blue
  - OM2 - Green
  - OM3 - Grey
  - OM4 - Red
  - OS2 - Yellow

HOW TO CREATE OUR LEVITON FIBRE OPTIC PIGTAIL PART NUMBERS

- Populate this field with the second required connector type:
  - SC, ST, LC, FC or MJ (MTRJ)
- Populate this field with required fibre type:
  - OM3 = 50/125um MM (Grey)
  - OM4 = OM4 50/125um MM (Red)
  - OS2 = OM2 50/125um MM (Green)
  - O62 = OM1 62.5/125um MM (Blue)
  - O08 = OS2 9/125um SM (Yellow)
- Populate this field with the required length:
  - 001 = 1m
  - 002 = 2m

EG: BR-HOTLCOM3001 = LC OM3 50-125 PIGTAIL 1M
**CONNECTORS**

➤ **KEYQUICK® FIELD INSTALLABLE CONNECTORS**

The innovative KeyQuick® field installable SC connectors and mechanical splice offers industry leading reliability combined with a fast, accurate and user friendly splicing process. Easy to connect, their unique transparent body with refractive properties ensures accuracy by acting as a visual fault detector. A red light becomes visible within the splice body when fibres are misaligned, but then disappears when a good connection is made. This design also means that no additional tools are required to verify the connection.

➤ Universal – for 250μm/900μm fibres
➤ No tools or epoxy required
➤ 2.5 times faster compared to traditional fusion splicing of fibre connectors.
➤ Low mean insertion loss (typically 0.2dB)
➤ Transparent body for immediate connecting confirmation

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>BR-FOCACFT008001</td>
<td>KeyQuick® SC APC Singlemode Connector - Universal G652D</td>
</tr>
<tr>
<td>BR-FOCUCFT008001</td>
<td>KeyQuick® SC UPC Singlemode Connector - Universal G652D</td>
</tr>
<tr>
<td>BR-FOCUCFT062001</td>
<td>KeyQuick® SC UPC Multimode Connector - Universal 62.5/125</td>
</tr>
<tr>
<td>BR-FOCUCFTOM3001</td>
<td>KeyQuick® SC UPC Multimode Connector - Universal 50/125 OM3</td>
</tr>
<tr>
<td>BR-FOCUCFTOM4001</td>
<td>KeyQuick® SC UPC Multimode Connector - Universal 50/125 OM4</td>
</tr>
</tbody>
</table>

➤ **KEYQUICK® MECHANICAL SPLICE**

The KeyQuick® mechanical splice is designed to make fibre instalation and deployment easier, cheaper and quicker. A feature of the product is to be able to visualise and verify a splice connection using visual fault indication made possible by the transparent body. Can be installed without any previous experience of mechanical splicing.

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>BR-FPCMS001</td>
<td>KeyQuick® Mechanical Splice 250μm, 900μm</td>
</tr>
<tr>
<td>BR-FPCMSH06</td>
<td>KeyQuick® Mechanical Splice Holder</td>
</tr>
</tbody>
</table>

➤ **LC CONNECTOR**

LC multimode and singlemode connector kits comprise of a precision ferrule, crimp sleeve, colour coded outer shroud, 2 x colour coded 2.0mm strain reliefs (.001) or a 0.9mm (.002) boot.

➤ Typical Insertion Loss: MM - <0.2dB, SM - <0.15dB
➤ Minimum Return Loss: MM 20dB, SM 45dB
➤ Available as either simplex or duplex variants

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>BR-FOCLCEPMM001</td>
<td>LC Duplex Multimode 1 Piece Connector with 2.0mm Boot</td>
</tr>
<tr>
<td>BR-FOCLCEPSM001</td>
<td>LC Duplex Singlemode 1 Piece Connector with 2.0mm Boot</td>
</tr>
<tr>
<td>BR-FOCLSEPMM001</td>
<td>LC Simplex Multimode 1 Piece Connector with 2.0mm Boot</td>
</tr>
<tr>
<td>BR-FOCLSEPSM001</td>
<td>LC Simplex Singlemode 1 Piece Connector with 2.0mm Boot</td>
</tr>
</tbody>
</table>
➤ **ST CONNECTOR**

ST connector kits are comprised of a nickel-plated zinc body coupling mechanism and a ceramic ferrule/spring/crimp barrel assembly plus a strain relief boot. These connectors are suitable for 900μm, 2mm and 2.4 - 3mm cables.

- Compliant with IEC 60874-10
- Strain relief boot colour code: SM 3mm Black & Yellow, MM 3mm Black & Red
- Typical Insertion Loss: MM - 0.2dB, SM - 0.15dB
- Minimum Return Loss: SM 45dB

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>BR-FOCSTEPMM001</td>
<td>ST Multimode Connector</td>
</tr>
<tr>
<td>BR-FOCSTEPSM001</td>
<td>ST Singlemode Connector</td>
</tr>
</tbody>
</table>

➤ **SC CONNECTOR**

SC multimode and singlemode connector kits comprise of a one piece SC body with precision ceramic ferrule, crimp, sleeve, colour coded outer shroud, 2 x colour coded 3mm strain relief boots and a 0.9mm boot.

- Compliant with IEC 60874-14
- Typical Insertion Loss: MM - 0.2dB, SM - 0.15dB
- Minimum Return Loss: SM 45dB

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>BR-FOCSCMM001</td>
<td>SC Simplex Multimode (Beige) Adaptor</td>
</tr>
<tr>
<td>BR-FOCSCSM001</td>
<td>SC Simplex Singlemode (Blue) Adaptor</td>
</tr>
</tbody>
</table>

➤ **SC DUPLEX ADAPTOR**

SC Duplex adaptors comprise of a polymer outer body and an inner assembly fitted with a precision alignment sleeve. Multimode with metal sleeve, Singlemode with Ceramic Sleeve.

- Compliant with IEC 60875-14
- Max. Insertion Loss: MM - 0.3dB, SM - 0.15dB

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>BR-BHCDMM001</td>
<td>SC Duplex - Multimode (Beige) Adaptor</td>
</tr>
<tr>
<td>BR-BHCDSM001</td>
<td>SC Duplex - Singlemode (Blue) Adaptor</td>
</tr>
</tbody>
</table>
## Fibre Optic Adaptors

### ST Adaptor

ST adaptors comprise of a nickel plated zinc die cast body with a precision alignment sleeve. They are both standard and double ‘D’ hole compatible. Multimode with metal sleeve. Singlemode with ceramic sleeve.

- Compliant with IEC 60875-10
- Max. Insertion Loss: MM - 0.3dB, SM - 0.1dB

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BR-BHCSTMM001</td>
<td>ST Multimode Adaptor with black dust caps</td>
</tr>
<tr>
<td>BR-BHCSTSM001</td>
<td>ST Singlemode Adaptor with red dust caps</td>
</tr>
</tbody>
</table>

### FC Adaptor

FC adaptors comprise of a nickel plated brass body that is fitted with a precision alignment sleeve. They are standard single and double ‘D’ hole compatible. Ceramic sleeve.

- Compliant with IEC 60875-7
- Max. Insertion Loss: SM - 0.1dB

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BR-BHCFCSM001</td>
<td>FC Singlemode Adaptor with Red Dust Caps</td>
</tr>
</tbody>
</table>

### LC Duplex Adaptor

LC duplex adaptors comprise of a polymer body with a precision alignment sleeve. They have the outer dimensions of a simplex SC style adaptor.

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BR-BHCLCMM001</td>
<td>LC Multimode (Duplex) Beige Adaptor</td>
</tr>
<tr>
<td>BR-BHCLCSM001</td>
<td>LC Singlemode (Duplex) Blue Adaptor</td>
</tr>
</tbody>
</table>

### LC Quad Adaptor

LC quad adaptors comprise of a polymer body with precision alignment sleeves. They have the outer dimensions of a quad SC style adaptor.

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BR-BHCL4MM001</td>
<td>LC Multimode (Quad) Beige Adaptor</td>
</tr>
<tr>
<td>BR-BHCL4SM001</td>
<td>LC Singlemode (Quad) Blue Adaptor</td>
</tr>
</tbody>
</table>

### MTRJ Duplex Adaptor

MTRJ adaptors have a polymer outer body which has the outer dimensions of a simplex SC sized adaptor.

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BR-BHCMJXX001</td>
<td>MTRJ Adaptor</td>
</tr>
</tbody>
</table>

---

**01403 754 233**  
@ enquiries@networkscentre.com  
www.networkscentre.com
The FibrePlus 19” 1U fibre optic patch panels have been designed to optimise both the internal fibre management but also to add greater fibre density. Constructed from mild steel with a powder coated paint finish the panels are available in black or grey. The patch panel offers a flexible and highly versatile solution for optical splicing and patching. The panel’s shallow depth allows it to be installed within the majority of standard racks and wall mounted enclosures. The integrated design features ensure that even once installed panels can be readily reconfigured to accommodate the changing needs of today’s high speed networks.

➤ FibrePlus panels are preloaded with fibre optic adaptors
➤ Front panel options for up to:
  - 24 FC or ST (24 fibres)
  - 12 SC Duplex (24 fibres) or LC Quad (48 fibres)
  - 24 SC Duplex (48 fibres) or LC Quad (96 fibres)
  - 24 SC Simplex (24 fibres), MTRJ or LC Duplex (48 fibres)
➤ Minimum depth: 237mm
➤ Front Panel includes a port identification strip

**HOW TO CREATE OUR LEVITON LOADED OPTICAL PATCH PANEL PART NUMBERS**

**BR-FPCC1SX**  
Populate this field with number of fibres required:  
- 4 = 4 fibre  
- 6 = 6 fibre  
- 8 = 8 fibre  
- 12 = 12 fibre  
- 16 = 16 fibre  
- 24 = 24 fibre  
- 48 = 48 fibre*  
- 96 = 96 fibre**  

*LC/MTRJ/SC Duplex only  
**LC Quad only  

Populate this field with the required Mode:  
- MM or SM

Populate this field with the adaptor type required:  
- XX = no adaptor  
- ST = ST  
- SC = SC Simplex  
- DC = SC Duplex  
- FC = FC/FC  
- LC = LC  
- MJ = MT-RJ

**EG: BR-FPCC1SXSM16ST2 = PANEL LOADED WITH 16 ST SM ADAPTORS – BLACK**
UNLOADED OPTICAL PATCH PANELS

- Enhanced sliding tray for easy access complete with quick release fastenings
- Adjustable mounting brackets aids installation within shallow enclosures
- Minimum depth 237mm
- Rear of panel offers a range of apertures to accommodate a variety of gland configurations
- Unloaded panels are supplied with management and glands
- Purpose designed panel base allows for customised fibre management and additional anchoring points for incoming cables or ducts
- Front face of the panel includes a port identification strip
- Compatible with Biolite.

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>BR-FPCC1SXXX48SC2</td>
<td>Unloaded Optical Panel for up to 24 SC Simplex, LC or MTRJ Adaptors - Black</td>
</tr>
<tr>
<td>BR-FPCC1SXXX24DC2</td>
<td>Unloaded Optical Panel for up to 12 SC Duplex Adaptors - Black</td>
</tr>
<tr>
<td>BR-FPCC1SXXX48DC2</td>
<td>Unloaded Optical Panel for up to 24 SC Duplex Adaptors - Black</td>
</tr>
<tr>
<td>BR-FPCC1SXXX24ST2</td>
<td>Unloaded Optical Panel for up to 24 ST or FC Adaptors - Black</td>
</tr>
</tbody>
</table>

Front panel configuration options:
- 24 fibre using ST, SC, FC, PC, LC or MTRJ
- 48 fibre using Duplex SC, Duplex LC or MTRJ
- 96 fibre using Quad LC

SWING OUT FIBRE PANEL

The 48 fibre universal dual pivoting patch panel provides easy segregation of fibres, perfect for separating services. The unique design offers features, such as the swivel function in a universal 19" size, normally only found in bespoke solutions. It is simple to manage and offers easy access in the event of moves, adds or changes. The dual cassette design pivots from the left and right allowing the patch leads to exit the panel from the two sides giving fast access to the fibre management whilst maintaining a fixed cable entry point. Easy to install lightweight and robust construction, the transparent cover protects the fibre and allows quick and easy access.

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>BR-TCCPC1SMM48LC2</td>
<td>19&quot; Optical Dual Pivoting Panel (1U)- populated with Multi-Mode flangeless LC Quad adapters</td>
</tr>
<tr>
<td>BR-TCCPC1SMM48LC2</td>
<td>19&quot; Optical Dual Pivoting Panel (1U)- populated with Multi-Mode flangeless LC Quad adapters</td>
</tr>
<tr>
<td>BR-TCCPC1SXXX24ST2</td>
<td>19&quot; Optical Dual Pivoting Panel (1U) – unpopulated</td>
</tr>
</tbody>
</table>

- Pivotled dual routing patch management ability to independently manage cables and patch leads - ideal for co-location facilities or partial loading.
- Recessed Patching Area Protects the connection and the cables, provides enhanced cable management and improved aesthetics
- Maximised labelling space easy port and panel identification, the flip hinge system gives unrestricted access to patch leads.
- Small footprint Cables and patch leads are contained within the panel to reduce congestion resulting in improved airflow.
Data centres and telecommunications rooms are rapidly outgrowing their footprint as they attempt to meet increasing bandwidth demands. The Leviton HDX cassette-based platform offers optimum patching capacity in areas where space is at a premium. Using HDX adaptor plates and cassettes in the UHDX rack-mount solutions or the HDX Distribution Frame, you can free up valuable space and reduce your patching footprint.

High- and ultra-high-density systems support cloud data centre and large enterprise networks with network manageability and a reduced cabling network footprint.

**UHDX RACK-MOUNT ENCLOSURES**

- Accepts Leviton HDX Adaptor Plates and Cassettes
- Up to 144 fibres with LC connectors or 864 fibres with 12-fibre MTP® connectors
- Individual sliding trays allow easy access to fibre connectors in dense applications while minimising the impact to surrounding fibres
- 20-inch depth for high-density, pre-terminated solution
- Hinged front door provides easy means to install, remove, and update port ID labels
- Highly visible port locators in the front and rear of the enclosure help easily identify specific ports
- Hinged or removable rear doors improve accessibility to rear cable routing

**UHDX 1U FLAT & ANGLED PANELS**

- Eliminates the need for horizontal patch cord cable managers
- Open access to patch leads and trunks
- One-hand installation and removal of HDX/HDX2 cassettes or adaptor plates
- Up to 144 fibres with LC connectors or 864 fibres with 12-fibre MTP connectors
# HDOX Platform Panels

<table>
<thead>
<tr>
<th>Description</th>
<th>Maximum Capacity</th>
<th>Part No</th>
</tr>
</thead>
<tbody>
<tr>
<td>1U UHDX Enclosure, empty</td>
<td>144 Fibres (Using LC)</td>
<td>864 Fibres (Using MTP)</td>
</tr>
<tr>
<td>2U UHDX Enclosure, empty</td>
<td>288 Fibres (Using LC)</td>
<td>1,728 Fibres (Using MTP)</td>
</tr>
<tr>
<td>4U UHDX Enclosure, empty</td>
<td>576 Fibres (Using LC)</td>
<td>3,456 Fibres (Using MTP)</td>
</tr>
<tr>
<td>1U UHDX Angled Panel, empty</td>
<td>144 Fibres (Using LC)</td>
<td>864 Fibres (Using MTP)</td>
</tr>
<tr>
<td>1U UHDX Flat Panel, empty</td>
<td>144 Fibres (Using LC)</td>
<td>864 Fibres (Using MTP)</td>
</tr>
</tbody>
</table>

### UHDX RACK-MOUNT ENCLOSURE ACCESSORIES

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BR-5RCMP-KIT</td>
<td>Universal Clamp Kit, Single Cable Grommet (mounts to enclosure or rear cable manager)</td>
</tr>
<tr>
<td>BR-5RCMP-KT2</td>
<td>Universal Clamp Kit, Multiple Cable Grommet (mounts to enclosure or rear cable manager)</td>
</tr>
<tr>
<td>BR-5RCMR-KIT</td>
<td>Universal Clamp Kit, Single and Multiple Cable Grommet (for rack mounting)</td>
</tr>
<tr>
<td>BR-5RBSH-1UN</td>
<td>1U Brush Guard, bag of 2</td>
</tr>
<tr>
<td>BR-5RBSH-2UN</td>
<td>2U Brush Guard, bag of 2</td>
</tr>
<tr>
<td>BR-5REAR-023</td>
<td>23&quot; Rack-Mount Ears, bag of 2</td>
</tr>
<tr>
<td>BR-E2XHD-CMB</td>
<td>Rear Cable Manager for Angled Panel, with cable management rings (four 1/4&quot; rings)</td>
</tr>
</tbody>
</table>
**HDX & HDX2 MTP® CASSETTES**

- Easy to migrate from 10G to 40/100G when used with Leviton cable assemblies
- 12- or 24-fibre configurations
- Select from LC or MTP connectors for 10G, 40G, or 100G applications
- Pre-terminated fibre eliminates the need for complicated field terminations and splices
- A variety of fibre types are available, including single-mode, multimode, and laser-optimised multimode
- Easy, one-hand installation and removal

---

**HOW TO CREATE OUR LEVITON HDX & HDX2 CASSETTE PART NUMBERS**

<table>
<thead>
<tr>
<th>X</th>
<th>X</th>
<th>X</th>
<th>M</th>
<th>X</th>
<th>X</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fibre Type:</td>
<td>Fibre Count:</td>
<td>MTP Type:</td>
<td>Polarity:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 = OM2</td>
<td>1 = 12 fibre</td>
<td>1 = 1 x 12 Fibre</td>
<td>ANN = Method A Polarity Black Latch</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 = OM3</td>
<td>2 = 24 fibre</td>
<td>2 = 24 fibre (0.5dB)</td>
<td>BCN = Method B Polarity (Core) Black Latch</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 = OM4</td>
<td>4 = 48 fibre</td>
<td>4 = 12 fibre (0.35dB)</td>
<td>BEN = Method B Polarity (Edge) White Latch</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 = OM4+</td>
<td></td>
<td>5 = 12 fibre (0.5dB)</td>
<td>CNN = Method C Polarity Black Latch</td>
<td></td>
<td></td>
</tr>
<tr>
<td>U = OS2</td>
<td></td>
<td></td>
<td>120G to 10G</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

EG 1: **BR-31LM4-BCN** = HDX UNITY MTP CASSETTE, 0.35 dB, 12Fibre OM3, LC TO 1X12 FIBRE MTP, METHOD B (CORE) POLARITY, BLACK LATCH

EG 2: **BR-52LM2-21C** = HDX2 UNITY MTP CASSETTE, 24 FIBRE OM4+, 0.50dB LC TO 1X24 FIBRE MTP, 120G TO 10G, BLACK LATCH

EG 3: **BR-U1SM1-CNN** = HDX2 ENTERPRISE MTP CASSETTE, 12 FIBRE OS2, SC TO 1X12 FIBRE MTP, METHOD C POLARITY, BLACK LATCH
HDX ADAPTOR PLATES

- Connect to field-terminated backbone cabling or pre-terminated trunks
- Easy, one-hand installation and removal
- Offered in OM1/OM2, OM3/OM4, and OS2 fibre types
- LC, SC, and MTP styles in 6-, 12-, 24-, or up to 72-fibre configurations are available
- Visible sequential numbering to identify ports (for Tx and Rx)

<table>
<thead>
<tr>
<th>Part No.:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>BR-5FUHD-2IL</td>
<td>12-fibre HDX Adaptor Plate, OM1 &amp; OM2, Quad LC (Beige), phosphor bronze sleeve</td>
</tr>
<tr>
<td>BR-5FUHD-2QL</td>
<td>12-fibre HDX Adaptor Plate, OM3, Quad LC (Aqua), zirconia ceramic sleeve</td>
</tr>
<tr>
<td>BR-5FUHD-2ML</td>
<td>12-fibre HDX Adaptor Plate, OM4, Quad LC (Heather Violet), zirconia ceramic sleeve</td>
</tr>
<tr>
<td>BR-5FUHD-2LL</td>
<td>12-fibre HDX Adaptor Plate, OS2, Quad LC (Blue), zirconia ceramic sleeve</td>
</tr>
<tr>
<td>BR-5FUHD-2VL</td>
<td>12-fibre HDX Adaptor Plate, OS2, Quad LC/APC (Green), zirconia ceramic sleeve*</td>
</tr>
<tr>
<td>BR-5FUHD-6IC</td>
<td>6-fibre HDX Adaptor Plate, OM1 &amp; OM2, Duplex SC (Beige), phosphor bronze sleeve</td>
</tr>
<tr>
<td>BR-5FUHD-6QC</td>
<td>6-fibre HDX Adaptor Plate, OM3, Duplex SC (Aqua), zirconia ceramic sleeve</td>
</tr>
<tr>
<td>BR-5FUHD-6LC</td>
<td>6-fibre HDX Adaptor Plate, OS2, Duplex SC (Blue), zirconia ceramic sleeve</td>
</tr>
<tr>
<td>BR-5FUHD-6VC</td>
<td>6-fibre HDX Adaptor Plate, OS2, Duplex SC/APC (Green), zirconia ceramic sleeve*</td>
</tr>
<tr>
<td>BR-5FUHD-6MB</td>
<td>HDX Adaptor Plate, 3 Duplex MTP Adaptors (Black), key up/key up</td>
</tr>
<tr>
<td>BR-5FUHD-6MP</td>
<td>HDX Adaptor Plate, 3 Duplex MTP Adaptors (Black), key up/key down</td>
</tr>
<tr>
<td>BR-5FUHD-BLK</td>
<td>HDX Adaptor Plate, blank (Black)</td>
</tr>
</tbody>
</table>
HDX & HDX2 CONVERSION CASSETTES

- Manage polarity to maintain, transmit, and receive connections between parallel optics and SFP connectivity
- Connect to electronics with LC-style ports and aggregates SFP ports to a QSFP+ (40G) or CXP (120G) port
- Fit in UHDX enclosures and panel
- Snap in and out of enclosure/panel for rapid installation, adds, and changes
- Ideal for applications using 40G-10G and 120G-10G

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>BR-32LM1-41C</td>
<td>40G to 10G HDX2, OM3, 3x8 fibre, MTP to 24-fibre LC</td>
</tr>
<tr>
<td>BR-42LM1-41C</td>
<td>40G to 10G HDX2, OM4, 3x8 fibre, MTP to 24-fibre LC</td>
</tr>
<tr>
<td>BR-U2LM1-41C</td>
<td>40G to 10G HDX2, OS2, 3x8 fibre, MTP to 24-fibre LC</td>
</tr>
<tr>
<td>BR-38LM1-1AE</td>
<td>40G to 10G HDX, OM3, 8 fibre, MTP to 8-fibre LC</td>
</tr>
<tr>
<td>BR-48LM1-1AE</td>
<td>40G to 10G HDX, OM4 8 fibre, MTP to 8-fibre LC</td>
</tr>
<tr>
<td>BR-U8LM1-1AE</td>
<td>40G to 10G HDX, OS2, 8 fibre, MTP to 8-fibre LC</td>
</tr>
</tbody>
</table>
HDX2 TAP CASSETTES

- Traffic analysis points (TAPs) provide real-time monitoring in network or SAN environments for anomalies in security and performance
- Fit in UHDX enclosures and panel
- TAP in HDX cassette footprint eliminates the need for an additional panel
- Supports monitoring of 10G and 40G channels (QSFP)
- Available in two split ratios for network design flexibility, 70:30 and 50:50

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>BR-U2LM1-BE5</td>
<td>HDX2 Enterprise TAP OS2 2X12 Fibre MTP-LC 50:50</td>
</tr>
<tr>
<td>BR-U2LM1-BE7</td>
<td>HDX2 Enterprise TAP OS2 2X12 Fibre MTP-LC 70:30</td>
</tr>
<tr>
<td>BR-42LM1-BE5</td>
<td>HDX2 Enterprise TAP OM4 2X12 Fibre MTP-LC 50:50</td>
</tr>
<tr>
<td>BR-42LM1-BE7</td>
<td>HDX2 Enterprise TAP OM4 2X12 Fibre MTP-LC 70:30</td>
</tr>
<tr>
<td>BR-42MM2-BE5</td>
<td>HDX2 Unity TAP OM4 24 Fibre MTP to 3X8 Fibre MTP 50:50</td>
</tr>
<tr>
<td>BR-42LM2-BE5</td>
<td>HDX2 Unity TAP OM4 24 Fibre MTP-LC 50:50</td>
</tr>
<tr>
<td>BR-42LM2-BE7</td>
<td>HDX2 Unity TAP OM4 24 Fibre MTP-LC 70:30</td>
</tr>
<tr>
<td>BR-42MM2-BE7</td>
<td>HDX2 Unity TAP OM4 24 Fibre MTP TO 3X8 Fibre MTP 70:30</td>
</tr>
</tbody>
</table>
HI-DEX SYSTEM

➤ HI-DEX - PRE-TERMINATED, MODULAR, OPTICAL FIBRE CABLELING SYSTEM

HI-DEX is an ultra high performance, pre-terminated, modular, Optical Fibre cabling system based on MT ferrule (e.g. MTP) connector technology.

This product set is ideally suited for installation in the data centre where multiple, point to point, fibre connections between distribution racks and equipment racks can be quickly and efficiently installed and where an upgrade path to multi lane higher speed transmissions is required.

This extensive suite of products provides future proofing for multi-gigabit fibre channel infiniband and Ethernet technologies.

➤ HI-DEX - PANEL SET

The HI-DEX panel set is based around a 19" 1U panel which can accommodate up to six interchangeable cassettes. The cassettes are mounted on sliding runners which allow each cassette to be brought forward independently of the others, providing unrestricted access to every port. The subdivision of the cassettes facilitates the routing of patch leads to both sides of the panel in order to simplify the management of the patch leads. The addition of a bridge piece ties each row together to provide single-sided routing where required. The front door protects the patches when not in use and provides generous labelling space on both the front and rear faces.

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>BR-HDXPNL12</td>
<td>HI-DEX 19&quot; 1U Panel in Black</td>
</tr>
<tr>
<td>BR-HDXPNL18</td>
<td>HI-DEX 19&quot; 1U Panel in Grey</td>
</tr>
<tr>
<td>BR-HDXMU1U2</td>
<td>HI-DEX 19&quot; 1U Cable Manager in Black</td>
</tr>
<tr>
<td>BR-HDXMU1U8</td>
<td>HI-DEX 19&quot; 1U Cable Manager in Grey</td>
</tr>
<tr>
<td>BR-HDXMNF2</td>
<td>HI-DEX 1U Finger Management in Black</td>
</tr>
<tr>
<td>BR-HDXMNF8</td>
<td>HI-DEX 1U Finger Management In Grey</td>
</tr>
</tbody>
</table>

➤ HI-DEX - ZERO U ACCESSORIES

The HI-DEX product range includes additional accessory panels which extend the use of HI-DEX beyond traditional U-based racks.

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>BR-HDXZSR2</td>
<td>HI-DEX Side Rack Consolidation Point in Black</td>
</tr>
<tr>
<td>BR-HDXZCT2</td>
<td>HI-DEX Cable Tray Consolidation Point in Black</td>
</tr>
<tr>
<td>BR-HDXZHR2</td>
<td>HI-DEX 3U Hanging Rack Frame in Black</td>
</tr>
<tr>
<td>BR-HDXZUF2</td>
<td>HI-DEX 3U Under Roof Frame in Black</td>
</tr>
</tbody>
</table>
HI-DEX closed cassettes provide 24 fibre MTP-to-LC patches per cassette, giving a maximum density of 144 LC fibres in 1U. HI-DEX closed cassettes have two 12-fibre MTP adaptors on the rear and 12 LC duplex adaptors on the front. The LC adaptors feature an integrated shutter which provides both dust and laser protection. The HI-DEX cassette features printed port identification in addition to a supplementary patch labelling area.

Innovative B-polarity cassettes provide alpha and beta configurations within a single unit which is flipped to transition between alpha and beta configurations.

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>BR-HDXBBTMLCOM424</td>
<td>HI-DEX 2x12 MTP-LC OM4 A/B Polarity Cassette in Grey</td>
</tr>
<tr>
<td>BR-HDXBBTMLCOM324</td>
<td>HI-DEX 2x12 MTP-LC OM3 A/B Polarity Cassette in Grey</td>
</tr>
<tr>
<td>BR-HDXBBTMLC10824</td>
<td>HI-DEX 2x12 MTP-LC APC A/B Polarity Cassette in Grey, Singlemode</td>
</tr>
<tr>
<td>BR-HDXACTMLC10824</td>
<td>HI-DEX 2x12 MTP-LC OM3 C Polarity Cassette in Grey</td>
</tr>
<tr>
<td>BR-HDXACTMLC10824</td>
<td>HI-DEX 2x12 MTP-LC SM C Polarity Cassette in Grey</td>
</tr>
<tr>
<td>BR-HDXACTMLCOM424</td>
<td>HI-DEX 2x12 MTP-LC OM4 C Polarity Cassette in Grey</td>
</tr>
<tr>
<td>BR-HDXACTMLCOM324</td>
<td>HI-DEX 2x12 MTP-LC OM3 C Polarity Cassette in Grey</td>
</tr>
<tr>
<td>BR-HDXACTMAL10824</td>
<td>HI-DEX 2x12 MTP-LC APC C Polarity Cassette in Grey, Singlemode</td>
</tr>
<tr>
<td>BR-HDXACTMLC10824</td>
<td>HI-DEX 2x12 MTP-LC SM C Polarity Cassette in Grey</td>
</tr>
</tbody>
</table>

HI-DEX open cassettes provide 24 fibre LC presentation or 144 fibre MTP presentation in a single cassette, giving a maximum density of 144 LC fibres or 864 MTP fibres in 1U. Available in singlemode and both OM3 and OM4 multimode, HI-DEX open cassettes can be configured with opposed or aligned MTP adaptors or UPC or APC LC adaptors. HI-DEX open cassettes provide an added element of cable management.

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>BR-HDXOCAM144</td>
<td>HI-DEX Opposed Key MTP Open Cassette in Grey</td>
</tr>
<tr>
<td>BR-HDXOCBM144</td>
<td>HI-DEX Aligned Key MTP Open Cassette in Grey</td>
</tr>
<tr>
<td>BR-HDXOCLC10824</td>
<td>HI-DEX Singlemode LC Open Cassette in Grey</td>
</tr>
<tr>
<td>BR-HDXOCLCOM324</td>
<td>HI-DEX OM3 LC Open Cassette in Grey</td>
</tr>
<tr>
<td>BR-HDXOCLCOM424</td>
<td>HI-DEX OM4 LC Open Cassette in Grey</td>
</tr>
<tr>
<td>BR-HDXOCBLK</td>
<td>HI-DEX Blank Open Cassette in Grey</td>
</tr>
</tbody>
</table>
**PRE-TERMINATED ASSEMBLIES**

➤ **MTP FIBRE BREAKOUT HARNESSES**

The micro-distribution cables used in the cable array assemblies are smaller and lighter than conventional optical cable products. This offers the added benefits of reducing the space taken in pathways, lightening loads in trays, and minimizing the possibility of adversely affecting cooling under-floor airflows by creating air dams in cable pathways.

MTP® Hybrid breakout units are made up of 8 or 12 fibres Euroclass LSZH jacketed cables terminated at one end in MTP® low loss connectors. This passes through a bifurcation unit, to duplex low loss connectors (high precision SM tolerance versions) terminated to 2mm OD simplex cables. These are used to connect equipment in racks to MTP® terminated backbone cables.

➤ The assemblies are available in OM3, OM4 and OS2 performance grade fibre.

➤ The assemblies are available in lengths between 2m & 15m. Custom engineered lengths are also available on request. The assemblies are delivered as coils.

➤ Colour will be determined by fibre type e.g. OM3 Aqua, OM4 Heather violet, OS2 Yellow.

➤ Break-out length, break-out connector, polarity and labeling (custom or standard) are also selectable.

➤ Manufactured in the UK for quality and efficient delivery.

---

**HOW TO CREATE MTP BREAKOUT ASSEMBLY PART NUMBERS**

- **Populate this field with the fibre type:**
  - A = OS2 Singlemode
  - E = OM3 Multimode
  - F = OM4 Multimode

- **Populate this field with the fibre count:**
  - 008 = 8 fibre
  - 012 = 12 fibre

- **Populate this field with the 1st end connector:**
  - M = 8f Female MTP
  - N = 8f Male MTP
  - L = 12f Female MTP
  - K = 12f Male MTP

- **Populate this field with the 2nd end connector:**
  - R = LC Duplex
  - Q = SC Duplex
  - V = LC Uniboot
  - E = SC Duplex APC
  - F = LC Duplex APC

- **Populate this field with the cable length:**
  - 002 = 2m (min)
  - 015 = 15m (max)

- **Populate this field with the CPR Fire rating:**
  - A = Euroclass Eca
  - B = Euroclass Cca

- **Populate this field with the polarity:**
  - A = Method A
  - BC = Method B core
  - BE = Method B edge
  - C = Method C

- **Populate this field with the labelling:**
  - S = Standard
  - C = Custom

---

**EG: BR-FH-FB012LV00210BC-S = BREAKOUT ASSEMBLY, 12 WAY FEMALE MTP TO 6 LC UNIBOOT CONNECTORS OM4 PERFORMANCE 2.0M OVERALL LENGTH 1.0M BREAKOUT, POLARITY B CORE, STANDARD LABELLING**
MTP TO MTP - CABLE ASSEMBLIES

Cable assemblies are made up of 8, 12 or 24 fibre Euroclass LSZH jacketed cables terminated at both ends in MTP Low Loss connectors which can be loomed together to offer increased fibre counts 1 to 30m as standard.

Cable assemblies are supplied in standard lengths but custom lengths are also available on request.

- The assemblies are delivered as coils in lengths up to 50m long and on reels in lengths over 50m.
- Singlemode cables are yellow; multimode are either aqua (OM3) or heather-violet (OM4).
- Connector polarity & gender are fully selectable and labelling can also be customised.

HOW TO CREATE CABLE ASSEMBLY PART NUMBERS

EG: BR-542BLK-BO100-S = 12 FIBRE OM4 MULTIMODE 10.0 METRES, EUROCLASS CCA, METHOD B, 12 WAY FEMALE MTP TO 12 WAY MALE MTP CONNECTORS WITH STANDARD LABELLING
**LC UNIBOOT PATCH LEADS**

The micro-distribution cables used in the cable array assemblies are smaller and lighter than conventional optical cable products. This offers the added benefits of reducing the space taken in pathways, lightening loads in trays, and minimising the possibility of adversely affecting cooling under-floor airflows by creating air dams in cable pathways.

The 2mm Uniboot patch lead is suited for high density applications where the reduced cable diameter improves cable management by reducing the total volume of cable without reducing fibre count. The polarity of the Uniboot patch lead can be switched at the point of installation.

- The assemblies are available in OM3, OM4 and OS2 performance grade fibre.
- The assemblies are available in standard lengths of 1 to 5m. Custom engineered lengths are also available on request. The assemblies are delivered as coils.
- Colour will be determined by fibre type e.g. OM3 Aqua, OM4 Heather violet, OS2 Yellow.

**HOW TO CREATE LC UNIBOOT PATCH LEAD PART NUMBERS**

- **BOP = Bend Insensitive Patch Lead**
- **Fibre Type**
  - OM3 = Multimode OM3
  - OM4 = Multimode OM4
  - 108 = Singlemode
- **Connector 2**
  - LC = LC PC
  - AL = LC APC
- **Length in metres**
  - e.g. 020 = 2.0m
- **Populate this field with fibre count**
  - Eg: 2 = Duplex
- **Populate this field with shear colour**
  - 0 = Yellow
  - 5 = Aqua
  - 7 = Heather Violet
- **Populate this field with cable type**
  - 7 = 2.0mm / 900µm

**Example:**

```
BR-BOPLCOM4010LC277 – BEND-INSENSITIVE UNIBOOT LC/PC – TO – LC/PC DUPLEX PATCH LEAD, 2.0MM DIAMETER, 1M LONG WITH OM4 FIBRE, HEATHER VIOLET COLOUR.
```
HOW TO CREATE LEVITON FIBRE OPTIC CABLE PART NUMBERS

Populate this field with required cable construction:
PDC = tight buffered
UNI = loose tube

Populate this field if armour is required:
STA = steel tape armoured

Populate this field with the fibre type:
062 = 62.5/125 OM1
050 = 50/125 OM2
OM3 = 50/125 OM3
OM4 = 50/125 OM4
008 = 09/125 OS2

Populate this field with the required number of cores:
04 = 4 core
08 = 8 core
16 = 16 core
24 = 24 core

Populate this field with the required CPR Euroclass rating (PDC cables only):
ECA = Euroclass E
CCA = Euroclass C
B2CA = Euroclass B2

EG: BR-GF062PDC04LU-CCA = 4 CORE 62.5/125 TIGHT BUFFERED INT/EXT CABLE BLACK EUROCLASS CCA

TIGHT BUFFERED EXTERNAL

For building backbone and horizontal distribution applications, the PDC cable range has been designed to be compact and yet offer excellent tensile performance making it suitable for a wide range of applications. The universal construction enables the cable to be used internally and externally without the need for transition cable joints. All universal PDC cables are constructed around the 900μm tight buffered elements which are suitable for direct termination.

- Compact design
- Water blocked design
- Low smoke halogen free sheath
- Available in Euroclass Eca, Cca and B2ca fire resistant grades.

LOOSE TUBE EXTERNAL

For building backbone applications, the duct grade unitube cable range has been designed to be lightweight and compact. The 4-12 fibre product variants are constructed around a 2.90mm gel filled loose tube, whereas the 16-24 fibre variants use a 4.00mm loose tube.

- Compact water blocked design
- Up to 24 fibres
- Level 1 rodent protection
- Choice of universal or external sheath

STEEL TAPE ARMoured UNITUBE CABLE

For direct burial campus backbone applications, the steel tape armoured unitube cable range has been designed to be compact and yet offer excellent tensile and crush performance making it suitable for a wide range of applications. Steel tape armoured unitube cables are constructed around the 4.00mm gel filled PBT loose buffer tube. The 16-24 fibre variants are supplied with 2 bundles within the loose tube. A Multi Loose Tube construction is available for 48core single mode.

- Steel tape armouroing
- Maximum protection from rodents
- Choice of universal or external sheath
FIRE SURVIVAL CABLE

Fire Survival cable is used in areas where critical data transmission must continue when the building structure in which it is installed is on fire. For this reason its use in large public buildings such as data centres, airports, railway stations, stadia and onshore/offshore industrial structures is becoming increasingly common. The use of the cable in building management, fire and security systems means that these vital systems will remain functional in the event of a real life incident which requires an emergency evacuation.

- Independent 3rd party tested (BRE)
- Unitube design offering up to 24 fibres
- Layer of fire retardant tape
- Steel tape armour
- Twin low smoke halogen-free sheaths

HOW TO CREATE OUR LEVITON FIRE SURVIVAL CABLE PART NUMBERS

Populate this field with the fibre type:
- **062** = 62.5/125 OM1  
- **050** = 50/125 OM2  
- **OM3** = 50/125 OM3  
- **OM4** = 50/125 OM4  
- **008** = 09/125 OS2

Populate this field with number of cores:
- **04** = 4 core  
- **08** = 8 core  
- **16** = 16 core  
- **24** = 24 core

**EG:** **BR-EF050UNI04LSTALUFS-ECA** = 4 CORE UNITUBE FIRE SURVIVAL CABLE OM2
Leviton Rail Safe Cable

RailSafe is a range of high performance low voltage power and signalling, fibre optic and copper cables. These cables are designed for use in signalling, data, telecommunications track-side, underground and metro station applications, where the effect of fire on cables is critical to the cable performance in the environment installed. Leviton has an extensive experience of products and materials used in the rail industry and holds a vast range of London Underground approvals, considered to be at the peak of cable performance in terms of smoke and fire performance.

➤ RAILSAFE CAT6A S/FTP LSC CABLE

RailSafe Cat6A S/FTP LSC communication cable is a premium grade Class EA/Cat6A cable. It exceeds the Cat6A performance standards and is rated to 500MHz. It is suitable for use in all structured wiring cabling systems up to and including Class EA and is able to support 10 Gigabit Ethernet protocol. The cable meets the specific fire, smoke and toxicity requirements for use in subsurface rail applications. Meets LUL 2337.

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>BR-RAILSAFE-AC6S-FTP</td>
<td>Railsafe Cat6A S/FTP LSC 23AWG 4 pair Class EA Cat6A cable. Supplied on a 500m reel.</td>
</tr>
</tbody>
</table>

➤ RAILSAFE CAT6 S/FTP LSC CABLE

RailSafe Cat6 S/FTP LSC communication cable is a premium grade Class E Cat6 cable. It exceeds the Cat6 performance standards and is rated to 250MHz. It is suitable for use in all structured wiring cabling systems up to and including Class E and is able to support Gigabit Ethernet protocol. The cable meets the specific fire, smoke and toxicity requirements for use in subsurface rail applications.

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>BR-RAILSAFE-C6S-FTP</td>
<td>Railsafe Cat 6 S/FTP LSC 23AWG 4 pair Class E Category 6 cable. Supplied on a 500m reel.</td>
</tr>
</tbody>
</table>
FIBRE RAIL SAFE CABLE

RAILSAFE NON-METALLIC ARMOURED LSC OPTICAL CABLES

A high performance Fire Resistant Low Smoke Halogen Free (LSHF) optical fibre cable combining the benefits of water swell and non-metallic armour technology. The cables meet the specific fire, smoke and toxicity requirements for use in subsurface rail applications. Cables are available in all standard singlemode and multimode fibre types. Meets London Underground 1708.

HOW TO CREATE OUR RAILSAFE NON-METALLIC ARMOURED LSC OPTICAL CABLES PART NUMBER

Enter number of fibres:
4 Fibres per tube: 4, 8, 12, 16, 20, 24
8 Fibres per tube: 8, 16, 24, 32, 40, 48, 56, 64, 72, 80, 88, 96
12 Fibres per tube: 12, 24, 36, 48, 60, 72, 84, 96, 108, 120, 132, 144

Enter Fibre Type:
008 = OS1 / OS2
062 = 62.5/125
050 = 50/125
OM3 = OM3
OM4 = OM4

Enter Fibres per tube:
4 = 12 fibres / tube
8 = 8 fibres/tube
12 = 12 fibres/tube

EG: BR-RAILSAFE-108F00812FTLSC = RAILSAFE NON-METALLIC ARMOURED 108 FIBRE SINGLE MODE CABLE WITH 12 FIBRES PER TUBE
**BLOLITE BLOWN FIBRE SOLUTION**

Customer requirements continue to grow in this ever-changing market. Installers are testing bandwidth capability alongside the performance of infrastructure. Choosing the right cabling system, whether small or large, has never been so important. Network planners must decide on site suitability and what fibre to use when considering future network expansion. Leviton has created a cost-effective solution, designed for internal and external applications. Introducing Blolite, an innovative system using air blown fibre, giving complete freedom from risk, by pre-installing a ducting route inside sheath.

Blolite is the industry standard for air-blow fibre systems. The solution allows for long distance links of up to 1km. Blolite is easily installed using compressed air. This technique makes the process hassle free, ensuring no disruption to the workplace. Blolite fibres are easily terminated and are compatible with all standard optical connectors. With a zero failure rate since 1988 – take advantage of this insurance policy for your high speed network requirements.

**SINGLE BLOWN FIBRE ELEMENTS**

The Blolite system offers a complete range of high quality singlemode and multimode optical fibres, with a blowable coating and a finished size of 500μm. The Blolite fibre is strippable with standard tools and is compatible with standard connector types. Blolite fibre is available in twelve standard colours and is supplied on plastic spools in 2km or 4km lengths for installation into Blolite 3mm, 5mm and 8mm MicroDuct by trained and licensed Blolite installers using the IM2000 blow head.

- Unique ‘Blowable’ coating
- 12 Standard Colours
- Installation up to 1000m

**HOW TO CREATE OUR SINGLE BLOWN FIBRE ELEMENT PART NUMBERS**

Populate this field with Colour:
- 09 = White
- 09 = Red
- 14 = Pink
- 06 = Black
- 10 = Grey
- 06 = Blue
- 11 = Yellow
- 07 = Orange
- 12 = Brown
- 08 = Green
- 13 = Violet
- 15 = Turquoise

Populate this field with fibre type:
- 0101 = 62.5/125 OM1
- 0005 = 50/125 OM2
- 0003 = 50/125 OM3
- 0004 = 50/125 OM4
- 0200 = 09/125 OS2

**EG: BR-10-0200-06 = 2KM SPOOL OF BLOLITE BLOWABLE BLUE OS2 FIBRE.**

(4KM SPOOL AVAILABLE ON REQUEST)
**BLOLITE INTERNAL MULTIDUCTS**

To facilitate the installation of Blolite single blown fibres, a range of multi-way MicroDucts into which Blolite fibres can be blown are available. The internal range of these MultiDucts are constructed with the standard Blolite MicroDuct surrounded with a layer of polyester tape and a LSHF outer sheath making them suitable for internal applications.

- Available with 3mm, 5mm or 8mm MicroDucts
- Non metallic design
- Simple MicroDuct identification

**HOW TO CREATE OUR INTERNAL MULTIDUCT PART NUMBERS**

Populate this field with the number of ducts:
- 01 = 1 Ducts
- 02 = 2 Ducts
- 04 = 4 Ducts
- 07 = 7 Ducts
- 12 = 12 Ducts
- 19** = 19 Ducts

Populate this field with the required duct size:
- 0321 = 3mm OD / 2.1mm Bore size
- 0535 = 5mm OD / 3.5mm Bore size
- 0806 = 8mm OD / 6mm Bore size

**EG:** BR-BL01IN0535 = 1 WAY 5MM INTERNAL MULTIDUCT

**BLOLITE EXTERNAL MULTIDUCTS**

To facilitate the installation of Blolite single blown fibres, a range of multi-way MicroDucts into which Blolite fibres can be blown are available. The external range of these MultiDucts are constructed with the standard Blolite MicroDuct Polyethylene outer sheath making them suitable for external applications.

- Available with 5mm or 8mm MicroDucts
- MicroDuct numbered for identification

**HOW TO CREATE OUR EXTERNAL MULTIDUCT PART NUMBERS**

Populate this field with the number of ducts:
- 01 = 1 Ducts
- 02 = 2 Ducts
- 04 = 4 Ducts
- 07 = 7 Ducts
- 12 = 12 Ducts
- 19** = 19 Ducts

Populate this field with the required duct size:
- 0321 = 3mm OD / 2.1mm Bore size
- 0535 = 5mm OD / 3.5mm Bore size
- 0806 = 8mm OD / 6mm Bore size

**EG:** BR-BL04DI0806 = 4 WAY 8MM DIRECT INSTALL MULTIDUCT
Microduct cabling systems are popular solutions for building flexibility into a network, they can be populated when needed and leave spare capacity for future growth. The ability to defer initial installation costs is a key advantage of an air blown cable installation over traditional cable installations. The Microblo air blown loose tube microduct cable is available with fibre counts from 2 to 12 in a 2.5 mm diameter package. The cable has been specifically designed and developed for improved installation efficiency in pre-installed 5 / 3.5 mm microducts using existing air blown installation techniques.

**HOW TO CREATE OUR 2-12 FIBRE AIR-BLOWN MICRO CABLE PART NUMBERS**

<table>
<thead>
<tr>
<th>BR</th>
<th>HF</th>
<th>X</th>
<th>BMC</th>
<th>WNM3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Populate this field with the number of fibre type:
- 062 = OM1
- 050 = OM2
- OM3 = OM3
- OM4 = OM4
- 008 = OS1/OS2

Populate this field with the required number of fibres:
- 2 = 2 fibres
- 4 = 4 fibres
- 6 = 6 fibres
- 8 = 8 fibres
- 12 = 12 fibres

**EG:** BR-HFOM3BMC6WNM3 = 6 FIBRE OM3 MICRODUCT CABLE

**12-72 FIBRE MICROBLO AIR-BLOWN MICRO CABLE**

Microduct cabling systems are popular solutions for building flexibility into a network, they can be populated when needed and leave spare capacity for future growth. The ability to defer initial installation costs is a key advantage of an air blown cable installation over traditional cable installations. The Microblo air blown loose tube microduct cable is available with fibre counts from 12 to 72 in a 6.0 mm diameter package. The micro cable is constructed of a non metallic, resin bonded glass central strength member and high density polyethylene sheath. The cable has been specifically designed and developed for improved installation efficiency in pre-installed 10/8 mm microducts using existing air blown installation techniques. Dry water blocking technology ensures the cable cores are fully water blocked.

**HOW TO CREATE OUR 12-72 FIBRE AIR-BLOWN MICRO CABLE PART NUMBERS**

<table>
<thead>
<tr>
<th>BR</th>
<th>HF</th>
<th>X</th>
<th>BMC</th>
<th>WNM6</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Populate this field with the number of fibre type:
- 062 = OM1
- 050 = OM2
- OM3 = OM3
- OM4 = OM4
- 008 = OS1/OS2

Populate this field with the required number of fibres:
- 12 = 12 fibres
- 24 = 24 fibres
- 36 = 36 fibres
- 48 = 48 fibres
- 60 = 60 fibres
- 72 = 72 fibres

**EG:** BR-HFOM4BMC48WNM6 = 48 FIBRE OM4 MICRODUCT CABLE
Microduct cabling systems are popular solutions for building flexibility into a network, they can be populated when needed and leave spare capacity for future growth. The ability to defer initial installation costs is a key advantage of air blown cable installation over traditional cable installations. The Leviton Microblo air blown loose tube microduct cable is available with fibre counts of 84 and 96 fibres in a 7.0mm diameter package. The cable has been specifically designed and developed for improved installation efficiency in pre-installed 12/10 mm microducts using existing air blown installation techniques. Dry water blocking technology ensures the cable cores are fully water blocked.

- Non-metallic, resin bonded glass central strength member
- Layer of stranded elements: Maximum 12 fibres per gel filled tube, plus solid fillers as necessary
- Dry water blocked interstices
- High density polyethylene sheath

HOW TO CREATE OUR 84-90 CORE AIR-BLOWN MICROCABLE PART NUMBERS

Population this field with the number of fibre type:
- 062 = OM1
- 050 = OM2
- 053 = OM3
- 054 = OM4
- 008 = OS1/OS2

Population this field with the required number of fibres:
- 84 = 84 fibres
- 90 = 90 fibres

EG: BR-HFOM3BMC84WNM8 = 84 FIBRE OM3 MICRODUCT CABLE

MICROBLO DIRECT INSTALL PROTECTED MICRODUCTS

The Leviton MicroBlo range of Direct Install Protected MicroDucts offer up to 19 ducts in a single construction. The range has been designed to facilitate the installation of Leviton MicroBlo Air Blown Fibre cables into Direct Install installations.

- Up to 19 individual ducts coloured for identification - options for high density and/or future proofed installations
- Range of Duct Sizes - for compatibility with Leviton MicroBlo Cables
- Low friction polyethylene duct for optimised blowing performance and superior installation distances
- High Density Polyethylene outer sheath
- Included in the Leviton 25 Year System Warranty - when used in conjunction with Leviton fibre connectivity
MicroBlo Direct Burial Protected Microducts

The Leviton MicroBlo range of Direct Burial Protected MicroDucts offer up to 19 ducts in a single construction. The range has been designed to facilitate the installation of Leviton MicroBlo Air Blown Fibre cables into direct burial installations.

Leviton MicroDucts are available in a variety of constructions including Direct Install, Direct Burial, Flat Burial and Indoor to suit a wide range of installation environments.

- Up to 19 individual ducts coloured for identification - options for high density and/or future proofed installations
- Range of Duct Sizes - for compatibility with Leviton MicroBlo Cables
- Low friction polyethylene duct for optimised blowing performance and superior installation distances
- High Density Polyethylene outer sheath
- Included in the Leviton 25 Year System Warranty - when used in conjunction with Leviton fibre connectivity

How to Create Our Direct Install Protected Microduct Part Numbers

POPULATE THIS FIELD WITH THE REQUIRED DUCT SIZE:

- 0535 = 5mm OD / 3.5mm Bore size
- 1008 = 10mm OD / 8mm Bore size
- 1210 = 12mm OD / 10mm Bore size

* Not for 12mm duct ** Not for 10 & 12mm duct

Example: BR-MB04DI1008 = 4WAY 10MM DIRECT INSTALL MICRODUCT

How to Create Our Direct Burial Protected Microduct Part Numbers

POPULATE THIS FIELD WITH THE NUMBER OF DUCTS:

- 01 = 1 Ducts
- 02 = 2 Ducts
- 04 = 4 Ducts
- 07 = 7 Ducts
- 12 = 12 Ducts
- 19** = 19 Ducts

* Not available for 12mm and 14mm duct

Example: MB02DB1208 = 2WAY 12MM DIRECT BURIAL MICRODUCT
MICROBLO INDOOR PROTECTED MICRODUCTS

The Leviton MicroBlo range of Indoor Protected MicroDucts offer up to 19 ducts in a single construction. The range has been designed to facilitate the installation of Leviton MicroBlo Air Blown Fibre Cables to provide access into a building.

➤ Up to 19 individual ducts numbered for identification - options for high density and/or future proofed installations
➤ Range of duct sizes - for compatibility with Leviton MicroBlo Cables
➤ Standard low friction Halogen Free Flame Retardant Low Smoke (HFFR-LS) duct for optimised blowing performance and superior installation distances
➤ HFFR-LS outer sheath
➤ Included in the Leviton 25 Year System Warranty - when used in conjunction with Leviton fibre connectivity

HOW TO CREATE OUR INDOOR PROTECTED MICRODUCTS PART NUMBERS

Populate this field with the required duct size:
- 0735 = 7mm OD / 3.5mm Bore size
- 1208 = 12mm OD / 8mm Bore size
- 1410 = 14mm OD / 10mm Bore size

Populate this field with the number of ducts:
- 01 = 1 Ducts
- 02 = 2 Ducts
- 04 = 4 Ducts
- 07 = 7 Ducts
- 12* = 12 Ducts
- 19** = 19 Ducts

* Not for 12mm duct
** Not for 10mm & 12mm duct

EG: BR-MB04IN1210 = 4WAY 12MM INDOOR PROTECTED MICRODUCT
STRAIGHT CONNECTOR FOR CONNECTING 2 EQUAL SIZE MICRODUCTS

Part No: & Description:
BR-30-0501-00  5.0mm Straight Connector
BR-30-0801-00  8.0mm Straight Connector

STRAIGHT SCREW CONNECTOR

Straight Screw Connector for connecting 2 equal size microducts, eliminating movement at the joint.

Part No: & Description:
BR-30-0502-00  5.0mm Straight Screw Connector
BR-30-0802-00  8.0mm Straight Screw Connector

END STOP

End Stop for blocking of a redundant tube or temporary sealing

Part No: & Description:
BR-30-0504-00  5.0mm End stop
BR-30-0804-00  8.0mm End stop

END PLUG

End Plug for blocking a straight connector when later connection is required

Part No: & Description:
BR-30-0505-09  5.0mm End Plug
BR-30-0805-09  8.0mm End Plug

BULKHEAD CONNECTOR

Bulkhead Connector for attaching a microduct to a panel or wall box

Part No: & Description:
BR-30-0506-09  5.0mm Bulkhead Connector
➤ DUST CAP
Dust Cap for preventing dust ingress during installation.

<table>
<thead>
<tr>
<th>Part No: &amp; Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>BR-30-0507-05 5.0mm Dust Cap</td>
</tr>
<tr>
<td>BR-30-0807-05 8.0mm Dust Cap</td>
</tr>
</tbody>
</table>

➤ GAS BLOCKING ‘T’
Gas Blocking ‘T’ Piece for use with resin to provide a gas blocking seal where required.

<table>
<thead>
<tr>
<th>Part No: &amp; Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>BR-30-0508-00 5.0mm Gas Blocking ‘T’</td>
</tr>
<tr>
<td>BR-30-0808-00 8.0mm Gas Blocking ‘T’</td>
</tr>
</tbody>
</table>

➤ 8MM TO 5MM REDUCER
8mm to 5mm Reducer. Reduces from 8mm to 5mm Microduct

<table>
<thead>
<tr>
<th>Part No: &amp; Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>BR-30-5801-00 8mm to 5mm Microduct Reducer</td>
</tr>
</tbody>
</table>

➤ STEM CONVERTER
Stem Converter for use with Termination Splitter at the end of a duct route.

<table>
<thead>
<tr>
<th>Part No: &amp; Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>BR-30-5810-05 8mm to 5mm Stem</td>
</tr>
<tr>
<td>BR-30-0809-05 8mm &quot;Y&quot; duct diverter</td>
</tr>
</tbody>
</table>

➤ WATER BLOCKING STRAIGHT CONNECTOR
Water blocking straight connector for connecting 2 equal size microducts

<table>
<thead>
<tr>
<th>Part No: &amp; Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>BR-30-0503-00 5mm Water blocking straight connector</td>
</tr>
</tbody>
</table>
PANDUIT™

PAN-NET™
➤ Copper 58
➤ Racks & Cabinets 70
➤ Fibre 74
➤ HD Flex™ 79
➤ Panzone™ 87
➤ Quicknet™ 89

NETKEY™
➤ Cables 91
➤ Modules & Patch Leads 93
➤ Faceplates 94

CABLE MANAGEMENT
➤ Wyr-Grid 95
➤ FiberRunner™ 96

INDUSTRIAL AUTOMATION
➤ Synapsense & Intravue 99
➤ Enclosures & Accessories 100
➤ Modules, Plugs & Adaptors 101

Pan-Net™  FiberRunner™  Net-Access®
NetKey™  Synapsense®  Wyr-Grid®  Intraview™
PANDUIT™ COPPER CABLE

➤ TX5500™ CAT5E UTP UNSHEILDDED CABLE

Premium Cat5E, low smoke zero halogen (LSZH), 4-pair, UTP copper cable. Conductors are twisted in pairs and protected by an LSZH (IEC 60332-1) jacket, 305m White

➤ Nominal Diameter 4.9mm (0.194 in.)
➤ Certified channel performance in a 4-connector configuration up to 100 meters
➤ Exceeds ISO 11801 Class D, ANSI/TIA-568-C.2 and component requirements of IEC 61156-5
➤ 24 AWG solid copper insulated with HDPE
➤ Meets IEEE 802.3af and IEEE 802.3at for PoE applications
➤ Installation temperature range 0°C to 50°C (32°F to 122°F)
➤ Operational temperature range -20°C to 75°C (-4°F to 167°F)
➤ Characterised to 450 MHz, 350 MHz above the standards
➤ Third Party tested to ISO/IEC 11801 and ANSI/TIA-568-C.2
➤ Descending scale cable length markings enable easy identification of existing cable, reducing time and scrap.
➤ Supplied in an easy payout EZBrake™ reel-in-a-box
➤ EN50575:2014 + A1:2016 Euroclass Dca-s2-d2-a1

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>PT-PUL5504WH-EY</td>
<td>UTP Cat5e Cable LSZH 305m. White Euroclass Dca</td>
</tr>
</tbody>
</table>

➤ TX5500™ CAT5E F/UTP SHIELDED CABLE

Premium Cat5E, low smoke zero halogen (LSZH), 4-pair, F/UTP copper cable. Conductors are twisted in pairs, surrounded by an overall metallic foil, and protected by an LSZH (IEC 60332-1) jacket, 305m Dark Grey

➤ Nominal Diameter 6.0mm (0.236 in.)
➤ Certified channel performance in a 4-connector configuration up to 100 meters
➤ Exceeds ISO 11801 Class D, ANSI/TIA-568-C.2 and component requirements of IEC 61156-5
➤ 24 AWG solid copper with PE insulation
➤ Meets IEEE 802.3af and IEEE 802.3at for PoE applications
➤ Installation temperature range 0°C to 50°C (32°F to 122°F)
➤ Operational temperature range -20°C to 60°C (-4°F to 140°F)
➤ Third Party tested to ISO/IEC 11801 and ANSI/TIA-568-C.2
➤ Descending scale cable length markings enable easy identification of existing cable, reducing time and scrap.
➤ Supplied in an easy payout EZBrake™ reel-in-a-box
➤ EN50575:2014 + A1:2016 Euroclass Eca-s2-d2-a1

<table>
<thead>
<tr>
<th>Part No:</th>
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</tr>
</thead>
<tbody>
<tr>
<td>PT-PFL5504DG-KG</td>
<td>F/UTP Cat5e Cable LSZH 305m. Dark Grey Euroclass Eca</td>
</tr>
</tbody>
</table>
TX6000™ CAT6 UTP CABLE

Premium Cat6, low smoke zero halogen (LSZH), 4-pair, UTP copper cable. Conductors are twisted in pairs, separated by an integrated pair divider, and protected by an LSZH (IEC 60332-1) jacket. 305m White

- Exceeds requirements of ANSI/TIA-568-C.2 Cat6and ISO 11801 2nd Edition Class E channel standards
- Exceeds requirements of ANSI/TIA-568-C.2 and IEC 61156-5 Cat6 component standards
- Meets requirements of IEEE 802.3af and IEEE 802.3at for PoE applications
- Third party tested to comply with ANSI/TIA-568-C.2
- Installation temperature range: 32°F to 122°F (0°C to 50°C)
- Operating temperature range: 14°F to 140°F (-10°C to 60°C)
- Characterised to 550MHz, 300MHz above the standard
- Descending length cable markings enable easy identification of remaining cable which reduces installation time and cable scrap
- Cable supplied in an easy payout EZBrake™ reel-in-a-box
- 23 AWG construction with HDPE insulation
- EN50575:2014 + AI:2016 Euroclass Dca-s2-d2-a1 and Euroclass Cca-s1-d1-a1 available

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>PT-PUL6004WH-EY</td>
<td>UTP Cat6 Cable LSZH 305m. White Euroclass Dca</td>
</tr>
<tr>
<td>PT-PUY6C04WH-CE</td>
<td>UTP Cat6 Cable LSZH 305m. White Euroclass Cca</td>
</tr>
</tbody>
</table>

TX6000™ CAT6 F/UTP SHIELDED CABLE

Premium Cat6, low smoke zero halogen (LSZH), 4-pair, F/UTP copper cable. Conductors are twisted in pairs, separated by an integrated pair separator, surrounded by an overall metallic foil shield and protected by an LSZH (IEC 60332-1) jacket. 500m Dark Grey

- Nominal Diameter 7.2mm (0.283 in.) (PT-PFL6004DG-KD)
- Certified channel performance in a 4-connector configuration up to 100 meters
- Exceeds ISO 11801 Class E & ANSI/TIA-568-C.2 Cat6
- 23 AWG solid copper with PE insulation
- Meets IEEE 802.3af and IEEE 802.3at for PoE applications
- Installation temperature range 0°C to 50°C (32°F to 122°F)
- Operational temperature range -20°C to 60°C (-4°F to 140°F)
- Third Party tested as part of channel to ISO/IEC 11801
- Descending scale cable length markings enable easy identification of existing cable, reducing time and scrap and supplied on a reel
- EN50575:2014 + AI:2016 Euroclass Eca and Euroclass Cca-s1-d1-a1 available

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>PT-PFL6004DG-KD</td>
<td>F/UTP Cat6 Cable LSZH 500m. Dark Grey Euroclass Eca</td>
</tr>
<tr>
<td>PT-PFY6C04WH-CED</td>
<td>F/UTP Cat6 Cable LSZH 500m. White Euroclass Cca</td>
</tr>
</tbody>
</table>
PASSIUT™ NetworksCentre

➤ TX6000™ CAT6 SF/UTP SHIELDED COPPER CABLE

Cat6, low smoke zero halogen (LSZH), 4-pair, SF/UTP copper cable. Conductors are twisted in pairs, separated by an integrated pair separator, surrounded by an overall braid and overall foil shield, and protected by an LSZH (IEC 60332-1) jacket. 500m Dark Grey

➤ Nominal Diameter 7.4mm (0.291 in.)
➤ Certified channel performance in a 4-connector configuration up to 100 meters
➤ Exceeds ISO 11801 Class E & ANSI/TIA-568-C.2 Cat6*
➤ 23 AWG solid copper with PE insulation
➤ Meets IEEE 802.3af and IEEE 802.3at for PoE applications
➤ Installation temperature range 0°C to 60°C (-4°F to 140°F)
➤ Operational temperature range -20°C to 75°C (-4°F to 140°F)
➤ Third Party tested to ISO/IEC 11801 & ANSI/TIA-568-C.2 Cat6
➤ Descending scale cable length markings enable easy identification of existing cable, reducing time and scrap and supplied on a reel

Part No: Description:
PT-PUL6ASD04WH-CED Cat6A UTP 4 Pair Cable White (Small Diameter) Per 305m. Copper Cable Euroclass Dca

➤ TX6A-SD™ 10GIG™ UTP COPPER CABLE WITH MATRIX TECHNOLOGY (70M CHANNEL SOLUTION)

Premium Cat6A, low smoke zero halogen (LSZH), 4-pair, UTP copper cable. Conductors are twisted in pairs, separated by an integrated pair divider, surrounded by patent-pending MaTriX tape and protected by an LSZH (IEC 60332-1) jacket. Ideal for installations up to 70 meters. Smallest diameter Cat6A UTP cable on the market, 305m White.

➤ Nominal Diameter 6.1mm (0.240 in.)
➤ Exceeds ISO 11801 Class EA & ANSI/TIA-568-C.2 Cat6A*
➤ 26 AWG solid copper with HDPE insulation
➤ Meets IEEE 802.3af, IEEE 802.3at & IEEE 802.3bt for PoE applications
➤ Installation temperature range 0°C to 60°C (32°F to 140°F)
➤ Operational temperature range -20°C to 75°C (-4°F to 140°F)
➤ Third Party tested to ISO/IEC 11801 & ANSI/TIA-568-C.2 Cat6A
➤ Descending scale cable length markings enable easy identification of existing cable, reducing time and scrap and supplied on a reel

Part No: Description:
PT-PSFL6004DG-KD SF/UTP Cat6 Cable LSZH, 500m, Dark Grey Euroclass Eca

* Note: The cable utilises 26 AWG conductors which does not meet the 24 to 22 AWG conductor size of horizontal cable in ANSI/TIA-568-C.2, resulting in increased attenuation which de-rates the maximum channel distance to 70 meters.
Part No: Description:
PT-PUFZ6X04BU-KD Cat6A 4-pair U/FTP Shielded Copper Cable LSZH 500m - Blue, Euroclass Dca
PT-PUFY6X04WH-HED Cat6A 4-pair U/FTP Shielded Copper Cable LSZH 500m - White, Euroclass Cca

**TX6A™ 10GIG™ U/FTP SHIELDED COPPER CABLE**

Premium Cat6A, low smoke zero halogen (LSZH), 4-pair, U/FTP shielded copper cable. Conductors are twisted in pairs, each individual twisted pair covered by a metallic foil shield and protected by a EN13501-6 Euroclass jacket. 500m White

- Nominal Diameter 7.1mm (0.280 in.)
- Certified channel performance in a 4-connector configuration up to 100 meters
- Exceeds ISO 11801 Class EA, ANSI/TIA-568-C.2 Cat6A and component requirements of IEC 61156-5. Meets IEEE 802.3af, IEEE 802.3at & IEEE 802.3bt for PoE applications
- 23 AWG solid copper with HDPE insulation
- Installation temperature range 0°C to 50°C (32°F to 122°F)
- Operational temperature range -20°C to 75°C (-4°F to 167°F)
- Descending scale cable length markings enable easy identification of existing cable, reducing time and scrap
- Supplied in an easy payout EZBrake™ reel-in-a-box
- EN50575: 2014 + A1:2016 Euroclass Cca-s2-d2-a1 available

Part No: Description:
PT-PSL7004WH-KD TX7000™ Cat7 S/FTP Cable LSZH 500m - White, Euroclass Eca
PT-PSW7004WH-HED TX7000™ Cat7 S/FTP Cable LSZH 500m - White, Euroclass B2ca

**TX7000™ CAT7 S/FTP SHIELDED COPPER CABLE**

Cat7, low smoke zero halogen (LSZH), 4-pair, S/FTP shielded copper cable. Conductors are twisted in pairs, each covered by a metallic foil shield, surrounded by an overall braided shield and protected by a EN13501-6 Euroclass jacket. 500m Dark Grey

- Nominal Diameter 7.3mm (0.287 in.) (PT-PSL7004DG-KED)
- Performance tested up to 1000 MHz
- Certified channel performance in a 4-connector configuration up to 100 meters
- Exceeds ISO 11801 Class EA, ANSI/TIA-568-C.2 Cat6A and component requirements of IEC 61156-5.
- 23 AWG conductors with foamed skin PE insulation
- Installation temperature range 0°C to 50°C (32°F to 122°F)
- Operational temperature range -20°C to 60°C (-4°F to 140°F)
- Descending scale cable length markings enable easy identification of existing cable, reducing time and scrap
- Supplied in an easy payout EZBrake™ reel-in-a-box
PAN-NET™ COPPER MODULES

➤ High performance termination
➤ Wire cap with separate quadrant for each conductor pair
➤ Highest density 48 ports in 1U
➤ Provide minimal cable untwist
➤ 100% tested and individually serialised
➤ Terminates 22-26 & 22-30 AWG solid and stranded conductors

➤ STANDARD UNSHEILDED

PAN-NET™ COPPER MODULES

➤ High performance termination
➤ Wire cap with separate quadrant for each conductor pair
➤ Highest density 48 ports in 1U
➤ Provide minimal cable untwist
➤ 100% tested and individually serialised
➤ Terminates 22-26 & 22-30 AWG solid and stranded conductors

➤ RIGHT ANGLE UNSHEILDED

➤ Allows cable to route at a 90° angle to the left or right
➤ Ideal for installations with minimal depth as not to violate cable bend radius

➤ SHUTTERED UNSHEILDED

➤ Includes shuttered door to protect contacts when not in use
➤ Ideal for use in dusty environments where jack is not always mated

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>PT-CJ6X88TG**</td>
<td>Cat6A Mini-Com® TX6A™ 10GigTM UTP Jack Module</td>
</tr>
<tr>
<td>PT-CJ688TG**</td>
<td>Cat6 Mini-Com® TX6™ PLUS UTP Jack Module</td>
</tr>
<tr>
<td>PT-CJ5E88TG**</td>
<td>Cat5e Mini-Com® TX5e™ UTP Jack Module</td>
</tr>
</tbody>
</table>

➤ RIGHT ANGLE UNSHEILDED

➤ Allows cable to route at a 90° angle to the left or right
➤ Ideal for installations with minimal depth as not to violate cable bend radius

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<tr>
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</tr>
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<tbody>
<tr>
<td>PT-CJR6X88TG**</td>
<td>Cat6A Mini-Com® TX6A™ 10GigTM Right Angle Jack Module</td>
</tr>
<tr>
<td>PT-CJR688TG**</td>
<td>Cat6 Mini-Com® TX6™ PLUS Right Angle Jack Module</td>
</tr>
<tr>
<td>PT-CJR5E88TG**</td>
<td>Cat5e Mini-Com® TX5e™ Right Angle Jack Module</td>
</tr>
</tbody>
</table>

➤ SHUTTERED UNSHEILDED

➤ Includes shuttered door to protect contacts when not in use
➤ Ideal for use in dusty environments where jack is not always mated

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</thead>
<tbody>
<tr>
<td>PT-CJD6X88TG**</td>
<td>Cat6A Mini-Com® TX6A™ 10GigTM Shuttered Jack Module</td>
</tr>
<tr>
<td>PT-CJD688TG**</td>
<td>Cat6 Mini-Com® TX6™ PLUS Shuttered Jack Module</td>
</tr>
<tr>
<td>PT-CJD5E88TG**</td>
<td>Mini-Com® TX5e™ Shuttered Jack Module</td>
</tr>
</tbody>
</table>

Bulk Packs: Standard jack modules available in bulk packs, which package jacks in a single box with no bag. Add -24 after part number for packs of 24. Add -C after part number for packs of 100.

** = Replace with desired colour.

IV=Off White, EI=Electric Ivory, IG=International Grey, AW=Arctic White, BL=Black, BU=Blue, GR=Green, RD=Red, OR=Orange, VL=Violet, YL=Yellow, WH=White, BR=Brown, LB=Light Blue, PK=Pink. Note: Colours shown may differ slightly from actual jack colours.
➤ **STANDARD SHIELDED**

- High performance termination
- Shielded wire cap with separate quadrant for each conductor pair
- Provides minimal cable untwist
- 100% tested and individually serialised
- Terminates 22-26 AWG solid and stranded conductors
- Provides a 360° conductive path to ground
- 100% tested and individually serialised
- Seamless bonding of the jack module to ground when using Mini-Com® all metal modular patch panels

<table>
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</tr>
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<tbody>
<tr>
<td>PT-CJS6X88TG**</td>
<td>Cat6A Mini-Com® TX6A™ 10GigTM UTP Jack Module</td>
</tr>
<tr>
<td>PT-CSJ688TG**</td>
<td>Cat6 Mini-Com® TX6™ PLUS 28/30 AWG Jack Module</td>
</tr>
<tr>
<td>PT-CSJ5E88TG**</td>
<td>Cat5e Mini-Com® TX5e™ 28/30 AWG Jack Module</td>
</tr>
</tbody>
</table>

➤ **CORROSIVE RESISTANT UNSHEILDED**

- Resists corrosive elements such as salt and moisture
- Protects electrical contacts with polymer based gel

<table>
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<tr>
<th>Part No:</th>
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<tbody>
<tr>
<td>PT-CJE688TG**</td>
<td>Cat6 Mini-Com® TX6™ PLUS Corrosive Resistant Jack Module</td>
</tr>
<tr>
<td>PT-CJE5E88TG**</td>
<td>Cat5e Mini-Com® TX5e™ Corrosive Resistant Jack Module</td>
</tr>
</tbody>
</table>

➤ **28/30 AWG UNSHEILDED**

- Required for terminating to wires of Panduit 28 AWG patch leads
- Terminates 28 AWG solid/stranded to 30 AWG solid conductors

<table>
<thead>
<tr>
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</tr>
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<tbody>
<tr>
<td>PT-CJT6X88TG**</td>
<td>Cat6A Mini-Com® TX6A™ 10GigTM 28/30 AWG Jack Module</td>
</tr>
<tr>
<td>PT-CJT688TG**</td>
<td>Cat6 Mini-Com® TX6™ PLUS 28/30 AWG Jack Module</td>
</tr>
<tr>
<td>PT-CJT5E88TG**</td>
<td>Cat5e Mini-Com® TX5e™ 28/30 AWG Jack Module</td>
</tr>
</tbody>
</table>
PAN-NET™ COPPER PATCH LEADS

➤ Dual-rated CM/LSZH flame rating
➤ Patented tangle-free latch on all plugs
➤ All leads support PoE, PoE+, and PoE++
➤ Multiple Cat6A, Cat6 & Cat5e cord choices
➤ Cat5A now available in 28 AWG

➤ 28 AWG (SMALL DIAMETER) PATCH LEADS

➤ Supports up to 96 metres of channel length (when using 6 metres of patch)
➤ Dual CM/LSZH Flame rating
➤ 28 AWG De-rating Factor 1.9

<table>
<thead>
<tr>
<th>Part No:</th>
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</tr>
</thead>
<tbody>
<tr>
<td>PT-UTP28X*M^</td>
<td>Cat6A Performance 28 AWG UTP Patch Lead</td>
</tr>
<tr>
<td>PT-UTP28SP*M^</td>
<td>Cat6 Performance 28 AWG UTP Patch Lead</td>
</tr>
<tr>
<td>PT-UTP28CH*M^</td>
<td>Cat5e Performance 28 AWG UTP Patch Lead</td>
</tr>
</tbody>
</table>

➤ TX6A-SD™ (REDUCED DIAMETER) PATCH LEADS

➤ Supports full 100-metre Cat6A channel while using 24% less space than 24 AWG Cat6A leads
➤ CM Flame rating and available LSZH option for metre lengths
➤ 26 AWG De-rating factor 1.5

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>PT-UTP6ASD*M^</td>
<td>Cat6A TX6A™ 10Gig™ 26 AWG UTP Patch Lead with MaTrX Technology</td>
</tr>
</tbody>
</table>

➤ TX6A™, TX6™ PLUS AND TX5E™ PATCH LEADS

➤ Supports full 100-metre channel
➤ 24 AWG De-rating factor 1.2
➤ CM flame rating with LSZH option for Cat6 & 5e (metre lengths only)

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>PT-UTP6A*M^</td>
<td>Cat6A TX6A™ 10Gig™ 24 AWG UTP Patch Lead with MaTrX Technology</td>
</tr>
<tr>
<td>PT-UTPSP*M^Y</td>
<td>Cat6TX6™ PLUS 24 AWG UTP Patch Lead</td>
</tr>
<tr>
<td>PT-UTPCH*M^Y</td>
<td>Cat5e TX5e™ 24 AWG UTP Patch Lead</td>
</tr>
</tbody>
</table>

* = Length 0.5m lengths up to 10m, 1m lengths 10m to 20m, 5m lengths 20m to 40m (UTP28) and to 60m (UTP6A, UTPSP, UTPCH)
^ = Lead colour. Off White default, BL=Black, BU=Blue, GR=Green, RD=Red, OR=Orange, VL=Violet, YL=Yellow, GY=Grey.
Pink (PK) available as cord Colour option for UTP28SP only.
PAN-NET™ COPPER PATCH LEADS

➤ 28 AWG SMALL DIAMETER SHIELDED PATCH LEADS

➤ Supports up to 96 metres of channel length (when using 6 meters of patch)
➤ 28 AWG De-rating factor: 1.9

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>PT-STP28X*M^</td>
<td>Cat6A Performance 28 AWG F/UTP Shielded Patch Lead</td>
</tr>
</tbody>
</table>

➤ STANDARD SHIELDED PATCH LEADS

➤ Supports full 100-metre channel
➤ 26 AWG De-rating factor: 1.5

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>PT-STP6X*M^</td>
<td>Cat6A TX6™ 10Gig™ 26 AWG</td>
</tr>
<tr>
<td>PT-STP6C*M^</td>
<td>Cat5e TX5e™ 26 AWG F/UTP Shielded Patch Lead</td>
</tr>
<tr>
<td>PT-STPCH*MB#</td>
<td>Cat5e TX5e™ 26 AWG F/UTP Shielded Patch Lead</td>
</tr>
</tbody>
</table>

* = Length
0.5m lengths up to 10m
Length comes in 1m lengths between 10m to 20m & comes in 5m lengths between 20m to 40m (STP28X) or between 20m to 60m (STP6 & STPCH)

^ = Colour
Add suffix: IG (Int'l Grey), AW (Arctic White), BL (Black), BU (Blue), GR (Green), RD (Red), OR (Orange), VL (Violet), YL (Yellow), GY (Grey)
STP6C not available in OR or VL. Off White default - leave blank. Additionally GY (Grey). STPCH only available in IG.

# = Boot Colour
Options for boots are BL, BU, GR, RD, YL, BR (Brown).

See the big difference small can make!

PAN-NET™ COPPER PATCH LEADS

28-AWG – Half the Size, Same Performance

28-AWG cords are less than the size!

Calculations are based on the area filled by the cores.
PANDUIT™ PATCH PANELS

Panduit offers an extensive selection of modular patch panels, with various styles and port densities and an assortment of labelling options making them ideal for any installation.

Modular patch panels accept all Mini-Com® Modules in copper, fibre and A/V, which snap in and out for easy moves, adds, and changes. This modular system is ideal for multimedia applications, providing flexibility to customise any installation. All patch panels mount to standard EIA 19-inch or 23-inch racks with optional extender brackets.

A variety of accessories are available to optimise the installation. Strain relief bars are recommended for all installations to properly support cables exiting the back of the panel. Covers and blank panels promote proper air flow and cooling by utilising unused rack openings.

---

PAN-NET™ PATCH PANELS

➤

PATCH PANELS - PLASTIC FRONT

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>PT-CPP24WBLY</td>
<td>Modular patch panel with plastic front unloaded 24 port. 1U</td>
</tr>
<tr>
<td>PT-CPP48WBLY</td>
<td>Modular patch panel with plastic front unloaded 48 port. 2U</td>
</tr>
<tr>
<td>PT-CPPL24WBLY</td>
<td>Modular patch panel with plastic front unloaded 24 port.1U + label</td>
</tr>
<tr>
<td>PT-CPP48HDWBLY</td>
<td>Modular patch panel 48 port unloaded. 1U</td>
</tr>
<tr>
<td>PT-CPPL24M6BLY</td>
<td>24-port patch panel with four factory Installed CPFLM6BL snap-in</td>
</tr>
<tr>
<td>PT-CPPL48M6BLY</td>
<td>48-Port patch panel with eight CPFLM6BL snap-in faceplates</td>
</tr>
</tbody>
</table>

➤

PATCH PANELS - ANGLED

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>PT-CPPLA24WBLY</td>
<td>Modular angled 24 port patch panel Unloaded. 1U</td>
</tr>
<tr>
<td>PT-CPPLA48WBLY</td>
<td>Modular angled 48 port patch panel Unloaded. 2U</td>
</tr>
<tr>
<td>PT-CPPLA72WBLY</td>
<td>Modular angled 72 port patch panel Unloaded. 2U</td>
</tr>
</tbody>
</table>

Flat

Flat panels require horizontal cable managers to help organise and route cables into vertical managers. Extended strain relief bars are recommended to allow proper cable support.

Angled

Angled panels enable higher density by allowing cables to flow to each side of the rack, thus minimising the need for horizontal cable managers and allowing patch leads to be routed directly into vertical cable managers. Straight strain relief bars are recommended, as closer mounting to the panel eliminates sagging and provides improved cable support.

---

High-Density Patch Panels

High-density patch panels are an ideal solution for installations with space constraints. They are available in flat and angled designs, with 48 ports in one rack space and 72 ports in two rack spaces. The angled design increases rack density, managing high-density applications in one-fourth of the area needed for conventional cable management systems. (High capacity vertical managers are recommended.)

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➤ PATCH PANELS - ALL METAL

- Accept Mini-Com™ Modules
- Provide write-on areas for port identification
- CPT removal tool allows easy moves, adds, and changes of shielded jack modules
- Mount to standard TIA/EIA 19" rack or 23" racks with optional extender bracket
- For use with shielded jacks only

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>PT-CP24BLY</td>
<td>24-Port all metal modular patch panel. 1U. (for shielded jacks only)</td>
</tr>
<tr>
<td>PT-CP48BLY</td>
<td>48-Port all Metal modular patch panel. 1U. (for shielded jacks only)</td>
</tr>
<tr>
<td>PT-CP72BLY</td>
<td>72-Port all metal modular patch panel 2U rear cable management is required to prevent twisting. (for shielded jacks only)</td>
</tr>
<tr>
<td>PT-CP24WSBLY</td>
<td>Modular 24 port patch panel Unloaded + strain relief bar. 1U. (for shielded jacks only)</td>
</tr>
<tr>
<td>PT-CP48WSBLY</td>
<td>Modular 48 port patch panel Unloaded + strain relief bar. 2U. (for shielded jacks only)</td>
</tr>
</tbody>
</table>

➤ PATCH PANELS - ALL METAL ANGLED

Shielded patch panels are recommended for high RFI/EMI environments, where interference is a risk. Panduit’s shielded offering includes integrated shielding which allows seamless integration with the Panduit® Structured Ground™ Grounding System.

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>PT-CPA24BLY</td>
<td>Modular angled 24 port patch panel Unloaded 1U</td>
</tr>
<tr>
<td>PT-CPA48BLY</td>
<td>Modular angled 48 port patch panel Unloaded 2U</td>
</tr>
<tr>
<td>PT-CPA72BLY</td>
<td>Modular angled 72 port patch panel Unloaded 2U</td>
</tr>
</tbody>
</table>

➤ PATCH PANELS - DP STYLE 110 UTP PUNCHDOWN

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>PT-DP245E88TGY</td>
<td>24-port, Cat5e, patch panel with 24 RJ45, 8-position, 8-wire ports</td>
</tr>
<tr>
<td>PT-DP485E88TGY</td>
<td>48-port, Cat5e, patch panel with 48 RJ45, 8-position, 8-wire ports</td>
</tr>
<tr>
<td>PT-DP24688TGY</td>
<td>24-port, Cat6, patch panel with 24 RJ45, 8-position, 8-wire ports</td>
</tr>
<tr>
<td>PT-DP48688TGY</td>
<td>48-port, Cat6, patch panel with 48 RJ45, 8-position, 8-wire ports</td>
</tr>
<tr>
<td>PT-DP246X88TGY</td>
<td>24-port, Cat6A, patch panel with 24 RJ45, 8-position, 8-wire ports</td>
</tr>
<tr>
<td>PT-DP486X88TGY</td>
<td>48-port, Cat6A, patch panel with 48 RJ45, 8-position, 8-wire ports</td>
</tr>
</tbody>
</table>
## CABLE MANAGEMENT

### STRAIN RELIEF BARS

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PT-SRB19BLY</td>
<td>Strain Relief Bar extends 50mm from Standard 19&quot; rack for additional cable support</td>
</tr>
<tr>
<td>PT-SRBM19BLY</td>
<td>Strain Relief Bar and Tak-Ty &quot;Hook and Loop Cable Ties for additional cable support</td>
</tr>
<tr>
<td>PT-SRBS19BL-XY</td>
<td>Straight Strain Relief Bar</td>
</tr>
</tbody>
</table>

### FILLER PANELS

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PT-TLBP1R-V</td>
<td>1U Tool-less Filler Panel, 9.52mm (3/8 in.) Square Holes</td>
</tr>
<tr>
<td>PT-TLBP2R-V</td>
<td>2U Tool-less Filler Panel, 9.52mm (3/8 in.) Round Tapped Holes</td>
</tr>
<tr>
<td>PT-CPAF1BLY</td>
<td>1U Angled Filler Panel</td>
</tr>
<tr>
<td>PT-CPAF2BLY</td>
<td>2U Angled Filler Panel</td>
</tr>
<tr>
<td>PT-FLBSIM-51</td>
<td>Full-length Blanking Shade Blanks out 4-51 Consecutive Rack Units</td>
</tr>
</tbody>
</table>

### HORIZONTAL CABLE MANAGEMENT

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PT-CMPH1</td>
<td>1U 4 D-ring Cable Management</td>
</tr>
<tr>
<td>PT-CMPHF2</td>
<td>2U 4 D-ring Cable Management</td>
</tr>
<tr>
<td>PT-NM2</td>
<td>NetManager® Horizontal Cable Manager with hinged cover, front and rear.</td>
</tr>
<tr>
<td>PT-NM4</td>
<td>4U NetManager® Horizontal Cable Manager with hinged cover, front and rear.</td>
</tr>
<tr>
<td>PT-NCMH2</td>
<td>2U NetManager® Horizontal Cable Manager with hinged Front Cover and Snap-on Rear cover, Front and Rear.</td>
</tr>
<tr>
<td>PT-NCMHF1</td>
<td>NetManager™ 1U Cable Management with cover</td>
</tr>
<tr>
<td>PT-NCMHF2</td>
<td>NetManager™ 2U Cable Management with cover</td>
</tr>
<tr>
<td>PT-WMPFSE</td>
<td>PatchLink™ 1U Cable Management with cover</td>
</tr>
<tr>
<td>PT-WMPSE</td>
<td>PatchLink™ 1U Cable Management with cover, Front and Rear</td>
</tr>
<tr>
<td>PT-WMP1E</td>
<td>PatchLink™ 2U Cable Management with cover, Front and Rear</td>
</tr>
</tbody>
</table>
**FACEPLATES & BOXES**

➤ **UK FACEPLATES**

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PT-CFPUKS2SAWY</td>
<td>86 x 86mm Single Gang Faceplate frame and one 1/2 Sloped Shuttered Module insert. Depth to rear of module: 18.0mm.</td>
</tr>
<tr>
<td>PT-CFPUKS4SAW-2GY</td>
<td>86 x 146mm Double Gang Faceplate frame and two 1/2 sized Sloped Shuttered Module inserts. Depth to rear of modules: 18.0mm.</td>
</tr>
<tr>
<td>PT-CM6CSAW-X</td>
<td>Shuttered Module snaps into standard UK LJ6C Floorbox Mounting Plates, faceplates and patch panels and holds a single Mini-Com™ module. Depth to rear of modules (copper): 29.0mm.</td>
</tr>
</tbody>
</table>

Available in: AW - Arctic White, IW - International White and WH - White (For other colours, replace AW with either IW or WH)

➤ **SURFACE MOUNT BOXES**

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PT-CBX2AW-AY</td>
<td>Mini-Com™ 2 Port Surface Mount Box</td>
</tr>
<tr>
<td>PT-CBX4AW-AY</td>
<td>Mini-Com™ 4 Port Surface Mount Box</td>
</tr>
<tr>
<td>PT-CBXF6AW-AY</td>
<td>Mini-Com™ 6 Port Surface Mount Box with Fibre Spool.</td>
</tr>
<tr>
<td>PT-CBXF12AW-AY</td>
<td>Mini-Com™ 12 Port Surface Mount Box with Fibre Spool.</td>
</tr>
</tbody>
</table>

Also available in black. Please call for more information.

➤ Cable entry from side and rear knockouts and from opening in centre of base
➤ CBXJ2 and CBX2 include built-in removable blank to add a second module
➤ Optional adhesive labels available

➤ **MUTOA BOXES**

Two module space, 1/2 size, sloped shuttered insert accepts two Mini-Com™ Modules. Shutters are spring loaded and rotate out of the way for cable connections. Not suitable for use with any audio/video or fibre connector module that protrudes beyond the face of the insert.

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PT-CM6PIW</td>
<td>Mini-Com™ 6 Port Mutoa Box (Off White)</td>
</tr>
</tbody>
</table>

For other colours, replace IW with suffix EI (Electric Ivory), WH (White), IG (International Grey), BL (Black), CL (Clear)

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PT-CHS2SIW-X</td>
<td>Mini-Com™ Shuttered Sloped Insert for Mutoa Box (Off White)</td>
</tr>
</tbody>
</table>

For other colours, replace IW with suffix AW (Arctic White), EI (Electric Ivory), WH (White), IG (International Grey), BL (Black), NG (Nordic Grey), PW (Polar White).
### Racks

#### 2 Post Standard Equipment Rack

The data equipment rack meets EIA-310D standards and is constructed of extruded aluminum or steel capable of accepting 19" wide EIA equipment. The telecommunications rack is constructed of extruded aluminum and capable of accepting 23" wide telecommunications equipment. Rack construction method ensures an electrically bonded structure for ease of grounding. The 3" channel rack are UL listed for 1000 lbs load rating and the 6" channel rack are UL listed for 1500 lbs load rating. The equipment mounting rails are double-sided #12-24 EIA universal mounting hole spacing. The equipment mounting rails include printed rack space identification on the front and back and be numbered up. The channel of the rack is capable of mounting NetRunner™ or PatchRunner™ Vertical Cable Managers. 24 #12-24 mounting screws are included with the rack.

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>PT-R2P</td>
<td>Standard 19&quot; EIA Aluminum 45RU 2-Post rack with hardware kit and Paint Piercing Bonding Kit, numbered up. Note: To achieve OSHPD compliance, use with Part Number R2PAK-OSHPD</td>
</tr>
<tr>
<td>PT-R2P6S</td>
<td>Standard 19&quot; EIA Steel 45U 2-Post rack with hardware kit and Paint Piercing Bonding Kit, numbered up. Note: To achieve OSHPD compliance, use with Part Number R2PAK-OSHPD hardware kit and paint piercing bonding kit.</td>
</tr>
</tbody>
</table>

#### 4 Post Standard Equipment Rack

The 4 post telecommunications rack come as 45 RU or 52 RU, constructed of steel and capable of accepting 19" wide EIA equipment. The equipment mounting rails have tapped #12-24 style mounting and have rack unit markings. The rack accepts shelves and equipment brackets. The front and rear structural posts of the rack are capable of mounting NetRunner™ or PatchRunner™ Vertical Cable Managers and accessories, such as power outlet unit brackets. The construction method supports up to 907kg (2000 lbs.) of equipment, cabling and ensure an electrically bonded structure for ease of grounding.

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>PT-R4P</td>
<td>Standard 19&quot; EIA 45U 30&quot; deep 4-Post rack with hardware kit and paint piercing bonding kit.</td>
</tr>
<tr>
<td>PT-R4PCN</td>
<td>Standard 19&quot; EIA 45U 30&quot; deep 4-Post rack with cage nut rails and hardware kit. 84&quot; High (2134mm)</td>
</tr>
<tr>
<td>PT-R4P23</td>
<td>Standard 19&quot; EIA Steel 45U, 23in deep, Threaded Mounting Holes, hardware kit and paint piercing bonding kit.</td>
</tr>
<tr>
<td>PT-R4P23CN</td>
<td>Standard 19&quot; EIA Steel 45U, 23in deep, with cage nut rails and hardware kit.</td>
</tr>
<tr>
<td>PT-R4P2396</td>
<td>Standard 19&quot; EIA Steel 52U, 23in deep, Threaded Mounting Holes, hardware kit and paint piercing bonding kit.</td>
</tr>
<tr>
<td>PT-R4P23CN96</td>
<td>Standard 19&quot; EIA Steel 52U, 23in deep, Cage Nut rails, hardware kit.</td>
</tr>
</tbody>
</table>
Vertical cable managers provide a solution to organise, manage, protect & showcase cabling where space is at a premium or to manage high density networking equipment. PatchRunner™ vertical cable managers are optimised to provide the maximum amount of capacity, flexibility and accessibility for high density switch and server applications. Two versions are available, regular and high capacity.

- Minimises area required for network layout, freeing up valuable floor space
- Supports cables as they transition to the vertical pathway eliminating the need for horizontal managers
- Individual fingers can be removed (without the use of a tool) to provide a large open area when creating cable pathways
- Organise and manage patch cord slack allowing for standardisation of patch cord lengths
- Dual hinged doors opens to the left or right to allow easy access to vertical pathway
- Allows vertical mounting of many standard EIA 19" accessories, such as patch panels (High Capacity Managers only)
- Ventilated side walls provide maximum airflow for equipment cooling
- Snap-on finger sections can be removed to improve airflow, and break away fingers allow routing of large cable bundles
- Optional sure close dual hinged metal doors provide easy access to vertical pathway and provide visual and audible feedback on closure

**Vertical Cable Manager Tables:**
(Based on 40% fill to accommodate correct routing techniques)

<table>
<thead>
<tr>
<th>Number of Cat6A Cables (24AWG/7.0mm)</th>
<th>Patch Runner Width *</th>
<th>Regular Capacity PR (Without Spools)</th>
<th>High Capacity PR</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>60% Side</td>
<td>40% Side</td>
<td>60% Side</td>
</tr>
<tr>
<td>Patch Runner</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Width &quot;</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6&quot;</td>
<td>254</td>
<td>185</td>
<td>436</td>
</tr>
<tr>
<td>8&quot;</td>
<td>365</td>
<td>262</td>
<td>626</td>
</tr>
<tr>
<td>10&quot;</td>
<td>476</td>
<td>338</td>
<td>814</td>
</tr>
<tr>
<td>12&quot;</td>
<td>587</td>
<td>415</td>
<td>989</td>
</tr>
<tr>
<td>15&quot;</td>
<td>753</td>
<td>530</td>
<td>N/A</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Number of Cat6 Cables (24AWG/6.0mm)</th>
<th>Patch Runner Width *</th>
<th>Regular Capacity PR (Without Spools)</th>
<th>High Capacity PR</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>60% Side</td>
<td>40% Side</td>
<td>60% Side</td>
</tr>
<tr>
<td>Patch Runner</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Width &quot;</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6&quot;</td>
<td>348</td>
<td>254</td>
<td>597</td>
</tr>
<tr>
<td>8&quot;</td>
<td>500</td>
<td>359</td>
<td>857</td>
</tr>
<tr>
<td>10&quot;</td>
<td>652</td>
<td>463</td>
<td>1115</td>
</tr>
<tr>
<td>12&quot;</td>
<td>804</td>
<td>569</td>
<td>1355</td>
</tr>
<tr>
<td>15&quot;</td>
<td>1031</td>
<td>725</td>
<td>N/A</td>
</tr>
</tbody>
</table>

**HOW TO CREATE PANDUIT PATCHRUNNER PART NUMBERS**

- **F** = Single Sided Vertical Manager
- **V** = Vertical Manager
- **D** = Door

**Example:**
- **PT-P**
- **PT-PEV1096B1** = HIGH CAPACITY, USER ASSEMBLY DUAL SIDED VERTICAL MANAGER, 10" (250MM) WIDE, 52U HIGH
- **PT-PED1096B1** = DUAL HINGED DOOR FOR HIGH CAPACITY 10" WIDE, 52U HIGH PATCH MANAGER (I.E. TO ACCOMPANY ABOVE EXAMPLE)

*15"/300mm width only available for regular capacity Vertical managers*
CABINETS

NET-ACCESS™ N-TYPE CABINETS & ACCESSORIES

Net-Access™ N-Type Cabinets are the first choice for data centre managers and systems integrators specifying high density network, storage and computer applications that require optimal thermal management and the capacity to manage high cable densities.

Integral cabinet air seal features and integration with passive hot and cold air containment components drive efficient utilisation of cooling capacity and reduce cooling energy consumption. The Net-Access™ inset frame design efficiently manages large quantities of cables and provides space for unmatched access reducing operational costs. This industry leading design also maximises air flow and provides easy access to equipment for ongoing operational efficiencies, providing exceptional value in a 800mm (31.5”) wide enclosure.

➤ Inset frame provides up to 10% more space for cable management and cooling air flow
➤ Dual hinged doors speed deployments and moves, adds and changes by 30%
➤ Efficiently manage high cable densities
➤ Open rail mounting creates more cable management space and equipment positioning flexibility
➤ Innovative levelling feet design reduces cabinet installation time by 80%
➤ Bond cabinets to the telecommunications grounding infrastructure with single connection, reducing installation time

HOW TO CREATE OUR NET-ACCESS™ N-TYPE CABINET PART NUMBERS

Populate this field with the Height:
2 = 42U
5 = 45U
8 = 48U

Required Depth:
1 = 1070mm
2 = 1200mm

Side Panels:
2 = 2 side panels*
9 = No Side Panel

Required Colour:
B = Black
W = White

Standard Options if required (Select one only):
C = Cage Nut Rails
E = Single Hinge Front Door and Cage Nut Rails
S = No Doors **
T = Integral Cabinet Top cable Routing System
TC = Integral Cabinet Top cable Routing System and Cage Nut Rails
U = Vertical Blanking & Cage Nut Rails
V = VED Ready **
Y = VED Ready and Cage Nut Rails
YT = VED Ready, Cage Nut Rails and Integral Cabinet Top Cable Routing System

EG: PT-N8212B – PANDUIT N SERIES 800 WIDE X 42U HIGH X 1070MM DEEP WITH 2 SIDE PANELS BLACK CABINET

* Standard side panel
** Include No. 12-24 Tapped Equipment Rails. V, Y and YT - Only available for 1200 deep cabinets
**NET-ACCESS™ S-TYPE CABINETS & ACCESSORIES**

Net-Access™ S-Type Cabinets provide data centre managers and systems integrators an unprecedented range of features in a cost effective cabinet platform for server, network, and pre-configured cabinet applications.

Integral cabinet air seal features and seamless integration with passive hot and cold air containment components provide efficient utilisation of cooling capacity, and contribute to reduced cooling energy consumption. An innovative frame design maximizes RU utilisation saving as much as 15% of the floor space while safely accommodating dynamic equipment loads. Offered in a variety of widths, heights and depths, they can be specified for a variety of applications in any facility to meet the diverse application needs of today’s data centres.

- Out-set cable entry improves floor space utilisation by 5%
- Zero RU E-Rail vertical patching adds capacity and improves floor space utilization by 10%
- Innovative levelling feet design reduces cabinet installation time by 80%

**HOW TO CREATE OUR NET-ACCESS™ S-TYPE CABINET PART NUMBERS**

* Standard side panel.

P - only available for 600mm wide S-Type cabinets.

V and V9 P - only available for 1200mm deep cabinets

**EG: PT-S6212B – PANDUIT S SERIES 600 WIDE X 42U HIGH X 1070MM DEEP WITH 2 SIDE PANELS BLACK CABINET**
## PAN-NET™ FIBRE

### OPTI-CORE™ FIBRE CABLE

Panduit provides high bandwidth and mission-critical physical infrastructures in data centre, enterprise and campus networks with comprehensive fibre optic systems that deliver high performance, reliability and scalability. The deployment of high-speed cabling systems has been increasing rapidly as data centres enable their physical infrastructure with 10 Gb/s capacity to support server virtualisation I/O consolidation, and convergence of backbone applications.

- Used in intra-building backbone, building backbone, and horizontal installations for riser and general-purpose environments
- Available in 6, 12, and 24-fibre counts in a “single jacket” design, and in 36, 48, 72, 96 and 144-fibre counts in a “subunit” design
- Multimode (OM4, OM3, OM2, and OM1) and singlomode (OS1/OS2) fibre available
- Sheath markings provide positive identification, quality traceability, and length verification
- Cable design and flexible buffer tubes allow for quick breakout and ease of routing
- 900μm standards-based colour-coded buffer coating protects fibres during handling and allows for easy identification and stripping

### INTERNAL FIBRE CABLE

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description:</th>
</tr>
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<tbody>
<tr>
<td>PT-FADCZ08-24</td>
<td>Fibre LSZH 50um OM4 Euroclass Cca Distribution Tight Buffered 8 Fibre Count Cable. Aqua.</td>
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<tr>
<td>PT-FADCZ12-24</td>
<td>Fibre LSZH 50um OM4 Euroclass Cca Distribution Tight Buffered 12 Fibre Count Cable. Aqua.</td>
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<tr>
<td>PT-FADCZ24-24</td>
<td>Fibre LSZH 50um OM4 Euroclass Cca Distribution Tight Buffered 24 Fibre Count Cable. Aqua.</td>
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<tr>
<td>PT-FADCX08-24</td>
<td>Fibre LSZH 50um OM3 Euroclass Cca 10 Gbit/s Distribution Tight Buffered 8 Fibre Count Cable. Aqua.</td>
</tr>
<tr>
<td>PT-FADC908-24</td>
<td>Fibre LSZH SM OS2 Euroclass Cca Distribution Tight Buffered 8 Fibre Count Cable. Yellow.</td>
</tr>
<tr>
<td>PT-FADC912-24</td>
<td>Fibre LSZH SM OS2 Euroclass Cca Distribution Tight Buffered 12 Fibre Count Cable. Yellow.</td>
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<tr>
<td>PT-FADC924-24</td>
<td>Fibre LSZH SM OS2 Euroclass Cca Distribution Tight Buffered 24 Fibre Count Cable. Yellow.</td>
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### EXTERNAL FIBRE CABLE

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<thead>
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<tr>
<td>PT-FQCLZ08</td>
<td>Fibre LSZH 50um OM4 Central Loose Tube 8 Fibre Count Cable. Black.</td>
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<tr>
<td>PT-FQCLZ12</td>
<td>Fibre LSZH 50um OM4 Central Loose Tube 12 Fibre Count Cable. Black.</td>
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<td>PT-FQCLZ24</td>
<td>Fibre LSZH 50um OM4 Central Loose Tube 24 Fibre Count Cable. Black.</td>
</tr>
<tr>
<td>PT-FQCLX08</td>
<td>Fibre LSZH 50um 10 Gbit/s Central Loose Tube 8 Fibre Count Cable. Black.</td>
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<td>PT-FQCLX12</td>
<td>Fibre LSZH 50um 10 Gbit/s Central Loose Tube 12 Fibre Count Cable. Black.</td>
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<td>PT-FQCLX24</td>
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<td>PT-FPCL908</td>
<td>Fibre LSZH SM Central Loose Tube 8 Fibre Count Cable. Black.</td>
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<tr>
<td>PT-FPCL912</td>
<td>Fibre LSZH SM Central Loose Tube 12 Fibre Count Cable. Black.</td>
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<tr>
<td>PT-FPCL924</td>
<td>Fibre LSZH SM Central Loose Tube 24 Fibre Count Cable. Black.</td>
</tr>
</tbody>
</table>

Opti-Core® 10Gig™ Fibre Optic Cable is designed to support network transmission speeds up to 10 Gb/s for link lengths up to 300 metres for OM3 and up to 550 metres for OM4 with an 850nm source per IEEE 802.3ae 10 GbE standard, backward compatible for use with all 50/125μm system requirements.
PANDUIT™ Networks Centre.

**Fibre Patch Leads**

- Pass all TIA/EIA-568-B.3 performance requirements
- 100% factory inspected end face geometry in compliance with Telcordia GR-326-CORE, Issue 3
- Typical insertion loss per connection: 0.25dB
- UPC polished (55dB minimum return loss)

- Factory terminated and 100% tested for insertion loss and return loss
- Insertion loss and return loss data recorded for every singlemode patch lead
- Lifetime traceability of test data to a Q.C. number on each patch lead
- Highest quality flame retardant fibre optic cable with tight-buffered coating on each optical fibre

**Fibre Pigtails**

**SC Pigtails**

- Pass all TIA/EIA-568-B.3 performance requirements
- Insertion loss per connection: 0.10dB typical; 0.30dB maximum
- Factory terminated and 100% tested for insertion loss

**LC Pigtails**

- Insertion loss data recorded for every multimode patch lead
- Lifetime traceability of test data to a Q.C. number on each pigtail

**How to Create Panduit Patch Leads & Pigtails Part Numbers**

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</tbody>
</table>

_EG: PT-FZ2ELLNSNSNM005 = FIBRE OM4, 2-FIBRE, 1.6MM CABLE, LOW SMOKE LSZH, LC DUPLEX TO SC DUPLEX, STANDARD IL, 5 METERS_
OPTICAM™ 2 TERMINATION TOOL

The Opticam® 2 tool is ideal for installers, contractors, end users and IT Departments who do occasional terminations. It is designed to offer 100% “Right the First Time” termination of OptiCam fibre connectors – LC, SC and ST. The tool immediately calculates insertion loss value on completion of the camming process. Opticam® 2 tool is the most technologically advanced feature rich option for field terminated connectors.

- Red and green light indicators provide additional visual confirmation of termination.
- LCD Screen guides users through termination process
- See connector insertion loss value
- Re-terminate if unhappy with IL value
- Companion Mobile App available to create projects files. Connects smartphone via Bluetooth to tool.

OPTICAM® 2 PRE-POLISHED SC & LC CONNECTORS

LC Simplex

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PT-FLCSMCXAQY</td>
<td>LC OM3/4 MM Simplex Connector</td>
</tr>
<tr>
<td>PT-FLCSM5BLY</td>
<td>LC OM2 MM Simplex Connector</td>
</tr>
<tr>
<td>PT-FLCSM6EY</td>
<td>LC OM1 MM Simplex Connector</td>
</tr>
<tr>
<td>PT-FLCSSCBUY</td>
<td>LC OS2 SM Simplex Connector</td>
</tr>
</tbody>
</table>

LC Duplex

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PT-FLCDMCXAQY</td>
<td>LC OM3/4 MM Duplex Connector</td>
</tr>
<tr>
<td>PT-FLCDMC5BLY</td>
<td>LC OM2 MM Duplex Connector</td>
</tr>
<tr>
<td>PT-FLCDM6EY</td>
<td>LC OM1 MM Duplex Connector</td>
</tr>
<tr>
<td>PT-FLCDSCBUY</td>
<td>LC OS2 SM Duplex Connector</td>
</tr>
</tbody>
</table>

SC2 Simplex

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PT-FSC2MCXAQ</td>
<td>SC2 OM3/4 MM Simplex Connector</td>
</tr>
<tr>
<td>PT-FSC2MC5BL</td>
<td>SC2 OM2 MM Simplex Connector</td>
</tr>
<tr>
<td>PT-FSC2M6E</td>
<td>SC2 OM1 MM Simplex Connector</td>
</tr>
<tr>
<td>PT-FSC2SCBU</td>
<td>SC2 OS2 SM Simplex Connector</td>
</tr>
</tbody>
</table>

SC2 Duplex

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PT-FSC2DCAQ</td>
<td>SC2 OM3/4 MM Duplex Connector</td>
</tr>
<tr>
<td>PT-FSC2DC5BL</td>
<td>SC2 OM2 MM Duplex Connector</td>
</tr>
<tr>
<td>PT-FSC2D6E</td>
<td>SC2 OM1 MM Duplex Connector</td>
</tr>
<tr>
<td>PT-FSC2DCBU</td>
<td>SC2 OS2 SM Duplex Connector</td>
</tr>
</tbody>
</table>

TIA/EIA-604 FOCS-3 (SC)and FOCS-10 (LC) compliant connectors

- Exceed TIA/EIA-568-B3 requirements
- Insertion loss: 0.3dB average (multimode and singlemode)
- Return loss: >26dB (10Gig™ multimode), >20dB (multimode), >50dB (singlemode)
- Quick installation; provides field termination in less than half the time of field polish connectors
- Patented re-termination capability provides yield rates approaching 100% and up to two re-terminations
- Factory pre-polished fibre endface eliminates time-consuming field polishing to reduce installation costs, labour, scrap and the number of tools required
- Cam activated fibre and buffer clamp mechanisms provide superior fibre and buffer retention – less sensitivity to fibre tensile loading
- Fibre cable type 900μm tight-buffered fibre only
- Fibre Cable size 1.6mm – 2.0mm and 3.0mm jacketed cable with optional boots
- For 250μm coated fibre termination, use 250 micron fibre build-up tube kit or fan-out kits
Fibre adaptor panels contain TIA/EIA-604 FOCIS compliant or compatible simplex or duplex fibre optic adaptors and meet or exceed TIA/EIA-568-B.3 requirements. Adaptors include phosphor bronze or zirconia ceramic split sleeves to fit specific network requirements. LC and SC adaptor housing colours follow the TIA/EIA-568-C.3 suggested colour identification scheme.

**OPTICOM® FIBRE ADAPTOR PANELS (FAP)**

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PT-FAP6WEIDSC</td>
<td>SC FAP loaded with 6 SC duplex multimode fibre optic adaptors</td>
</tr>
<tr>
<td>PT-FAP6WBUDSCZ</td>
<td>SC FAP loaded with 6 SC duplex singlemode fibre optic adaptors</td>
</tr>
<tr>
<td>PT-FAP6WST</td>
<td>ST FAP loaded with 6 ST Simplex multimode fibre optic adaptors</td>
</tr>
<tr>
<td>PT-FAP6WSTZ</td>
<td>ST FAP loaded with 6 ST Simplex singlemode fibre optic adaptors</td>
</tr>
<tr>
<td>PT-FAP6WEIDLC</td>
<td>LC FAP loaded with 6 LC duplex multimode fibre optic adaptors</td>
</tr>
<tr>
<td>PT-FAP6WBUDLCZ</td>
<td>LC FAP loaded with 6 LC duplex singlemode fibre optic adaptors</td>
</tr>
<tr>
<td>PT-FAP6WAQDLC</td>
<td>LC FAP loaded with 6 LC duplex multimode fibre optic adaptors aqua zirconia</td>
</tr>
<tr>
<td>PT-FAP6WAQDLCZ</td>
<td>LC FAP loaded with 6 LC duplex multimode fibre optic adaptors aqua zirconia</td>
</tr>
</tbody>
</table>

**OPTICOM® QUICKNET™ RACK MOUNT FIBRE CASSETTE ENCLOSURES**

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PT-FCE1U</td>
<td>Holds up to four QuickNet™ Cassettes, FAP adaptor panels, or FOSM splice modules, dimensions: (43.8mm x 447.0mm x 414.0mm)</td>
</tr>
<tr>
<td>PT-FCE1UA</td>
<td>Open access version of FCE1U enclosure</td>
</tr>
<tr>
<td>PT-FCE2U</td>
<td>Holds up to eight QuickNet™ cassettes, FAP adaptor panels, or FOSM splice modules, dimensions: (88.4mm x 447.0mm x 414.0mm)</td>
</tr>
<tr>
<td>PT-FRE4U</td>
<td>Holds up to twelve QuickNet™ cassettes, FAP adaptor panels, or FOSM splice modules, dimensions: (177.0mm x 447.0mm x 414.0mm)</td>
</tr>
</tbody>
</table>

**FIBRE ADAPTOR PATCH PANELS**

- Mount to standard BA 19” rack rails
- Standard version holds both QuickNet™ Fibre Optic Cassettes and Opticom® Fibre Adaptor Panels
- Angled version holds Opticom® Fibre Adaptor Panels and matches Mini-Com™ Angled Patch Panel profile
- Use with Opticom® Rack Mount Fibre Trays to protect fibres and terminations

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PT-CFAPPBL1</td>
<td>Flat fibre patch panel. Holds up to four FAP or RMP adaptor panels</td>
</tr>
<tr>
<td>PT-CFAPPBL2</td>
<td>Flat fibre patch panel. Holds up to eight FAP or RMP adaptor panels</td>
</tr>
<tr>
<td>PT-CFAPPBL1A</td>
<td>Angled fibre patch panel. Holds up to four FAP or RMP adaptor panels</td>
</tr>
<tr>
<td>PT-CFAPPBL2A</td>
<td>Angled fibre patch panel. Holds up to eight FAP or RMP adaptor panels</td>
</tr>
</tbody>
</table>
OPTICOM® RACK MOUNT FIBRE TRAYS

➤ Mount to standard EIA 19" rack rails
➤ Standard front or angled front options
➤ Use with Opticom® fibre adaptor patch panels to protect fibres and terminations
➤ Can be used as a back box for select Mini-Com™ Patch Panels
➤ Removable top cover provides access to connections, fibres, and slack storage in rear of tray
➤ Multiple trunk cable entry locations provided on rear and sides of enclosure
➤ Include fibre optic cable routing kit (grommets, cable ties, spools, strain relief bracket and ID/caution labels) for various cable management solutions
➤ One rack space = 1.75" (44.45mm). Optional locks available for rack mount enclosures. All product colour is black.

STANDARD PATCH PANELS

Pre-loaded fibre drawers provide a pre-configured, ready-to-install system for managing fibre optic terminations, connections and patching in a 1U rack mount enclosure. The pre-loaded enclosure accommodates both field termination and field splicing, it supports trunk cable entry via PG style glands, blown fibre glands and metric knockouts with rubber grommets. The pre-loaded enclosure is a two-piece design with a slide-out drawer for full access to all fibre terminations, easy moves, adds and changes and simple installation.

The enclosure has white write on areas adjacent to each adaptor for individual fibre channel labelling and a similar area for overall enclosure labelling. The enclosure has integral mounting brackets suitable for installation in any 19" wide EIA-310/IEC 60297 compatible rack or cabinet.

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PT-FD1W12BUDSCZ</td>
<td>Edrawer loaded with 12 Singlemode SC Adaptors</td>
</tr>
<tr>
<td>PT-FD1W6BUDSCZ</td>
<td>Edrawer loaded with 6 Singlemode SC Adaptors</td>
</tr>
<tr>
<td>PT-FD1W12BUDLCZ</td>
<td>Edrawer with 12 Duplex LC Adaptor Singlemode</td>
</tr>
<tr>
<td>PT-FD1W12AQDLC</td>
<td>Edrawer with 12 Duplex LC Adaptors OM3</td>
</tr>
<tr>
<td>PT-FD1W12AQDSC</td>
<td>Edrawer with 12 Duplex SC Adaptors OM3</td>
</tr>
<tr>
<td>PT-FD1W24BUDLCZ</td>
<td>Edrawer with 24 Duplex LC Adaptor Singlemode</td>
</tr>
<tr>
<td>PT-FD1W24AQDLC</td>
<td>Edrawer with 24 Duplex LC Adaptors OM3</td>
</tr>
<tr>
<td>PT-FD1W6AQDSC</td>
<td>Edrawer with 6 Duplex SC Adaptors OM3</td>
</tr>
</tbody>
</table>
PANDUIT HD FLEX™
FIBRE CABLELING SYSTEM

The HD Flex™ Fibre Cabling System addresses today’s requirements for increasingly higher density levels, delivering simplified management while helping you maximise return on assets and minimise downtime. This complete, integrated fibre system has been purposely engineered to accommodate the dynamic lifecycle of today’s high-performance data centres, delivering serviceability, network reliability and ease of deployment. The Panduit HD Flex enclosures are built for up to 16-cassettes allowing installers to manage and protect fibre optic cables.

➤ HD FLEX™ – HIGH DENSITY FIBRE ENCLOSURES

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>PT-FLEX1U06</td>
<td>1U HD Flex™ 6-Port Enclosure</td>
</tr>
<tr>
<td>PT-FLEX1U12</td>
<td>1U HD Flex™ 12-Port Enclosure</td>
</tr>
<tr>
<td>PT-FLEX2U06</td>
<td>2U HD Flex™ 6-Port Enclosure</td>
</tr>
<tr>
<td>PT-FLEX2U12</td>
<td>2U HD Flex™ 12-Port Enclosure</td>
</tr>
<tr>
<td>PT-FLEX4U06</td>
<td>4U HD Flex™ 6-Port Enclosure</td>
</tr>
<tr>
<td>PT-FLEX4U12</td>
<td>4U HD Flex™ 12-Port Enclosure</td>
</tr>
</tbody>
</table>

➤ HD FLEX™ – HIGH DENSITY FIBRE PANELS

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>PT-FLEX1UPN06</td>
<td>1U HD Flex™ 6-Port Panel</td>
</tr>
<tr>
<td>PT-FLEX1UPN12</td>
<td>1U HD Flex™ 12-Port Panel</td>
</tr>
<tr>
<td>PT-FLEX2UPN06</td>
<td>2U HD Flex™ 6-Port Panel</td>
</tr>
<tr>
<td>PT-FLEX2UPN12</td>
<td>2U HD Flex™ 12-Port Panel</td>
</tr>
<tr>
<td>PT-FLEX4UPN06</td>
<td>4U HD Flex™ 6-Port Panel</td>
</tr>
<tr>
<td>PT-FLEX4UPN12</td>
<td>4U HD Flex™ 12-Port Panel</td>
</tr>
</tbody>
</table>

➤ HD FLEX™ – ENCLOSURE TRUNK SLACK PLATE

We offer a full range of mounting and cable management accessories for the HD Flex™ cabling system. Please call for more information.

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>PT-FLEX-PLATE1U</td>
<td>1U HD Flex™ Enclosure Trunk Slack Plate</td>
</tr>
<tr>
<td>PT-FLEX-PLATE4U</td>
<td>4U HD Flex™ Enclosure Trunk Slack Plate</td>
</tr>
</tbody>
</table>
HD FLEX™ – HIGH DENSITY FIBRE CASSETTES

HD Flex™ Fibre Optic Cassettes offer a wide array of deployment options to support both Ethernet and Fibre Channel networks. Cassette types are available with 1 MPO to 6 duplex LC connectors, 1 MPO to 4 duplex LC connectors for breaking out parallel optics applications (40G into four 10G channels), and 6-port duplex LC cassettes for splice terminations. Also 6-port MPO and duplex LC fibre adaptor panels (FAP).

HD Flex™ Fibre Optic Cassettes allow system designers to tailor configuration, reach and breakout construction to application requirements; to minimise waste, optimise cable management, speed up deployment, and improve flexibility and manageability for lower installation costs.

<table>
<thead>
<tr>
<th>Description:</th>
<th>6-port, 12-fibre (1 MPO)</th>
<th>Part No:</th>
<th>12-port, 12-fibre (2 MPOs)</th>
<th>12-port, 24-fibre (1 MPO)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>OM4 Fibre/Optimized Loss (0.50 dB)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Method A Polarity</td>
<td>PT-FHCZO-12-10AS</td>
<td>PT-FHCZ0-24-10AS</td>
<td>PT-FHCZ0-24F-10AS</td>
<td></td>
</tr>
<tr>
<td>Modified Method A Polarity (Pair flipped)</td>
<td>PT-FHCZO-12-10AF</td>
<td>PT-FHCZ0-24-10AF</td>
<td>PT-FHCZ0-24F-10AF</td>
<td></td>
</tr>
<tr>
<td>Method B Polarity</td>
<td>PT-FHCZO-12-10BN</td>
<td>PT-FHCZ0-24-10BN</td>
<td>PT-FHCZ0-24F-10BN</td>
<td></td>
</tr>
<tr>
<td><strong>OM4 Fibre/Ultra Low Loss (0.35 dB)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Method A Polarity</td>
<td>PT-FHCZA-12-10AS</td>
<td>PT-FHCZA-24-10AS</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Modified Method A Polarity (Pair flipped)</td>
<td>PT-FHCZA-12-10AF</td>
<td>PT-FHCZA-24-10AF</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Method B Polarity</td>
<td>PT-FHCZA-12-10BN</td>
<td>PT-FHCZA-24-10BN</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td><strong>OM3 Fibre/Optimized Loss (0.50 dB)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Method A Polarity</td>
<td>PT-FHCXO-12-10AS</td>
<td>PT-FHCXO-24-10AS</td>
<td>PT-FHCXO-24F-10AS</td>
<td></td>
</tr>
<tr>
<td>Modified Method A Polarity (Pair flipped)</td>
<td>PT-FHCXO-12-10AF</td>
<td>PT-FHCXO-24-10AF</td>
<td>PT-FHCXO-24F-10AF</td>
<td></td>
</tr>
<tr>
<td>Method B Polarity</td>
<td>PT-FHCXO-12-10BN</td>
<td>PT-FHCXO-24-10BN</td>
<td>PT-FHCXO-24F-10BN</td>
<td></td>
</tr>
<tr>
<td><strong>OS2 Fibre/Standard Loss (0.75 dB)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Method A Polarity</td>
<td>PT-FHC9N-12-10AS</td>
<td>PT-FHC9N-24-10AS</td>
<td>PT-FHC9N-24F-10AS</td>
<td></td>
</tr>
<tr>
<td>Modified Method A Polarity (Pair flipped)</td>
<td>PT-FHC9N-12-10AF</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
</tbody>
</table>
# HD FLEX™ – HIGH DENSITY FIBRE BREAKOUT CASSETTES

![Image of HD FLEX™-Fibre Breakout Cassette]

## Description:

<table>
<thead>
<tr>
<th>Description:</th>
<th>6-port, 12-fibre (1 MPO)</th>
<th>Part No:</th>
<th>12-port, 12-fibre (3 MPOs)</th>
<th>12-port, 24-fibre (1 MPO)</th>
</tr>
</thead>
<tbody>
<tr>
<td>OM4 Fibre/Optimized Loss (0.50 dB)</td>
<td></td>
<td>PT-FHC3ZO-08-10B</td>
<td>PT-FHC3Z0-24-10B</td>
<td>PT-FHC3Z0-24F-10B</td>
</tr>
<tr>
<td>Method B Polarity</td>
<td></td>
<td>PT-FHC3ZA-08-10B</td>
<td>PT-FHC3ZA-24-10B</td>
<td>-</td>
</tr>
<tr>
<td>OM4 Fibre/Ultra Low Loss (0.35 dB)</td>
<td></td>
<td>PT-FHC3XO-08-10B</td>
<td>PT-FHC3XO-24-10B</td>
<td>PT-FHC3XO-24F-10B</td>
</tr>
<tr>
<td>Method B Polarity</td>
<td></td>
<td>PT-FHC39N-08-10B</td>
<td>PT-FHC39N-24-10B</td>
<td>PT-FHC39N-24F-10B</td>
</tr>
<tr>
<td>OM3 Fibre/Optimized Loss (0.35 dB)</td>
<td></td>
<td>PT-FHC39N-08-10B</td>
<td>PT-FHC39N-24-10B</td>
<td>PT-FHC39N-24F-10B</td>
</tr>
<tr>
<td>Method B Polarity</td>
<td></td>
<td>PT-FHC39N-08-10B</td>
<td>PT-FHC39N-24-10B</td>
<td>PT-FHC39N-24F-10B</td>
</tr>
</tbody>
</table>

Change B to A in part numbers for method A conversion Cassettes.
## HD FLEX™ – PRE-LOADED LC SPLICE FIBRE CASSETTES

<table>
<thead>
<tr>
<th>Part Number:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>OM4 Fibre/Optimized Loss (0.15 dB max connector insertion loss plus splice loss)</strong></td>
<td></td>
</tr>
<tr>
<td>PT-FHSZO-12-10P</td>
<td>Pre-loaded with 12 pigtails (250μm) and 12 splice sleeves</td>
</tr>
<tr>
<td>PT-FHSZO-12-10R</td>
<td>Pre-loaded with 12 fibre ribbon pigtails and 1 ribbon fibre splice sleeve</td>
</tr>
<tr>
<td><strong>OM4 Fibre/Ultra Low Loss (0.1 dB max connector insertion loss plus splice loss)</strong></td>
<td></td>
</tr>
<tr>
<td>PT-FHSZA-12-10P</td>
<td>Pre-loaded with 12 pigtails (250μm) and 12 splice sleeves</td>
</tr>
<tr>
<td>PT-FHSZA-12-10R</td>
<td>Pre-loaded with 12 fibre ribbon pigtails and 1 ribbon fibre splice sleeve</td>
</tr>
<tr>
<td><strong>OM3 Fibre/Optimized Loss (0.15 dB max connector insertion loss plus splice loss)</strong></td>
<td></td>
</tr>
<tr>
<td>FHSXO-12-10P</td>
<td>Pre-loaded with 12 pigtails (250μm) and 12 splice sleeves</td>
</tr>
<tr>
<td>FHSXO-12-10R</td>
<td>Pre-loaded with 12 fibre ribbon pigtails and 1 ribbon fibre splice sleeve</td>
</tr>
<tr>
<td><strong>OS2 Fibre/Standard Loss (0.35 dB max connector insertion loss plus splice loss)</strong></td>
<td></td>
</tr>
<tr>
<td>PT-FHS9N-12-10P</td>
<td>Pre-loaded with 12 pigtails (250μm) and 12 splice sleeves</td>
</tr>
<tr>
<td>PT-FHS9N-12-10R</td>
<td>Pre-loaded with 12 fibre ribbon pigtails and 1 ribbon fibre splice sleeve</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Part Number:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>LC Fibre Adaptor Panels</strong></td>
<td></td>
</tr>
<tr>
<td>PT-FHSXN-12-10N</td>
<td>6 LC duplex multimode adapters in aqua with zirconia sleeves</td>
</tr>
<tr>
<td>PT-FHS9N-12-10N</td>
<td>6 LC Duplex singlemode adapters in blue with zirconia sleeves</td>
</tr>
<tr>
<td><strong>MPO Fibre Adaptor Panels</strong></td>
<td></td>
</tr>
<tr>
<td>PT-FHMP-6-ABL</td>
<td>6 MPO type A adapters (key-up to key-down) in black</td>
</tr>
<tr>
<td>PT-FHMP-6-BCG</td>
<td>6 MPO type B adapters (key-up to key-up) in charcoal grey</td>
</tr>
<tr>
<td>PT-FHMP-6-ARD</td>
<td>6 MPO type A adapters (key-up to key-down) in red</td>
</tr>
</tbody>
</table>

Can’t find what you’re looking for? Then contact us…
HD FLEX™ ROUND HARNESS CABLE ASSEMBLIES

HD Flex Harnesses are round harness cable assemblies featuring LC connectivity on one end, and PanMPO™ on the other, for easy changing of polarity and gender. Available in several configurations, multiple fibre types and cable jackets.

- Fast infrastructure deployment, optimising cable pathway space
- Provides compatibility, flexibility and system performance as part of the HD Flex system
- Available in standard fan out or 4 to 1 conversion formats

HOW TO CREATE OUR ROUND HARNESS ASSEMBLIES PART NUMBERS

<table>
<thead>
<tr>
<th>PT-F</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Fibre Type</td>
<td>9 = OS2 9/125um</td>
<td>X = OM3 50/125um</td>
<td>Z = OM4 50/125um</td>
<td></td>
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<tr>
<td>2. Fibre Count</td>
<td>T = 12 Fibre</td>
<td>8 = 8 Fibre</td>
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<tr>
<td>3. Cable Type</td>
<td>R = Round</td>
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<tr>
<td>4. Jacket Type</td>
<td>L = Low Smoke (LSZH)</td>
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<tr>
<td>5. Connector Type (End A)</td>
<td>5 = Singlemode MPO Female</td>
<td>6 = Singlemode MPO Male</td>
<td>7 = Multimode PanMPO Female</td>
<td>8 = Multimode PanMPO Male</td>
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<tr>
<td>6. Connector Variant (End A)</td>
<td>N = No Variant</td>
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<tr>
<td>7. Connector Type (End B)</td>
<td>Q = Push/Pull Duplex LC</td>
<td></td>
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<tr>
<td>8. Connector Variant (End B)</td>
<td>S = 24” (61cm)</td>
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</tr>
<tr>
<td>9. Construction Performance</td>
<td>S = Standard IL / Standard Fanout (Singlemode)</td>
<td>O = Standard IL / Standard Fanout (Multimode)</td>
<td>Q = Standard IL / 4-to-1 conversion (Singlemode)</td>
<td>V = Standard IL / 4-to-1 conversion (Multimode)</td>
<td>N = Ultra Low IL / Standard Fanout (OM4 Only)</td>
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<tr>
<td>10. Other</td>
<td>N = No Variant</td>
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</tr>
<tr>
<td>11. Length Unit</td>
<td>F = Feet (OFNP)</td>
<td>M = Metres</td>
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<tr>
<td>12. Length*</td>
<td>Length must be 3 digits</td>
<td>005-100m, 1m Increments</td>
<td></td>
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</tbody>
</table>

EXAMPLE: PT-FZTRL8NQSSNM003 = FIBRE HARNESS ASSEMBLY OM4, 12 FIBRE, ROUND LSZH RATED, PANMPO MALE TO LC DUPLEX HARNESS WITH 61CM EQUAL BREAKOUT, STANDARD IL, NO PULLING EYE, 3 METRES
**HD FLEX™ TRUNK CABLE ASSEMBLIES**

HD Flex Trunks Pre-terminated PanMPO™ Trunk Cable Assemblies allow rapid gender and polarity changes in the field for standards compliant cable plant migration from 10G Ethernet to 40G/100G Ethernet. Available in multimode or singlemode, 12-fibre, 24-fibre, and 48-fibre assemblies.

- Optimise cable routing requirements for efficient use of pathway space.
- Significantly reduces installation time and cost.
- Standard lengths available from 5 to 100m in 1m increments.

### HOW TO CREATE OUR TRUNK CABLE PART NUMBERS

<table>
<thead>
<tr>
<th>1. Fibre Type</th>
<th>9 = OS2 9/125um</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>X = OM3 50/125um</td>
</tr>
<tr>
<td></td>
<td>Z = OM4 50/125um</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2. Fibre Count</th>
<th>T = 12 Fibre</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>U = 24 Fibre</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3. Y = Trunk Cable</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>4. Jacket Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>L = Low Smoke (LSZH)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>5. Connector Type (End A)</th>
<th>5 = Singlemode MPO Female</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>6 = Singlemode MPO Male</td>
</tr>
<tr>
<td></td>
<td>7 = Multimode PanMPO Female</td>
</tr>
</tbody>
</table>

| 6. Connector Variant (End A) | 5 = 39' Breakout Transition |

| 7. Connector Type (End B) | 5 = Singlemode MPO Female |

| 8. Connector Variant (End B) | 5 = 39' Breakout Transition |

<table>
<thead>
<tr>
<th>9. Construction Performance</th>
<th>A = Singlemode Polarity A – Standard IL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>X = Multimode Polarity A – Optimised IL</td>
</tr>
<tr>
<td></td>
<td>Y = Multimode Polarity B – Optimised IL</td>
</tr>
<tr>
<td></td>
<td>K = Multimode Polarity A – Ultra Low IL</td>
</tr>
<tr>
<td></td>
<td>L = Multimode Polarity B – Ultra Low IL</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>10. Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>N = No Pulling Eye (5-30m)</td>
</tr>
<tr>
<td>A = Pulling Eye End A (&gt;30m)</td>
</tr>
</tbody>
</table>

| 11. Length Unit | M = Metres |

<table>
<thead>
<tr>
<th>12. Length*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Length must be 3 digits</td>
</tr>
<tr>
<td>005-100m, 1m Increments</td>
</tr>
</tbody>
</table>

**EXAMPLE:** **PT-FXUYL7575XAM030** = FIBRE TRUNK ASSEMBLY OM3, 24 FIBRE INDOOR SMALL DIAMETER TRUNK CABLE, LSZH, PANMPO FEMALE TO PANMPO FEMALE, POLARITY A, PULLING EYE, 30 METRES
## HD FLEX™ ROUND INTERCONNECT CABLE

MPO Interconnect Round Cable Assemblies are pre-terminated 12 Fibre cable assemblies that are used in high density network applications. These assemblies are used in conjunction with pre-terminated cassettes in main and horizontal cabling distribution areas.

- Meets the demands of Gigabit Ethernet, 10Gigabit Ethernet and high speed Fibre Channel
- Available in standard, optimised and ultra-low insertion loss for multimode
- Small diameter and extremely flexible for shorter cable runs (0-30m)

### HOW TO CREATE OUR ROUND INTERCONNECT PART NUMBERS

<table>
<thead>
<tr>
<th>1.</th>
<th>2.</th>
<th>3.</th>
<th>4.</th>
<th>5.</th>
<th>6.</th>
<th>7.</th>
<th>8.</th>
<th>9.</th>
<th>10.</th>
<th>11.</th>
<th>12.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fibre Type</td>
<td>Fibre Count</td>
<td>Cable Type</td>
<td>Jacket Type</td>
<td>Connector Type (End A)</td>
<td>Connector Variant (End A)</td>
<td>Connector Type (End B)</td>
<td>Connector Variant (End B)</td>
<td>Construction Performance</td>
<td>Other</td>
<td>Length Unit</td>
<td>Length*</td>
</tr>
<tr>
<td>9 = OS2 9/125um</td>
<td>T = 12 Fibre</td>
<td>R = 3.0mm Round Indoor</td>
<td>L = Low Smoke (LSZH)</td>
<td>7 = PanMPO Female</td>
<td>N = No Variant</td>
<td>7 = PanMPO Female</td>
<td>N = No Variant</td>
<td>A = Multi/Simplemode Polarity A – Standard IL</td>
<td>N = No Pulling Eye</td>
<td>M = Metres</td>
<td>001-050m, 1m Increments</td>
</tr>
<tr>
<td>X = OM3 50/125um</td>
<td></td>
<td></td>
<td></td>
<td>8 = PanMPO Male</td>
<td></td>
<td>8 = PanMPO Male</td>
<td></td>
<td>B = Multimode Polarity B – Standard IL</td>
<td></td>
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<tr>
<td>Z OM4 50/125um</td>
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<td>X = Multimode Polarity A – Optimised IL</td>
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<td>Y = Multimode Polarity B – Optimised IL</td>
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<td></td>
<td>K = Multimode Polarity A – Ultra Low IL</td>
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<td></td>
<td>L = Multimode Polarity B – Ultra Low IL</td>
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</tbody>
</table>

**EXAMPLE:** PT-PT-FZTRL7N7NAM003 = FIBRE OM4, 12 FIBRE, 3.0MM ROUND LSZH RATED, PANMPO FEMALE TO PANMPO FEMALE, POLARITY A, NO PULLING EYE, 3 METRES
**HD FLEX™ PATCH LEAD**

The HD Flex Push-Pull low profile LC Duplex Fibre Optic Patch Leads allow for rapid deployment of high density permanent links.

- Custom push-pull strain relief boot and duplex clip
- Allows users easy accessibility in tight areas when deploying very high density LC patch fields in Data Centre applications.
- Available in Standard, Optimised or Ultra low insertion loss

### HOW TO CREATE OUR HD FLEX PATCH CORD PART NUMBERS

<table>
<thead>
<tr>
<th>PT-F</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Fibre Type</td>
<td>9 = OS2 9/125um</td>
<td>X = OM3 50/125um</td>
<td>Z OM4 50/125um</td>
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<tr>
<td>2.</td>
<td>Fibre Count</td>
<td>2 = 2 Fibre</td>
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<tr>
<td>3.</td>
<td>Cable Type</td>
<td>E = 1.6mm</td>
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<tr>
<td>4.</td>
<td>Jacket Type</td>
<td>L = Low Smoke (LSZH)</td>
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<tr>
<td>5.</td>
<td>Connector Type (End A)</td>
<td>Q = LC Push Pull Connector</td>
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<tr>
<td>6.</td>
<td>Connector Variant (End A)</td>
<td>1 = 1st Gen (Low Profile Duplex LC)</td>
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<tr>
<td>7.</td>
<td>Connector Type (End B)</td>
<td>Q = Push/Pull Duplex LC</td>
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<tr>
<td>8.</td>
<td>Connector Variant (End B)</td>
<td>1 = 1st Gen (Low Profile Duplex LC)</td>
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<tr>
<td>9.</td>
<td>Construction Performance</td>
<td>S = Standard IL / Straight through (A-B)</td>
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<td></td>
<td>O = Optimised IL / Straight through (A-B)</td>
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<td>N = Ultra Low IL / Straight through (A-B)</td>
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<tr>
<td>10.</td>
<td>Other</td>
<td>1 = No Variant</td>
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<tr>
<td>11.</td>
<td>Length Unit</td>
<td>M = Metres</td>
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<tr>
<td>12.</td>
<td>Length</td>
<td>Length must be 3 digits</td>
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<td>005-100m, 1m Increments</td>
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</tbody>
</table>

**EXAMPLE:** PT-FX2ERQ1Q1SNM005 = FIBRE PATCH CORD, OM3, 2 FIBRE, 1.6MM CABLE, RISER RATED, LC PUSH-PULL TO LC PUSH-PULL CONNECTOR, STANDARD IL, 5M
PANZONE™ CONSOLIDATION POINT BOXES

➤ Work with standard office raised floor tiles
➤ Include Cool Boot® Raised Floor Air Sealing Grommet for quick moves, adds, and changes
➤ Accept all Mini-Com™ Modules
➤ Accept field terminated or pre-terminated connectivity solutions
➤ Secure lockable cover
➤ Compatible with 7/8” square, 1” diameter, 1 1/2” diameter, and 2” diameter raised floor pedestals

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>PT-PZRFE4</td>
<td>Panzone™ raised floor enclosure accepts 4U standard patch panel or 2U of QuickNet™</td>
</tr>
<tr>
<td>PT-PZRFE8</td>
<td>Panzone™ raised floor enclosure accepts 6U standard patch panel or 4U of QuickNet™</td>
</tr>
<tr>
<td>PT-PZRFE12</td>
<td>Panzone™ raised floor enclosure accepts 12U standard patch panel or 6U of QuickNet™</td>
</tr>
<tr>
<td>PT-PZRFC</td>
<td>Panzone™ lockable cover for raised floor enclosures</td>
</tr>
</tbody>
</table>

➤ Designed to accept up to 2 RU of active electronics as deep as 17.5” and up to 6 RU of standard 19” passive connectivity (PZICEA only)
➤ Designed to accept up to 8 RU standard 19” passive connectivity (PZICF only)
➤ Thermal management design optimises air flow for improved heat dissipation; ideal for high heat load PoE enabled switch applications
➤ Mount in 2’ x 2’, 2’ x 4’, and 2’ x 6’ drop ceilings
➤ 23kgs door weight capacity
➤ Includes door plate, equipment mounting bracket and integrated horizontal cable slack manager
➤ AC power ready – receptacle not included (PZICEA only)
➤ Includes low decibel 60 CFM fan (PZICEA only)

PANZONE™ OVERHEAD DISTRIBUTION RACKS

➤ Ideal solution for adding more rack spaces above racks or cabinets in data centres or telecommunication rooms
➤ Universal mounting bracket can be mounted to most industry ladder racks, wire basket, or suspended by threaded rod from ceiling
➤ Multiple mounting configurations
➤ 40/60/80 lbs. load rating
➤ Optional cable management solutions (PZBR4 and CMVR2)

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>PT-PZLRE2</td>
<td>Panzone™ Overhead Distribution Racks 2RU</td>
</tr>
<tr>
<td>PT-PZLRE4</td>
<td>Panzone™ Overhead Distribution Racks 4RU</td>
</tr>
<tr>
<td>PT-PZLRE6</td>
<td>Panzone™ Overhead Distribution Racks 6RU</td>
</tr>
</tbody>
</table>
**PANZONE™ WALL MOUNTED SWITCH/PANEL ENCLOSURE**

- Hold 12U of active and passive network equipment plus two additional U for power strips and small electronic devices (modems, routers, etc.)
- Structurally engineered to swing freely even under maximum load capacity
- Thermal management design (vents, perforated doors, and optional fan) optimises airflow for improved heat dissipation; ideal for high heat load PoE enabled switch applications
- Working load rating of 113kgs
- Adjustable rails mount at 1” increments to accommodate various depths of network equipment including PoE switches
- Individual rack spaces are identified for ease of equipment mounting

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PT-PZAEWM3Y</td>
<td>Panzone™ Wall Mounted Switch/Panel Enclosure</td>
</tr>
<tr>
<td>PT-PZAELOCK</td>
<td>Panzone™ Lock Kit for Wall Enclosure</td>
</tr>
</tbody>
</table>

**PANZONE™ METAL UNDER FLOOR BOX**

- Suitable for wall mount and underfloor applications
- UL 2043 approved for use in air-handling spaces for copper applications
- Accept Mini-Com™ modules for STP and UTP, fibre optic, and audio/video, which snap in and out for easy moves, adds, and changes
- Supplied with cable management accessories
- Optional fibre conversion kit available

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PT-CUFMB24BL</td>
<td>Mini-Com™ 24 Port Unloaded Metal Under Floor Box</td>
</tr>
<tr>
<td>PT-CUFB48BL</td>
<td>Mini-Com™ 48 Port Unloaded Metal Under Floor Box</td>
</tr>
</tbody>
</table>

**10GIG™ SFP+ DIRECT ATTACH PASSIVE COPPER CABLE ASSEMBLIES**

As virtualisation, consolidation, and convergence initiatives continue to grow, so do the demands placed on the physical infrastructure. To meet the needs for faster processing speeds, low power server inter-connect and I/O consolidation deployments, Panduit offers 10Gig™ SFP+ Direct Attach Passive Copper Cable Assemblies.

This high speed data transport capability is ideal as server virtualisation becomes more prevalent. With multiple virtual machines, server I/O consolidation topology requires 10 Gb/s interconnects between top of rack switches and servers.

By incorporating 10Gig™ SFP+ direct attach passive copper cable assemblies into the physical infrastructure, businesses can achieve 10 Gigabit performance port-to-port without additional signal processing or conversion, providing a low power, low latency 10 Gb/s server interconnect option for top of rack switching applications.

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PT-PSF1PXA1MBU</td>
<td>High speed twinaxial cable assembly with SFP+ 10Gb/s hot pluggable modular connectors on each end 1 metre.</td>
</tr>
</tbody>
</table>

Please insert required length 1-7 Metre eg:

- 2 Metre - PT-PSF1PXA2MBU
- 3 Metre - PT-PSF1PXA3MBU

Can’t find what you’re looking for? Then contact us...
The QuickNet™ Copper Cabling System provides a custom, pre-terminated cabling solution which meets unique requirements. Fast and simple to install, the system enables quick network deployment, increased reliability, and lower total cost of ownership as compared to field terminated installations. Engineered for maximum design flexibility and high rack density utilisation (up to 48-ports in one rack space), the system offers 100% factory tested pre-terminated cable assemblies in custom lengths and configurations. QuickNet™ Angled and Flat Patch Panels accept QuickNet™ Pre-Terminated Cassettes, Patch Panel Adaptors, and Blanks, which snap in and out, with one hand, for quick installation.

**QUICKNET™ CABLE ASSEMBLIES**

- Offer UTP Cat6 Cabling and UTP/STP Cat6A Cabling
- Pre-bundled with six cables for easy installation
- Available in lengths from 3 metre to 90 metres (half metre increments) and different cable colours for redundant path applications
- Multiple termination types including pre-terminated cassettes, jack modules, modular plugs, plug packs and/or unterminated options
- Shielded die cast cassette utilises direct bonding, eliminating external bonding requirement
- Each QuickNet™ Cable Assembly is factory tested to electrical permanent link specifications
- Euroclass Cca flammability ratings (Cat6 & Cat6A) available

**QUICKNET™ PATCH PANELS**

- TX600™ Copper Cabling Systems exceeds ANSI/TIA-568-C.2 and ISO 11801 2nd Edition Class E standard
- Jack modules utilise patented Giga-TX™ Technology which optimises performance by maintaining cable pair geometry and eliminating conductor untwist
- Modular plugs meet all applicable ANSI/TIA-968-A requirements and exceed IEC 60603-7 specifications

### Part No.: Description:

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>PT-QAPP24BL</td>
<td>24-Port, Angled Patch Panel which accepts QuickNet™ Pre-Terminated Cassettes and Patch Panel Adaptors</td>
</tr>
<tr>
<td>PT-QAPP48HDBL</td>
<td>48-Port, Angled Patch Panel which accepts QuickNet™ Pre-Terminated Cassettes and Patch Panel Adaptors</td>
</tr>
<tr>
<td>PT-QPP24BL</td>
<td>24-Port, Patch Panel which accepts QuickNet™ Pre-Terminated Cassettes and Patch Panel Adaptors</td>
</tr>
<tr>
<td>PT-QPP48HDBL</td>
<td>48-Port, Patch Panel which accepts QuickNet™ Pre-Terminated Cassettes and Patch Panel Adaptors</td>
</tr>
</tbody>
</table>

**PLEASE CALL FOR PART NUMBERS**
“THE ‘6 STEPS’ OF THE RIGHT FIBRE CERTIFICATION PROCESS”

ORDER YOUR FREE PRINTED POSTER NOW, JUST SCAN THE CODE BELOW
NETKEY™ COPPER CABLE

The NetKey™ Copper Cabling System provides a complete, standards compliant cabling infrastructure solution for voice, data, and video applications. NetKey™ Modules feature the universal Keystone design and are compatible with a wide assortment of modular patch panels, faceplates, and surface mount boxes. When teamed with complementary Panduit products, the NetKey™ solutions cover all of your needs from the telecommunication room to the work area with the proven innovation and quality you depend on from Panduit.

NETKEY™ CAT6 UTP REDUCED DIAMETER CABLE

- Meets ISO/IEC Cat6/Class E performance requirements
- Descending length cable markings enable easy identification of remaining cable
- Nominal Diameter (mm) - 5.2
- EN50575: 2014 Euroclass Eca
- Cable supplied in an easy payout reel in a box

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>PT-NUL6CR04BU-CE</td>
<td>Cat6, LSZH, 4-pair, 24 AWG, UTP, Blue Reduced Diameter Copper Cable, Euroclass Eca, 305m</td>
</tr>
</tbody>
</table>

NETKEY™ CAT6 UTP CABLE

- Meets ISO/IEC Cat6/Class E performance requirements
- Descending length cable markings enable easy identification of remaining cable
- Third party verified
- EN50575: 2014 Euroclass Eca, Dca-s2-d1-a1 and Cca-s1-d1-a1 available.
- Cable supplied in an easy payout reel in a box

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>PT-NUL6C04BU-CE</td>
<td>Cat6, Low Smoke Zero Halogen (LSZH), 4-pair, UTP, Blue Copper Cable, Euroclass Dca, 305m</td>
</tr>
<tr>
<td>PT-NUL6C04VL-CE</td>
<td>Cat6, Low Smoke Zero Halogen (LSZH), 4-pair, UTP, Violet Copper Cable, Euroclass Eca, 305m</td>
</tr>
<tr>
<td>PT-NUY6C04WH-CE</td>
<td>Cat6, Low Smoke Zero Halogen (LSZH), 4-pair, UTP, White Copper Cable, Euroclass Cca, 305m</td>
</tr>
</tbody>
</table>

NETKEY™ CAT5E UTP CABLE

- Meets ISO/IEC Cat5e/Class D performance requirements
- Descending length cable markings enable easy identification of remaining cable
- Third party verified
- 305m (1,000 ft.) in an easy-pay-out box
- EN50575: 2014 Euroclass Eca

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>PT-NUL5C04BU-CE</td>
<td>Cat5e, Low Smoke Zero Halogen (LSZH), 4-pair, UTP, Blue Copper Cable, Euroclass Eca, 305m</td>
</tr>
<tr>
<td>PT-NUL5C04VL-CE</td>
<td>Cat5e, Low Smoke Zero Halogen (LSZH), 4-pair, UTP, Violet Copper Cable, Euroclass Eca, 305m</td>
</tr>
</tbody>
</table>
NETKEY™ PUNCHDOWN PATCH PANELS

- PT-NK6PPG48Y: Cat6, 48-port punchdown patch panel, 2U
- PT-NK6PPG24Y: Cat6, 24-port punchdown patch panel, 1U
- PT-NK5EPPG48Y: Cat5e, 48-port punchdown patch panel, 2U
- PT-NK5EPPG24Y: Cat5e, 24-port punchdown patch panel, 1U

NETKEY™ ALL METAL PATCH PANELS

- PT-NKMP24Y: 24-port all metal modular patch panel, 1U
- PT-NKMP48Y: 48-port all metal modular patch panel, 2U

NETKEY™ FLUSH MOUNT PATCH PANELS

- PT-NKPPA48FMY: 24-port flush mount angled modular patch panel, 1U
- PT-NKPPA48FMY: 48-port flush mount angled modular patch panel, 2U
- PT-NKPP24FMY: 24-port flush mount angled modular panel, 1U
- PT-NKPP48FMY: 48-port flush mount angled modular panel, 2U
NETKEY™
MODULES & PATCH LEADS

➤ NETKEY™ CAT5e & CAT6 COPPER JACK MODULES

- Meet all industry performance standards for Cat6 and Cat5e
- Punchdown jack modules are 100% performance tested and individually serialised for future traceability
- Snap in and out of keystone openings for easy moves, adds and changes
- Universal label includes T568A and T568B wiring schemes
- Jack Rapid tool is available, please see Page 199 for details.

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>PT-NK688MIW</td>
<td>Cat6, 8-position, 8-wire, keystone punchdown jack module</td>
</tr>
<tr>
<td>PT-NK688MIW-Q</td>
<td>Convenience pack of 25, Cat6, 8-position, 8-wire, keystone punchdown jack modules</td>
</tr>
<tr>
<td>PT-NKP5E88MIW</td>
<td>Cat5e, 8-position, 8-wire, keystone punchdown jack module</td>
</tr>
<tr>
<td>PT-NKP5E88MIW-Q</td>
<td>Convenience pack of 25, Cat5e, 8-position, 8-wire, keystone punchdown jack modules</td>
</tr>
<tr>
<td>PT-NK5E88MIW</td>
<td>Cat5e, 8-position, 8-wire, keystone leadframe jack module</td>
</tr>
<tr>
<td>PT-NK5E88MIW-Q</td>
<td>Convenience pack of 25, Cat5e, 8-position, 8-wire, keystone leadframe jack module</td>
</tr>
</tbody>
</table>

➤ NETKEY™ COPPER UTP PATCH LEADS

- Meet all industry performance standards for Cat6 and 5e
- 100% performance tested
- Available in a variety of colours and lengths for design flexibility

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>PT-NK6PC^*Y</td>
<td>Cat6, UTP patch lead with modular plugs on each end</td>
</tr>
<tr>
<td>PT-NK5EPC^*Y</td>
<td>Cat5e, UTP patch lead with modular plugs on each end</td>
</tr>
</tbody>
</table>

∧ Available in 1, 2, 3, 4, 5 metre lengths.

* For standard colours other than Off White, add suffix BU (Blue), RD (Red), YL (Yellow) or GR (Green) before Y in the part number. For example, the part number of a blue, Cat6, 5-metre patch lead is PT-NK6PC5MBUY.
FACEPLATES

➤ NETKEY™ FACE PLATES

PT-NK6CSAW-X

PT-NKUKS2SAW

PT-NKUKS4SAW-2G

➤ NETKEY™ MODULAR FURNITURE FACEPLATES

PT-NK4MFAW

➤ NETKEY™ SURFACE MOUNT BOXES

PT-NK2BXIW-A

PT-NK4BXIW-AY

PT-NK6BXIW-AY

PT-CBM-X

Part No: Description:

PT-NK6CSAW-X | Single gang, 25.4mm x 32mm, shuttered adaptor. Compatible with LJ6C frame. Accepts one NetKey module

PT-NKUKS2SAW | Single gang, sloped, shuttered faceplate kit with labels. Kit includes one 86mm x 86mm faceplate frame and one sloped, shuttered insert. Accepts two NetKey modules

PT-NKUKS4SAW-2G | Double gang, sloped, shuttered faceplate kit with labels. Kit includes one 146mm x 86mm faceplate frame and two sloped, shuttered inserts. Accepts four NetKey modules

Part No: Description:

PT-NK2BXIW-A | Surface mount box accepts two NetKey modules

PT-NK4BXIW-AY | Surface mount box accepts four NetKey modules

PT-NK6BXIW-AY | Surface mount box accepts six NetKey modules

PT-CBM-X | Optional magnet for mounting on metal Surfaces. Compatible with NK2BXIW-A and NK4BXIW-AY
**WYR-GRID® OVERHEAD ROUTING SYSTEM**

The overhead cable tray routing system consists of pathway sections, splice connectors, sidewalls, waterfalls, mounting brackets and accessories designed to route and manage copper, fibre optic or power cables. The pathway sections come in five widths: 8” (203mm), 12” (305mm), 18” (457mm), 24” (610mm) and 30” (762mm). Optional snap-on sidewalls include 2” (50mm), 4” (102mm), and 6” (152mm) heights that can be hand installed at any location along pathway sections. Sidewall waterfalls and intersection bend radius parts provide 3” (76mm) bend radius protection. Trapeze, cantilever, and wall mount brackets are provided to support the system. Components are painted black or electro zinc plated.

**Part No:**

<table>
<thead>
<tr>
<th>Part No</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PT-WG12BL10</td>
<td>12” Wyr-Grid® Pathway Section</td>
</tr>
<tr>
<td>PT-WG18BL10</td>
<td>18” Wyr-Grid® Pathway Section</td>
</tr>
<tr>
<td>PT-WG24BL10</td>
<td>24” Wyr-Grid® Pathway Section</td>
</tr>
<tr>
<td>PT-WG30BL10</td>
<td>30” Wyr-Grid® Pathway Section</td>
</tr>
<tr>
<td>PT-WGTBS8BL</td>
<td>8” Wyr-Grid® Trapeze Bracket</td>
</tr>
<tr>
<td>PT-WGTBS12BL</td>
<td>12” Wyr-Grid® Trapeze Bracket</td>
</tr>
<tr>
<td>PT-WGTBS18BL</td>
<td>18” Wyr-Grid® Trapeze Bracket</td>
</tr>
<tr>
<td>PT-WGTBS24BL</td>
<td>24” Wyr-Grid® Trapeze Bracket</td>
</tr>
<tr>
<td>PT-WGTBS30BL</td>
<td>30” Wyr-Grid® Trapeze Bracket</td>
</tr>
<tr>
<td>PT-WGWMTB08BL</td>
<td>8” Wyr-Grid® Wall Mount Termination Bracket</td>
</tr>
<tr>
<td>PT-WGWMTB12BL</td>
<td>12” Wyr-Grid® Wall Mount Termination Bracket</td>
</tr>
<tr>
<td>PT-WGWMTB1830BL</td>
<td>18-30” Wyr-Grid® Wall Mount Termination Bracket</td>
</tr>
<tr>
<td>PT-WGINBRC2BL</td>
<td>2” High Wyr-Grid® Intersection Bend Radius Control</td>
</tr>
<tr>
<td>PT-WGINBRC4BL</td>
<td>4” High Wyr-Grid® Intersection Bend Radius Control</td>
</tr>
<tr>
<td>PT-WGINBRC6BL</td>
<td>6” High Wyr-Grid® Intersection Bend Radius Control</td>
</tr>
<tr>
<td>PT-WGSWF4BL</td>
<td>4” High Wyr-Grid® Side Waterfall</td>
</tr>
<tr>
<td>PT-WGBTMWFBL</td>
<td>Wyr-Grid® Bottom Waterfall</td>
</tr>
</tbody>
</table>
FIBERRUNNER™ ROUTING SYSTEMS

Panduit™ provides innovative solutions for routing fibre optic and high performance copper cabling to and between equipment racks within a data centre, telecommunications room or service provider facility. Routing products such as the FiberRunner™ routing system are critical factors in your ability to quickly install, easily implement moves, add changes and maintain the integrity of your fibre and copper cabling plant in order to maximise long-term performance.

The FiberRunner™ 12x4, 6x4, 4x4 and 2x2 Routing Systems are comprised of channel, couplers, fittings and brackets, designed to segregate, route, and protect fibre optic and high performance copper cabling.

- Robust, large capacity 12x4 and 6x4 systems to handle large cable counts; 4x4 and 2x2 systems for use with smaller cable counts
- Hinged channel cover and split fitting covers protect cabling and provide easy access for future cabling revisions and additions
- Fittings provide minimum 2" (50.8mm) bend radius to protect against signal loss due to excessive cable bends
- Multiple spillout options provide versatility to make transitions to various equipment and rack configurations
- Compatible with Panduit™ Fiber-Duct™ 4x4 and 2x2 Routing Systems, cable management, and racks
No: Part No: Description:
1  PT-FR6X4**2  6x4 FibreRunner® Channel 2m
2  PT-FRHC6**2  6x4 Snap-On Hinged Cover 2m
3  PT-FRSHC6**2  6x4 Split Hinged Cover 2m
4  PT-FRBC6X4**  6x4 QuikLock™ Coupler
5  PT-FRRA6X4**  6x4 Horizontal Right Angle Fitting
 PT-FRRASC6**  Optional Split Cover
6  PT-FR456X4**  6x4 Horizontal 45° Angle Fitting
 PT-FRH45SC6**  Optional Split Cover
7  PT-FR6X4**  6x4 Horizontal Tee Fitting
 PT-FRTSC6**  Optional Split Cover
8  PT-FRFWC6X4**  6x4 4-Way Cross Fitting
 PT-FRFWCS6**  Optional Split Cover
9  PT-FRTR6X4**  3-Sided BRC Trumpet Spillout for 6x4 Exit
 PT-FRTR6X4SC6** Optional Split Cover
10 PT-FREC6X4**  6x4 End Cap Fitting
11 PT-FRT6X4**  6x4 QuikLock™ Vertical Tee
12 PT-FRIDT6X4**  3-Port Spillout to 1.5” (38mm) Inside Diameter Corrugated Tubing

** - COLOUR: YL = Yellow; OR = Orange; BL = BLACK. Replace 6 with 4 to create 4 X 4 inch system.
### Panduit™ FiberRunner™

**COLOUR:**  
- **YL** = Yellow  
- **OR** = Orange  
- **BL** = Black

<table>
<thead>
<tr>
<th>No.</th>
<th>Part No:</th>
<th>Description:</th>
<th>OEM Code:</th>
</tr>
</thead>
<tbody>
<tr>
<td>13</td>
<td>PT-FROVRA6X4**</td>
<td>6x4 Outside Vertical Right Angle Fitting</td>
<td><strong>-</strong></td>
</tr>
<tr>
<td></td>
<td>PT-FROVRASC6**</td>
<td>Optional Split Cover</td>
<td><strong>-</strong></td>
</tr>
<tr>
<td>14</td>
<td>PT-FRIV456X4**</td>
<td>6x4 Inside Vertical 45° Angle Fitting</td>
<td><strong>-</strong></td>
</tr>
<tr>
<td>15</td>
<td>PT-FROV456X4**</td>
<td>6x4 Outside Vertical 45° Angle Fitting</td>
<td><strong>-</strong></td>
</tr>
<tr>
<td></td>
<td>PT-FROV45SC6**</td>
<td>Optional Split Cover</td>
<td><strong>-</strong></td>
</tr>
<tr>
<td>16</td>
<td>PT-FRRF6FR4**</td>
<td>6x4 to 4x4 FiberRunner® Reducer Fitting</td>
<td><strong>-</strong></td>
</tr>
<tr>
<td></td>
<td>PT-FRRF6FR4SC**</td>
<td>Optional Split Cover</td>
<td><strong>-</strong></td>
</tr>
<tr>
<td>17</td>
<td>PT-FRRF64**</td>
<td>6x4 FiberRunner® Fitting to 4x4 Fiber-Duct™ Channel Reducer Fitting</td>
<td><strong>-</strong></td>
</tr>
<tr>
<td>18</td>
<td>PT-FRSP4**</td>
<td>Split-Over Junction with 4x4 Exit</td>
<td><strong>-</strong></td>
</tr>
<tr>
<td></td>
<td>PT-FRSP4C**</td>
<td>Optional Cover for 6x4 System</td>
<td><strong>-</strong></td>
</tr>
<tr>
<td>19</td>
<td>PT-FRDDS6X4**</td>
<td>6x4 Dual Downspout</td>
<td><strong>-</strong></td>
</tr>
<tr>
<td></td>
<td>PT-FRDDSCHC6**</td>
<td>Optional Cover for 6x4 Dual Downspout</td>
<td><strong>-</strong></td>
</tr>
<tr>
<td>20</td>
<td>PT-FRUPS6X4**</td>
<td>6x4 Up Spout</td>
<td><strong>-</strong></td>
</tr>
<tr>
<td>21</td>
<td>PT-FR1.5IDE**</td>
<td>1-Port Spillout Side Exit to 1.5&quot; (38mm) Inside Diameter Corrugated Tubing</td>
<td><strong>-</strong></td>
</tr>
<tr>
<td>22</td>
<td>PT-FIVRA6X4**</td>
<td>6x4 Inside Vertical 90° Angle Fitting</td>
<td><strong>-</strong></td>
</tr>
<tr>
<td>23</td>
<td>PT-FRCR6BL-X</td>
<td>Cable Retainer for 6x4 System</td>
<td><strong>-</strong></td>
</tr>
</tbody>
</table>

**Note:** Replace 6 with 4 to create 4 X 4 inch system.
INDUSTRIAL AUTOMATION

➤ SYNAPSENSE® - WIRELESS ENVIRONMENTAL MONITORING SYSTEM

A low-cost, easy-to-deploy solution to gather, communicate and visualize environmental data within the facility for improved reliability, product quality and energy optimization. Robust wireless mesh sensing technology delivers granular temperature, humidity and differential air pressure data to the IoT application at a fraction of the time and cost of wired solutions. The software package includes tools to visualise, analyse and alarm from multiple devices, easing deployment and allowing immediate use of collected data. Complete kits with detailed instructions are available to further speed learning and deployment.

Ethernet networks are the critical link between the manufacturing and automation systems and the business systems. With so many connected devices to manage, detection, diagnosis and problem resolution have become a costly and time-consuming task.

IntraVUE™ Industrial Network Visualisation and Analytics addresses the challenges unique to industrial environments:

➤ Leverages real-time visualisation and monitoring across ethernet endpoints
➤ Collects and documents essential data
➤ Monitors and data capture at-a-glance
➤ Diagnoses network problems from any location
➤ Network documentation and deployment
➤ Accelerates troubleshooting with advanced analytics

Armed with these capabilities, IntraVUE™ empowers control professionals to shift to a pro-active approach, which can greatly improve both the uptime and performance of critical, real-time networks.
INDUSTRIALNET™ ETHERNET ENCLOSURE

The IndustrialNet™ ethernet enclosure is designed to protect Industrial Ethernet hardened switches in harsh environments. The enclosure is ideally suited for work zone cells where the switch is integrated into the automation equipment. The enclosure allows for long runs (in the architecture) to be accommodated by fibre. It can also be used in the integration of building automation systems into the LAN. With IP ratings of IP66 or IP54, the enclosure provides reliability and high performance, as an integral component to the end-to-end solution for Industrial Networks. A wide range of complementary accessories are available to complete your industrial network design.

<table>
<thead>
<tr>
<th>No.</th>
<th>Part No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>PT-IAEFKSP</td>
<td>Industrial Ethernet fibre uplink splice kit</td>
</tr>
<tr>
<td>2</td>
<td>PT-IAEFK54</td>
<td>Industrial Ethernet fan/filter kit, 24 VDC powered. Includes DIN rail mount thermostat.</td>
</tr>
<tr>
<td>3</td>
<td>PT-IAEPCBH</td>
<td>Bulkhead Assembly</td>
</tr>
<tr>
<td>4</td>
<td>PT-IAEKO30</td>
<td>Knockout tool</td>
</tr>
<tr>
<td>5</td>
<td>PT-IAEBGP</td>
<td>Enclosure Blank Gland Plate</td>
</tr>
<tr>
<td>6</td>
<td>PT-IAECGP</td>
<td>Industrial Ethernet connector gland plate. Fully populated with 14 bulkhead fittings, 14 internal enclosure patch leads (IUJGY) for 12 downlink ports, and 2 copper uplink ports.</td>
</tr>
</tbody>
</table>

Can’t find what you’re looking for? Then contact us...
INDUSTRIALNET™ M12 D-CODE PLUG

The IndustrialNet™ M12 D-CODE plug has an ingress protection rating of IP20 and an extended temperature range. The plug can be easily field attachable without special tools.

- 8 position industrial plug suitable for manufacturing purposes
- Meets or exceeds ANSI/TIA-568-C.2 standards
- Up to 100 metres at swept frequencies
- Up to 500 metres when installed with other Panduit Cat6A components
- RJ45 plug constructed from zinc die cast housing

INDUSTRIALNET™ M12 D-CODE TO RJ45 PANEL MOUNT ADAPTER

The IndustrialNet™ M12 D-CODE industrial adapters shall be applicable for use in manufacturing as well as other industrial environments.

- Meets or exceeds ANSI/TIA-568-C.2 standards
- Adapter housing made of Nylon GF
- Ingress protection rating of IP20 when RJ45 side + IP68 on M12 side when mated
- Easily field installable without the need for special tools

MINI-COM® DIN RAIL MOUNT ADAPTER

Mini-Com® DIN rail mount adapter is a single port adapter that mounts onto a 35mm DIN rail. Adapter includes a label pocket, label and label cover. Mini-Com® DIN rail mount accept any single module space Mini-Com® module.

PartNo: Description:

<table>
<thead>
<tr>
<th>PartNo:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>PT- ISPS6A88MFA</td>
<td>4-Position, IndustrialNet™ M12 D-Code Plug, for use with stranded 26/7 - 22/7 AWG Cat5e, UTP Copper Cable</td>
</tr>
<tr>
<td>PT-ICAM12DRJS</td>
<td>Cat5e, M12 D-code to RJ45 Industrial Adapter, Panel Mount.</td>
</tr>
<tr>
<td>PT-CADIN1IG</td>
<td>Mini-Com® DIN Rail Mount Adapter</td>
</tr>
</tbody>
</table>
INDUSTRIALNET™ RJ45 PLUG

The 8-position, industrial plug is applicable for use in manufacturing as well as other industrial environments. The product meets or exceeds the component requirements of the ANSI/TIA-568-C.2 Cat6 and Cat5e, ISO 11801 Class E and Class D, and ODVA Ethernet/IP standards. It also meets the channel requirements of ANSI/TIA-568-C.2 Cat6A and ISO 11801 2nd Edition Class EA in a 4-connector configuration up to 100 meters at swept frequencies up to 500MHz when installed with other Panduit Cat6A components. The RJ45 plug is constructed of zinc die cast housing with 360° shielding and includes a dust cap.

The plug incorporates an ingress protection rating of IP20 and offer an extended temperature range as required for more demanding applications. The plug can be easily terminated without any special tools and is capable of termination to either a 2-pair or 4-pair solid or stranded twisted pair copper cable.

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PT-ISPS688FAS</td>
<td>8-Position, IndustrialNet™ RJ45 Plug, Field Terminable Cat6A STP or UTP. For cables with 0.85-1.0mm (0.033-0.039 in.) insulation diameter</td>
</tr>
<tr>
<td>PT-ISPS688FA</td>
<td>8-Position, IndustrialNet™ RJ45 Plug, Field Terminable Cat6A, UTP and STP copper cable. For use with for cables with 1.0 -1.6mm (0.039-0.063 in.) insulation diameter</td>
</tr>
</tbody>
</table>

INDUSTRIALNET™ 8-PORT FIBRE OPTIC & COPPER ENCLOSURE

These 8-port DIN rail mount fibre and copper patching solution are made of high impact polycarbonate material and mount to a standard 35mm DIN rail. The product has a removable faceplate that includes four label pockets, labels and covers for port identification.

The latch design allows the product to mount on a flat surface for vertical bulkhead mounting. The fibre solution provides enclosed fibre protection for terminated distribution style cabling and include a PG21 cable cord grip to secure fibre cable(s) exiting the enclosure. The 8-port DIN rail mount patching solution accepts any Mini-Com® Module that occupies a single space.

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PT-FDME8RG</td>
<td>IndustrialNet™ 8-port DIN Rail Fibre Optic Enclosure</td>
</tr>
<tr>
<td>PT-CDPP8RG</td>
<td>IndustrialNet™ 8-port DIN Rail Mount Copper Patch Panel</td>
</tr>
</tbody>
</table>

4U INDUSTRIAL AUTOMATION BRACKET

4RU Industrial automation bracket for standard EIA 19" wide rack or cabinet, with hardware. Facilitates DIN rail mountable equipment.

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PT-IABDIN4</td>
<td>4U Industrial Automation Bracket for Standard EIA 19&quot; Wide Rack or Cabinet with Hardware. Facilitates DIN Rail Mountable Equipment</td>
</tr>
</tbody>
</table>
➤ Cat5e 104
➤ Cat6 106
➤ Cat6A 109
➤ Cat7A 111
➤ Tools 112
➤ Cable Management 114
➤ Fibre Optic Cable 115
➤ Fibre Optic Patch Leads & Pigtails 116
➤ Fibre Optic Enclosures 117
➤ Lightstack™ MTP Solution 118
➤ Racks & Cabinets 123
➤ PDU's 125
➤ Plug and Play 126
CAT5E PREMIUM 5E® UTP 4-PAIR CABLE

Compliance:
- ISO/IEC 11801: Ed. 2.2 (Class D)
- EEC 61156-6-5 Ed. 2.0 (Cat5e)
- EEE 802.3
- TIA-568-C.2 (Cat5e)
- LSZH: IEC 60332-1, IEC 60754, AND IEC 61034
- EN50575: 2014 Euroclass Eca

Cable Construction:
- UTP
- Nominal jacket OD: 5mm
- 0.5mm solid (non-tinned) copper
- 1.0mm max conductor insulation diameter

Part No: Description:
SM-9C5L4-E2 LSZH (IEC 60332-1), Violet Jacket, 305m Reel, Euroclass Eca

Other cable lengths also available:
Add "-5CR" for 500m Reel, "-1KR" for 1000m Reel

CAT5E MAX® 5E UTP OUTLETS

MAX 5e Outlets exceed Cat5e performance with component and channel performance to 160 MHz. These outlets offer all the functional advantages of MAX 6 modules in a variety of colour options. All outlets utilise our S310 punch-down block — making termination quick and easy. The Siemon palm guard is recommended when terminating all MAX jacks.

*Doors are not available on MX5-Fxx & MX5-Kxx

HOW TO CREATE OUR UTP OUTLET PART NUMBERS

Angled MAX outlet, T568A/B, rear strain relief cap and protective colour-matching rubber door
Flat MAX outlet, T568A/B, rear strain relief cap
Keystone MAX outlet, T568A/B, rear strain relief cap

USE XX TO SPECIFY COLOUR: 01 = BLACK, 02 = WHITE, 03 = RED, 04 = GREY, 05 = YELLOW, 06 = BLUE, 07 = GREEN, 09 = ORANGE, 20 = IVORY, 25 = BRIGHT WHITE, 80 = LIGHT IVORY
CAT5E HD®5E UTP PATCH PANELS

Siemon’s HD 5e series patch panels offer the most robust patching solution in the industry. HD 5e panels feature universal T568A/B wiring and exceed Cat5e requirements with component and channel performance to 160 MHz. Compliant pin technology enables the use of multi-pair S110® punch-down tools to reduce termination time. Panels include rear cable manager, icon/label holders, designation labels, cable ties, and mounting hardware.

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>SM-HD5-16</td>
<td>16 Port Cat5e UTP HD Patch Panel, T568A/B, 1U</td>
</tr>
<tr>
<td>SM-HD5-24</td>
<td>24 Port Cat5e UTP HD Patch Panel, T568A/B, 1U</td>
</tr>
<tr>
<td>SM-HD5-32</td>
<td>32 Port Cat5e UTP HD Patch Panel, T568A/B, 2U</td>
</tr>
<tr>
<td>SM-HD5-48</td>
<td>48 Port Cat5e UTP HD Patch Panel, T568A/B, 2U</td>
</tr>
<tr>
<td>SM-HD5-96</td>
<td>96 Port Cat5e UTP HD Patch Panel, T568A/B, 4U</td>
</tr>
</tbody>
</table>

CAT5E MC®5E UTP MODULAR PATCH LEADS

Siemon uses the highest quality components combined with stringent manufacturing processes to produce durable modular patch leads. The end result is a cord that exceeds all ISO/IEC and TIA/IEA component specifications for transmission performance.

HOW TO CREATE SIEMON MODULAR PATCH CORD PART NUMBERS

Populate this field with the required colour:
- 01 = Black
- 02 = White
- 03 = Red
- 04 = Grey
- 05 = Yellow
- 06 = Blue
- 07 = Green

Populate this field with the cord length:
- 01 = 1m
- 1.5 = 1.5m
- 02 = 2m
- 03 = 3m
- 05 = 5m

EG: SM-MC5-8T-03M-B06C = CAT5E UTP MC DOUBLE-ENDED, 4-PAIR STRANDED MODULAR CORD, COLOUR MATCHING JACKET/BOOT, T568A/B, LSZH, 3M IN BLUE
CAT6

➤ CAT6 SOLUTION 6™ UTP CABLE

Compliance:
- ISO/IEC 11801 Ed. 2.2 (Class E)
- IEC 61156-5:2002 (Cat6)
- TIA-568-C.2 (Cat6)
- LSZH, IEC 60332-1, IEC 60332-3-22 (SM-9C6B24-E2)
- IEC 60754, and IEC 61034
- EN50399: 2014 Euroclass Eca (SM-9C6L4-E2) / B2ca (SM-9C6B24-E2)

Cable Construction:
- UTP
- Nominal jacket OD: 5.6mm (Eca)/6.1mm (B2ca)
- Solid (non-tinned) copper
- 1.0mm max conductor insulation diameter

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SM-9C6L4-E2</td>
<td>LSZH, Violet Jacket, 305m Reel-in-Box, Euroclass Eca</td>
</tr>
<tr>
<td>SM-9C6B24-E2</td>
<td>LSZH, Violet Jacket, 305m Reel-in-Box, Euroclass B2ca</td>
</tr>
</tbody>
</table>

Other cable lengths also available:
Add "-5CR" for 500m Reel, "-1KR" for 1000m Reel

➤ CAT6 Z-MAX® 6 UTP OUTLETS

The Cat6 UTP Z-MAX® Outlet offers best-in-class performance exceeding all Cat6 performance requirements. Its innovative features not only accelerate and simplify termination, but remove installation variability for consistently high and repeatable performance - every termination, every time! This consistency eliminates troubleshooting time due to marginal passes during field testing.

HOW TO CREATE SIEMON UTP OUTLET PART NUMBERS

Populate this field with the required colour:
Eg: 01 = Black 02 = White 03 = Red 04 = Grey 05 = Yellow 06 = Blue 07 = Green 09 = Orange 20 = Ivory 80 = Light Ivory

Populate this field with mounting style:
(Blank) = Hybrid Flat/Angled K = Keystone

Populate this field with door option:
(Blank) = No Door D = Door (Hybrid only)

EG: SM-Z6-K01 = UTP Z-MAX 6 OUTLET, T568A/B, KEYSTONE, BLACK, NO DOOR
**CAT6 MAX 6 UTP OUTLETS**

Part of Siemon’s Cat6 UTP end-to-end cabling solution, the MAX 6 outlet exceeds Cat6 connecting hardware performance specifications. Its compact design is ideal for high density applications. Up to six outlets can be utilised in a single gang faceplate and twelve outlets in a double gang faceplate. Additionally, the angled MAX outlet provides a gravity feed, low-profile design for the work area - greatly improving cable management in installations where front or rear clearance is at a minimum.

*Doors are not available on MX6-Fxx & MX6-Kxx*

**HOW TO CREATE SIEMON CAT 6 UTP OUTLET PART NUMBERS**

<table>
<thead>
<tr>
<th>Angled MAX Outlet, T568A/B, rear strain relief cap and protective colour-matching rubber door</th>
<th>Flat MAX Outlet, T568A/B, Rear Strain Relief Cap</th>
<th>Keystone MAX Outlet, T568A/B, Rear Strain Relief Cap</th>
</tr>
</thead>
<tbody>
<tr>
<td>SM-MX6</td>
<td>SM-MX6</td>
<td>SM-MX6</td>
</tr>
</tbody>
</table>

**USE XX TO SPECIFY COLOUR: 01 = BLACK, 02 = WHITE, 03 = RED, 04 = GREY, 05 = YELLOW, 06 = BLUE, 07 = GREEN, 09 = ORANGE, 20 = IVORY, 25 = BRIGHT WHITE, 80 = LIGHT IVORY**

**CAT6 MC® UTP MODULAR PATCH LEADS**

Siemon’s Cat6 series of modular leads are key components to ensure optimum channel performance of Cat6 UTP systems. A variety of product enhancements contribute to the cord’s superior performance — including 250 MHz rated stranded cordage, a patented crosspair isolator and an innovative 360° crimp, which provides excellent plug-to-cable strain relief without causing pair deformation.

**SKINNYPATCH CAT6 UTP MODULAR PATCH LEADS**

SkinnyPatch 6 modular leads deliver Cat6 performance with a reduced cable diameter, providing increased flexibility in high density patching areas. The smaller 28AWG diameter stranded copper cable construction offers a significantly tighter bend radius for easier cable routing and enhanced cable management, providing pathway space savings in racks and cabinets. Confirmed by an independent third party test lab, SkinnyPatch 6 Modular Leads exceed ANSI/TIA-568-C.2 and ISO/IEC 11801 Edition 2.2 performance standards.

- Integral latch guard protects plug from snagging when pulling through pathways or cable managers
- Clear boots and optional colour clips enable a single cord part number to be custom colour coded
- Features a nominal OD of 4.0 mm for improved airflow and flexibility in high-density applications
- Jacket meets flame resistance requirements for LSZH
- Ultra slim boot further facilitates high-density patching
- Exceptional Cat6 NEXT performance
CAT6 Z-MAX® 6 UTP PATCH PANELS

Z-MAX® patch panels provide outstanding performance and aesthetics in a high density, modular UTP solution. The Z-MAX® UTP panels provide rapid and reliable installation by accelerating module mounting and cable tie down operations.

In addition to traditional 24-port 1U flat and angled versions, the Z-MAX® UTP panels are also available in 48-port 1U configurations for ultra high density installations.

Part No: Description:

- SM-Z6-PNLX-24K: Z-MAX® 24-Port, CAT 6 UTP Patch Panel Kit, 1 RMS, Black, with Jacks
- SM-Z6-PNLX-U48K: Z-MAX® 48-Port, CAT 6 UTP Patch Panel Kit, 1 RMS, Black, with Jacks
- SM-Z-PNLX-24E: Z-MAX® 24-Port UTP Patch Panel, 1 RMS, Black, Empty
- SM-PNLA-CVR-01: Angled Panel Cover, Black

CAT6 HD® 6 UTP PATCH PANELS

Siemon’s HD 6 patch panel was the industry’s first patch panel to exceed Cat6 connecting hardware specifications for all pair combinations up to 250 MHz. Get superior performance and user friendly termination, labeling, and cable management features with Siemon’s popular Cat6 patch panel.

Part No: Description:

- SM-HD6-16: 16-port Cat6 UTP HD Patch Panel, 1U
- SM-HD6-24A: 24-port Cat6 UTP Angled HD Patch Panel, 1U
- SM-HD6-24: 24-port Cat6 UTP HD Patch Panel, 1U
- SM-HD6-48: 48-port Cat6 UTP HD Patch Panel, 2U
- SM-HD6-96: 96-port Cat6 UTP HD Patch Panel, 4U

HOW TO CREATE SIEMON UTP MODULAR LEADS PART NUMBERS

EG: SM-MC6-03M-08-28 = SKINNY PATCH CAT6 UTP, 4-PAIR STRANDED MODULAR CORD, 3M IN VIOLET
HOW TO CREATE SIEMON Z-MAX® 6A SHIELDED OUTLET PART NUMBERS

EG: SM-Z6A-SK01D = Z-MAX 6A SHIELDED OUTLET, KEYSTONE, BLACK WITH DOOR
**Z-MAX® Cat6A Shielded Patch Panels**

Z-MAX® Patch Panels provide outstanding performance and aesthetics in a shielded, high-density modular solution. The Z-MAX® panels provide rapid and reliable installation by accelerating outlet mounting, grounding, and cable tie-down operations.

In addition to traditional 24 port / 1U flat and angled versions, the Z-MAX® shielded panels are also available in 48 port / 1U configurations to permit high density installations.

**Part No:**

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SM-Z6AS-PNLX-24K</td>
<td>Z-MAX® 24-Port, Cat6A Shielded Patch Panel Kit, 1 RMS, Black, with Jacks</td>
</tr>
<tr>
<td>SM-Z6AS-PNLX-U48K</td>
<td>Z-MAX® 48-Port, Cat6A Shielded Patch Panel Kit, 1 RMS, Black, with Jacks</td>
</tr>
<tr>
<td>SM-ZS-PNLX-24E</td>
<td>Z-MAX® 24-Port Shielded Patch Panel, 1 RMS, Black, Empty*</td>
</tr>
<tr>
<td>SM-ZS-PNLX-U48E</td>
<td>Z-MAX® 48-Port Shielded Patch Panel, 1 RMS, Black, Empty*</td>
</tr>
</tbody>
</table>

* These panels can only accept Z6A-SPB type jacks

**Z-MAX® Cat6A Shielded Modular Leads**

Combining the unparalleled performance of an exclusive PCB-based plug, noise-resistant shielded construction and a host of innovative user friendly features, the shielded Z-MAX® 6A Modular Leads are the ultimate Cat6A cord. All leads are 100% factory-tested to ensure performance and compliance.

**Part No:**

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SM-ZM6A-S01M01</td>
<td>Z-MAX 6A 1M Shielded Patchlead Black</td>
</tr>
<tr>
<td>SM-ZM6A-S02M01</td>
<td>Z-MAX 6A 1.5M Shielded Patchlead Black</td>
</tr>
<tr>
<td>SM-ZM6A-S03M01</td>
<td>Z-MAX 6A 2M Shielded Patchlead Black</td>
</tr>
<tr>
<td>SM-ZM6A-S04M01</td>
<td>Z-MAX 6A 3M Shielded Patchlead Black</td>
</tr>
<tr>
<td>SM-ZM6A-S05M01</td>
<td>Z-MAX 6A 4M Shielded Patchlead Black</td>
</tr>
<tr>
<td>SM-ZM6A-S06M01</td>
<td>Z-MAX 6A 5M Shielded Patchlead Black</td>
</tr>
<tr>
<td>SM-ZM6A-S07M01</td>
<td>Z-MAX 6A 7.5M Shielded Patchlead Black</td>
</tr>
</tbody>
</table>

**HOW TO CREATE SIEMON Z-MAX® 6A Shielded Modular Cord Part Numbers**

- **Populate this field with the required colour:**
  - Eg: 01 = Black
  - 02 = White
  - 03 = Red
  - 04 = Grey
  - 05 = Yellow
  - 06 = Blue
  - 07 = Green
  - 09 = Orange

- **Populate this field with the cord length:**
  - 01 = 1m
  - 1.5 = 1.5m
  - 02 = 2m
  - 03 = 3m
  - 04 = 4m
  - 05 = 5m
  - 7.5 = 7.5m

**EG:** SM-ZM6A-S01M01 = Z-MAX 6A 1M Shielded Patchlead Black
CAT7A

➤ CAT7A CABLE

Compliance:
➤ IEC 61156-5 Ed 2.0 (Cat7A)
➤ ISO/IEC 11801: Ed 2.2
➤ EN 50528
➤ EN 50173
➤ EN50224
➤ EEE 803.23an
➤ LSZH: IEC 60332-1, IEC 60754, and IEC 61034
➤ IEC50575:2014  Euroclass Dca-s2-d1 and B2ca-s1-d0-a1

Construction:
➤ S/FTP
➤ Sequential measurement markings on jacket
➤ Pairs individually shielded with aluminum-polyester foil
➤ Overall tinned-copper braid
➤ Jacket Material: LSZH
➤ Nominal Cable O.D: 7.7mm (SM-9T7L4-E10)/7.1mm (SM-9T7L4-E6)
➤ 0.57mm (0.022 in.) 23 AWG solid bare copper

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>SM-9T7L4-E10</td>
<td>Cat7A, 4 Pair, S/FTP Violet Copper cable on 305m reel, Euroclass Dca</td>
</tr>
<tr>
<td>SM-9T7L4-E6</td>
<td>Cat7A, 4 Pair, S/FTP Violet Copper cable on 305m reel, Euroclass Bc2a</td>
</tr>
</tbody>
</table>

➤ TERA® PLUG & 4-PAIR OUTLET

The Siemon TERA® outlet was invented by Siemon in 1999 and subsequently chosen as an industry standard interface for Cat7/Class F and Cat7A/Class FA. When installed as part of a TERA solution, each pair delivers 1.2 GHz of bandwidth — exceeding Cat7A/Class FA specifications. This extra bandwidth supports demanding applications like 10GBASE-T and broadband video.

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>SM-T7P4-B(XX)-1</td>
<td>4-Pair TERA® Plug with Coloured Boot, Compatible with 0.64 - 0.55mm (22 - 23 AWG) solid S/FTP Cable</td>
</tr>
</tbody>
</table>

Use XX to specify boot colour: 01 = Black, 02 = White, 03 = Red, 05 = Yellow, 06 = Blue & 07 = Green

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>SM-T7F-01-1</td>
<td>TERA® 4 Pair Outlet with Black Door, Latch and Boot. Compatible with 0.64-0.55mm (22-23 AWG) solid S/FTP and F/FTP cable</td>
</tr>
</tbody>
</table>

➤ TERA-MAX® PATCH PANELS

TERA-MAX® 19” Patch Panels provide outstanding performance and reliability in a shielded, high-density modular solution. As outlets are snapped into place, resilient ground tabs assure that each outlet is properly grounded. No secondary outlet grounding operations are required, reducing overall installation time.

Note: These panels can also accept Z-MAX® type jacks

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>SM-TM-PNLZ-24-01</td>
<td>24 Port TERA-MAX® Panel, Black, 1U</td>
</tr>
<tr>
<td>SM-TM-PNLZ-24</td>
<td>24 Port TERA-MAX® Panel, Metallic, 1U</td>
</tr>
<tr>
<td>SM-TM-PNLZ-24-01</td>
<td>24 Port Angled TERA-MAX® Panel, Black, 1U</td>
</tr>
<tr>
<td>SM-TM-PNLZ-24</td>
<td>24 Port Angled TERA-MAX® Panel, Metallic, 1U</td>
</tr>
<tr>
<td>SM-PNLA-CVR-01</td>
<td>Angled Panel Cover, Black</td>
</tr>
</tbody>
</table>
Part of the TERA® cabling solution, TERA-to-TERA Patch Leads exceed bandwidth of Cat7A/ Class FA specifications when combined with the TERA® outlet. TERA® delivers up to 1.2 GHz of bandwidth per pair, providing the extra bandwidth for demanding applications like 10GBASE-T and Broadband Video. Facilitated by 1 and 2 pair patch leads, TERA’s extended performance also supports cable sharing the simultaneous convergence of video, voice and data onto a single 4-pair cable and outlet.

HOW TO CREATE SIEMON TERA® PATCH CORD PART NUMBERS

EG: SM-T1-02M-B03L = 1 PAIR, 2M, RED TERA® CAT7A PATCH CORD

MAX® TURBO TOOL

Siemon’s MAX® TurboTool significantly reduces the time associated with the termination of Cat5e & Cat6 UTP MAX® outlets. Unlike a single action punchdown tool the MAX® TurboTool seats and cuts all 8 wires with a single action.

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>SM-MAX-TT</td>
<td>MAX® TurboTool</td>
</tr>
<tr>
<td>SM-MAX-TTREP</td>
<td>Replacement MAX® TurboTool cartridge kit including die, hardware and Allen wrench</td>
</tr>
</tbody>
</table>
### PALM GUARD

Ergonomically designed to provide a safe and convenient means of terminating Siemon’s flat or angled CT couplers and MAX® modules.

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>SM-PG</td>
<td>Palm Guard with MAX insert</td>
</tr>
<tr>
<td>SM-PG-MX6</td>
<td>MAX insert</td>
</tr>
</tbody>
</table>

### ALLPREP CABLE PREPARATION TOOL

The AllPrep cable preparation tool provides a robust and reliable method of preparing both coaxial and twisted-pair cable for termination. The tool features two colour coded interchangeable dies for each media type. The twisted pair die strips a wide variety of UTP, shielded and fibre cable. The coaxial die strips RG59 and RG6 cable.

The TERA version of the tool is specifically designed to accurately strip the jacket and foil from a fully shielded cable without damaging the conductors.

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>SM-CPT-RGTP</td>
<td>AllPrep Cable Preparation tool for Coax and twisted pair cable</td>
</tr>
<tr>
<td>SM-CPT-DIE-RG</td>
<td>Replacement coax die (black)</td>
</tr>
<tr>
<td>SM-CPT-DIE-TP</td>
<td>Replacement twisted-pair die (yellow)</td>
</tr>
<tr>
<td>SM-CPT-DIE-6A</td>
<td>Green die</td>
</tr>
<tr>
<td>SM-CPT-DIE-XX</td>
<td>White die</td>
</tr>
<tr>
<td>SM-CPT-DIE-EZ</td>
<td>Blue die</td>
</tr>
</tbody>
</table>

#### TERA® VERSION

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>SM-CPT-T</td>
<td>TERA preparation tool. Includes: CPT-DIE-T4 and cable preparation template</td>
</tr>
<tr>
<td>SM-CPT-DIE-T4</td>
<td>Replacement TERA cable die (red)</td>
</tr>
<tr>
<td>SM-CPT-DIE-TP</td>
<td>Replacement twisted-pair die (yellow)</td>
</tr>
<tr>
<td>SM-CPT-DIE-TMPL</td>
<td>Replacement TERA wiring guide (red)</td>
</tr>
</tbody>
</table>

### Z-TOOL™

The Z-TOOL™ is an integral part of the exclusive Z-MAX® termination process and is used with both UTP and shielded Z-MAX® modules. This easy to use and ergonomically designed tool is used to both secure the cable retention/grounding clip and to fully engage the termination module to the back of the outlet.

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>SM-Z-TOOL</td>
<td>Z-MAX® Termination Tool</td>
</tr>
</tbody>
</table>
CABLE MANAGEMENT

➤ WM SERIES HORIZONTAL CABLE MANAGERS

The WM Series Cable Managers provide increased strength and do not interfere with panels mounted above or below. They are a popular and economical solution for providing a clean and simple means of organising small to large bundles of cables and patch leads.

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SM-WM-143-5</td>
<td>Horizontal Cable Manager with 5 S143 hangers, 1U</td>
</tr>
<tr>
<td>SM-WM-144-5</td>
<td>Horizontal Cable Manager with 5 S144 hangers, 2U</td>
</tr>
<tr>
<td>SM-WM-145-5</td>
<td>Horizontal Cable Manager with 5 S145 hangers, 2U</td>
</tr>
</tbody>
</table>

Note: 1U = 44.5mm

➤ CABLE HANGERS

The Cable Hanger Design features structural integrity and sleek appearance. These cable hangers are ideal for routing small to very large quantities of cables. The durable plastic design ensures reliability for any application.

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Height:</th>
<th>Width:</th>
<th>Depth:</th>
</tr>
</thead>
<tbody>
<tr>
<td>SM-S143*</td>
<td>44mm</td>
<td>38mm</td>
<td>89mm</td>
</tr>
<tr>
<td>SM-S144*</td>
<td>87mm</td>
<td>57mm</td>
<td>74mm</td>
</tr>
<tr>
<td>SM-S145*</td>
<td>87mm</td>
<td>57mm</td>
<td>125mm</td>
</tr>
<tr>
<td>SM-S146</td>
<td>151mm</td>
<td>63mm</td>
<td>130mm</td>
</tr>
<tr>
<td>SM-S147</td>
<td>254mm</td>
<td>63mm</td>
<td>130mm</td>
</tr>
</tbody>
</table>

*Add “-A” for optional adhesive backing

➤ MAX® BRITISH FACEPLATES

MAX® British faceplates are compatible with British standards (85mm x 85mm). The faceplate is designed to accept up to six Z-MAX®, MAX or TERA® outlets.

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SM-MX-BFP-S-01-02</td>
<td>1 Port Single Gang Faceplate for a Z-MAX®, MAX or TERA Outlet, White</td>
</tr>
<tr>
<td>SM-MX-BFP-S-02-02*</td>
<td>2 Port Single Gang Faceplate for Z-MAX®, MAX or TERA Outlets, White</td>
</tr>
<tr>
<td>SM-MX-BFP-S-03-02*</td>
<td>3 Port Single Gang Faceplate for Z-MAX®, MAX or TERA Outlets, White</td>
</tr>
<tr>
<td>SM-MX-BFP-S-04-02*</td>
<td>4 Port Single Gang Faceplate for Z-MAX®, MAX or TERA outlets, White</td>
</tr>
<tr>
<td>SM-MX-BFP-S-06-02*</td>
<td>6 Port Single Gang Faceplate for Z-MAX®, MAX or TERA Outlets, White</td>
</tr>
</tbody>
</table>

Faceplates include designation labels, clear label cover(s), and M3.5x 0.6x25 mounting screws.

*Not compatible with shielded MAX outlets
FIBRE CABLE

An extensive range of Siemon Fibre Optic cables, providing ideal connectivity options for data centres, campuses and building backbones. Siemon fibre optic cables are offered in XGLO and Light System configurations, supporting high-speed applications such as Gigabit Ethernet, Gigabit ATM and Fibre Channel. Siemon provide an all-in-one solution for data connectivity in line with and above industry standards. Each cable contains high-grade materials which provide protection against moisture. Take advantage of 10 Gigabit speeds with an end-to-end Siemon system.

For more information on Siemon Fibre Optic solutions, please call our expert sales team today on 01403 754 233 or email enquiries@networkscentre.com

➤ XGLO® & LIGHTSYSTEM® INDOOR/OUTDOOR TIGHT BUFFER

Siemon LSZH-FR Euroclass Csa,da1,Indoor/Outdoor Tight Buffer Cables are ideal for data centres, campus and building backbones. Siemon fibre optic cables are offered in XGLO and LightSystem configurations supporting high-speed applications such as Gigabit Ethernet, 10 Gigabit Ethernet, Gigabit ATM and Fibre Channel.

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Fibre Count</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SM-9GD(X)C002B-(XXXX)M</td>
<td>2</td>
<td>1 tube of 2 fibres</td>
</tr>
<tr>
<td>SM-9GD(X)C004C-(XXXX)M</td>
<td>4</td>
<td>1 tube of 4 fibres</td>
</tr>
<tr>
<td>SM-9GD(X)C006D-(XXXX)M</td>
<td>6</td>
<td>1 tube of 6 fibres</td>
</tr>
<tr>
<td>SM-9GD(X)C008E-(XXXX)M</td>
<td>8</td>
<td>1 tube of 8 fibres</td>
</tr>
<tr>
<td>SM-9GD(X)C012G-(XXXX)M</td>
<td>12</td>
<td>1 tube of 12 fibres</td>
</tr>
<tr>
<td>SM-9GD(X)C016K-(XXXX)M</td>
<td>16</td>
<td>1 tube of 16 fibres</td>
</tr>
<tr>
<td>SM-9GD(X)C024L-(XXXX)M</td>
<td>24</td>
<td>1 tube of 24 fibres</td>
</tr>
</tbody>
</table>

Use 1st X to specify fibre type:
- 5 = 50/125μm
- 6 = 62.5/125μm
- 8 = Singlemode

Use XXXX to specify class performance:
- G106 = OM1 62.5μm
- T106 = OM2 50μm
- T306 = OM3 50μm Laser Optimised
- T506 = OM4 50μm Laser Optimised
- E206 = OS1/OS2 Singlemode

M = metres

➤ XGLO® & LIGHTSYSTEM INTERNAL/EXTERNAL LOOSE TUBE

Siemon LSZH (IEC 60332-1) Euroclass D, Indoor/Outdoor Loose Tube Cables are ideal for campus and building backbones. Siemon fibre optic cables are offered in XGLO and LightSystem configurations supporting high-speed applications such as Gigabit Ethernet, 10 Gigabit Ethernet, Gigabit ATM and Fibre Channel.

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Fibre Count</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SM-9GG(X)D002B-(XXXX)M</td>
<td>2</td>
<td>1 tube of 2 fibres</td>
</tr>
<tr>
<td>SM-9GG(X)D004C-(XXXX)M</td>
<td>4</td>
<td>1 tube of 4 fibres</td>
</tr>
<tr>
<td>SM-9GG(X)D006D-(XXXX)M</td>
<td>6</td>
<td>1 tube of 6 fibres</td>
</tr>
<tr>
<td>SM-9GG(X)D008E-(XXXX)M</td>
<td>8</td>
<td>1 tube of 8 fibres</td>
</tr>
<tr>
<td>SM-9GG(X)D012G-(XXXX)M</td>
<td>12</td>
<td>1 tube of 12 fibres</td>
</tr>
<tr>
<td>SM-9GG(X)D016K-(XXXX)M</td>
<td>16</td>
<td>2 tubes of 6 fibres</td>
</tr>
<tr>
<td>SM-9GG(X)D024D-(XXXX)M</td>
<td>24</td>
<td>4 tubes of 6 fibres</td>
</tr>
<tr>
<td>SM-9GG(X)D036G-(XXXX)M</td>
<td>36</td>
<td>6 tubes of 6 fibres</td>
</tr>
<tr>
<td>SM-9GG(X)D048G-(XXXX)M</td>
<td>48</td>
<td>4 tubes of 12 fibres</td>
</tr>
<tr>
<td>SM-9GG(X)D072G-(XXXX)M</td>
<td>72</td>
<td>6 tubes of 12 fibres</td>
</tr>
<tr>
<td>SM-9GG(X)D096G-(XXXX)M</td>
<td>96</td>
<td>8 tubes of 12 fibres</td>
</tr>
<tr>
<td>SM-9GG(X)D144G-(XXXX)M</td>
<td>144</td>
<td>12 tubes of 12 fibres</td>
</tr>
</tbody>
</table>

Use 1st X to specify fibre type:
- 5 = 50/125μm
- 6 = 62.5/125μm
- 8 = Singlemode

Use XXXX to specify class performance:
- G106 = OM1 62.5μm
- T106 = OM2 50μm
- T306 = OM3 50μm Laser Optimised
- T506 = OM4 50μm Laser Optimised
- E206 = OS1/OS2 Singlemode

M = metres
## PATCH LEADS & PIGTAILS

### LC BLADEPATCH®

Siemon’s LC BladePatch duplex jumper offers a unique solution for high-density fibre optic patching environments. It features a revolutionary and innovative push-pull boot design to control the latch, enabling easy access and removal in tight-fitting areas. The LC BladePatch utilizes a smaller diameter unitube cable design which reduces cable pathway congestion improving air flow and increasing energy efficiency while simplifying overall cable management.

The LC BladePatch provides low-loss performance for multimode and singlemode supporting the precise optical performance requirements for high speed networks and improving network performance. The LC BladePatch is ideal for patching high density blade servers, patch panels and equipment.

### XGLO® JUMPER & PIGTAILS

#### XGLO Singlemode OS1/OS2 Duplex Jumpers

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>SM-FJ2-LCULLCULL-(XX)H</td>
<td>LC to LC OS2 - Yellow cable &amp; Blue connectivity Jumper</td>
</tr>
<tr>
<td>SM-FJ2-SCULSCUL-(XX)H</td>
<td>SC to SC OS2 - Yellow cable &amp; Blue connectivity Jumper</td>
</tr>
</tbody>
</table>

#### XGLO Singlemode OS1/OS2 900µM Buffered Pigtails

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>SM-FP1B-LCUL-(XX)H</td>
<td>LC to LC OS2 Yellow cable &amp; Blue connectivity Jumper</td>
</tr>
<tr>
<td>SM-FP1B-SCUL-(XX)H</td>
<td>SC to SC OS2 Yellow cable &amp; Blue connectivity Jumper</td>
</tr>
</tbody>
</table>

**XX** = Length e.g. 01=1metre

For Angled Polished (APC) substitute **U** with **A** (Green Connectivity). Only available in LC or SC.

ST connectivity also available (substitute LC or SC with ST in part numbers above)

XGLO Multimode OM3 and OM4 Duplex Jumpers

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>SM-FJ2-LCLC5L-(XX)AH</td>
<td>LC to OM3 Aqua cable &amp; Beige connectivity Jumper</td>
</tr>
<tr>
<td>SM-FJ2-LCLC5V-(XX)EH</td>
<td>LC to OM4 Erica Violet cable &amp; connectivity Jumper</td>
</tr>
<tr>
<td>SM-FJ2-SCSC65L-(XX)AH</td>
<td>SC to OM3 Aqua &amp; Beige connectivity Jumper</td>
</tr>
<tr>
<td>SM-FJ2-SCSC65V-(XX)EH</td>
<td>SC to OM4 Erica Violet cable &amp; connectivity Jumper</td>
</tr>
</tbody>
</table>

XGLO Multimode OM3 & OM4 900µM Simplex Buffered Pigtails

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>SM-FP1B-LC5L-(XX)AH</td>
<td>LC OM3 Aqua cable &amp; Beige connectivity buffered Pigtail</td>
</tr>
<tr>
<td>SM-FP1B-LC5V-(XX)EH</td>
<td>LC OM4 Erica Violet cable &amp; connectivity buffered Pigtail</td>
</tr>
<tr>
<td>SM-FP1B-SC5L-(XX)AH</td>
<td>SC OM3 Aqua cable &amp; Beige connectivity buffered Pigtail</td>
</tr>
<tr>
<td>SM-FP1B-SC5V(XX)EH</td>
<td>SC OM4 Erica Violet cable &amp; connectivity buffered Pigtail</td>
</tr>
</tbody>
</table>

XGLO fibre optic cable assemblies are ideal for supporting 10 Gigabit fibre applications over extended distances and next-generation backbones. XGLO cable assemblies feature premium fibre that meets IEEE 802.3 10 Gigabit Ethernet Standard as well as IEC-60793-2-10 and TIA-492AAAC (OM3), TIA-492AAAD (OM4) specifications for laser bandwidth Differential Mode Delay (DMD) specifications. In addition, these assemblies offer a superior connector polish that meets stringent Telcordia and ISO/IEC specifications for end-face geometry and exceeds all ISO/IEC and ANSI/TIA insertion loss and return loss requirements.

---

Use **XX** to specify length: 01=1m, 02 = 2m, 03 = 3m, 05 = 5m

Note: Polarity CFP (Continuous fibre position) is available as an option. Remove the first dash "-" and add C to the end of the PP part number. Example: SM-FBPLCLC5L(XX)AH
**ENCLOSURES**

### FIBRE CONNECT PANEL

The Fibre Connect Panel is a rack-mounted fibre enclosure that can be fitted with hard-mount adaptors. It is designed to connect, protect, and manage up to 48 fibres in a low profile 1U rack space. The FCP3-R can be supplied empty (FCP3-R-01) or fully loaded — and populated to provide terminations for 24 fibres in SC and 48 fibres in the LC version.

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>SM-FCP3-R-01</td>
<td>Fixed Patch Panel, 1U, C/W 12 Blanks, Fibre Management, Black</td>
</tr>
<tr>
<td>SM-FA2-SCSC-01</td>
<td>Fibre Adaptor, SC Duplex, MM or SM, Phosphor Bronze**</td>
</tr>
<tr>
<td>SM-FA4-LCLC-06C</td>
<td>Fibre Adaptor, LC Quad, SM, Phosphor Bronze Sleeve, Blue**</td>
</tr>
<tr>
<td>SM-FA4-LCLC-80C</td>
<td>Fibre Adaptor, LC Quad, MM, Phosphor Bronze Sleeve, Beige**</td>
</tr>
<tr>
<td>SM-FA-BLANK</td>
<td>Fibre Adaptor Blank, Black**</td>
</tr>
<tr>
<td>SM-FCP3-RACK</td>
<td>6 to 72 fibre (up to 288 fibre with MTP adaptor plates) Fibre Connect Panel with fixed tray, accepts (3) Quick-Pack adaptor plates, 1U, black. Includes mounting brackets, housing/ cover, fibre managers and grommet height: 43.2mm, width: 482.6mm, depth: 241.3mm</td>
</tr>
</tbody>
</table>

** Add “B” to the end of part number for bulk pack of 48.
Note: 1U = 44.5 mm

### SURFACE PACK™ BOX

Siemon’s Surface Pack Box is best described as a compact, lightweight box often utilised in high density work area environments that require rapid deployment of cabling systems. Typically deployed in buildings with a raised floor system, environments range from call centres to trading floors.

The box supports rapid deployment by allowing connectivity to be pre-terminated and stored away while construction is finalised. Cables can be routed within a flexible conduit (not supplied), secured to the box and terminated to outlets. The small overall footprint allows the box and connectivity to be stored under a raised floor and then passed through standard size floor grommets for efficient deployment to the work station.

Surface Pack Boxes are available in 3 port and 6 port versions. Both boxes are the same size and compatible with MAX®, Z-MAX® and TERA® outlets allowing customers to support Cat5e, 6, 6A and 7A installations. The outlets are presented at an angle to allow patch leads to dress less prominently off the face of the box. Blanks may be used to accommodate port count variants and allow for expansion in the future. Ample labelling is provided for both the box and ports.

Two mounting options are available. One method features a mounting bracket that can be secured to a fixed location and allows the box to be clipped into the bracket via a one touch latch. For additional security, the box can be mounted without the use of the bracket by securing the base directly to the work area surface.

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>SM-SP-3-01</td>
<td>3 Port Surface™ Pack Box, Modular, Black</td>
</tr>
<tr>
<td>SM-SP-6-01</td>
<td>6 Port Surface™ Pack Box, Modular, Black</td>
</tr>
</tbody>
</table>

**Box Includes:**
- 3 - Port identification labels and covers
- 1 - Box label and cover
- 1 - (203mm) Tie-wrap
- 1 - Screw for securing cover to the base of the box
As today’s high-density data centres migrate from 10 to 40 and 100 gigabit speeds, they require low-loss fibre connectivity to support multiple mated connections for flexible patching options over a wide range of distances and configurations while remaining within link loss budgets. At the same time, these connections need to be easily accessed and managed to quickly and effectively make changes. With superior best-in-class features, Siemon’s LightStack Ultra High Density Fibre Plug-And-Play System offers superior density, port access and cable management in a sleek, modern enclosure that easily supports today’s advanced data centre and storage area network environments, while providing fast, seamless migration to advanced 40 and 100 gigabit applications.

The LightStack System consists of:
- Enclosures
- Plug & Play Modules
- Adaptor Plates
- MTP Trunks
- Hybrid MTP to LC Trunks

**ULTRA HIGH DENSITY**
Up to 144 fibres (LC interface) and 864 fibres (MTP interface) within 1U.

**UNMATCHED ACCESSIBILITY**
Enclosures can be stacked repeatedly and maintain full accessibility due to rear sliding bottom tray.

**DATA CENTRES**
Designed for advanced data centres, network and storage area environments providing a seamless migration to 40 and 100 gigabit.

**JUMPER CAPACITY**
Features industry leading horizontal cable management capacity. Designed to work with both uni-tube and mini-zip jumpers.

**JUMPER MANAGEMENT**
Horizontal cable managers have a hinged cover for easy access to all jumpers during install and subsequent MAC work.

**INNOVATIVE LABELLING**
Label holder utilising an excel template for ease of use - both laser printing and secondary adhesive labels can be used.

**AESTHETICS**
Molded magnetic hinged door with enhanced graphics.

**STRAIN RELIEF**
Swivel tie down allows for simplistic approach for anchoring trunks and eliminating pinch points.

**LC PASS THROUGH**
LC adaptor plate option - 144 fibres in 1U.
### LIGHTSTACK™ PANELS

**Part No:** Description:

- **SM-LS-1U-01**: 1U Enclosure, 144 LC fibres or 864 MTP fibres, mounts in 19” racks or cabinets
- **SM-LS-4U-01**: 4U Enclosure, 576 LC fibres or 3456 MTP fibres, mounts in 19” racks or cabinets

### LIGHTSTACK™ LC TO MTP MODULES

**Features:**
- Used in conjunction with LC BladePatch® RazorCore™ trunks for rear connections only
- Ultra slim design to achieve maximum fibre density
- Low loss performance (0.35dB per multimode module)
- Handles in the rear of module helps facilitate removal from the back of the enclosure

**Part No:** Description:

- **SM-LS-12-LC5V-01**: Module, 12 LC-to-MTP Fibres, OM4, XGLO 550, Aqua LC and MTP Adaptors
- **SM-LS-12-LSM-01**: Module, 12 LC-to-MTP Fibres Singlemode, Blue LC Adaptors, Black MTP Adaptors

### LIGHTSTACK™ LC ADAPTOR PLATES

**Features:**
- Used in conjunction with LC BladePatch® RazorCore™ trunks for rear connections only
- Available in Beige and Aqua (MM) and Blue (SM)
- 12 LC Fibres

**HOW TO CREATE SIEMON LIGHTSTACK LC ADAPTOR PLATE PART NUMBERS**

Adaptor Colour:
- **AQ** = Aqua Multimode
- **BG** = Beige Multimode
- **BL** = Blue Singlemode

**Example Part Number:**

**SM-LS-LC12-01C-AQ** = LIGHTSTACK 12 AQUA LC TO LC FIBRE ADAPTOR PLATE
➤ **LIGHTSTACK™ MTP ADAPTOR PLATES**

**Features:**
- Used in conjunction with LC BladePatch® RazorCore™ trunks for rear connections only
- Ultra slim design to achieve maximum fibre density
- Up to 72 fibre count
- Handles in the rear of module helps facilitate removal from the back of the enclosure

**HOW TO CREATE SIEMON LIGHTSTACK MTP ADAPTOR PLATE PART NUMBERS**

<table>
<thead>
<tr>
<th>MTP Port Number:</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 = 2 MTP Ports</td>
</tr>
<tr>
<td>4 = 4 MTP Ports</td>
</tr>
<tr>
<td>6 = 6 MTP Ports</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Adaptor Colour</th>
</tr>
</thead>
<tbody>
<tr>
<td>AQ = Aqua **</td>
</tr>
<tr>
<td>BK = Black **</td>
</tr>
<tr>
<td>GR = Grey *</td>
</tr>
</tbody>
</table>

*Key Orientation (B Only)*
**Key Orientation (C Only)*

EG: **SM-LS-MP6-01CAQ** = LIGHTSTACK 6 OPPOSED AQUA MTP-MTP ADAPTOR PLATE
CREATE YOUR SIEMON LIGHTSTACK LC PATCHBLADE TO MTP TRUNK CABLE PART NUMBER

- **Pulling Eye Option:**
  - A = MTP Side Only (Length > 5m)
  - C = None

- **Jacket Rating:**
  - L = LSZH

- **Fibre Type:**
  - X = OM3 XGLO 300 50/125 Multimode
  - V = OM4 XGLO 550 50/125 Multimode
  - A = OS1 / OS2 Single Mode

- **Strand Count:**
  - B = 12 Strand

- **Performance:**
  - L = Low Loss (OM3 / OM4 Only)
  - F = Standard Loss (SM Only)

- **Stagger Type:**
  - 1 = No Stagger
  - 2 = Cisco 9512 & 9412
  - 3 = Cisco Nexus
  - 4 = Brocade

- **MTP Gender:**
  - M = MTP Male
  - F = MTP Female

- **Length must be 3 digits:**
  - 003 = 3m
  - 005 = 5m
  - 010 = 10m

- **LC BP Connector:**
  - LB = RFP (OM3, OM4, SM/UPC)
  - BL = CFP (OM3, OM4, SM/UPC)

- **Example:**
  - SM-T2BAALF3LB007M = LIGHTSTACK 7METRE SINGLE MODE FIBRE FEMALE MTP TRUNK TO LC BREAKOUT WITH STAGGER TO SUIT CISCO NEXUS WITH PULLING EYE ON MTP END

---

LC PATCHBLADE TO MTP HYBRID TRUNKS

- LC BladePatch with push pull latch further improves accessibility
- Designed to facilitate an interconnect or cross connect point between active equipment
- OM3/OM4 Bend Insensitive Fibre (BIF)
- SM Non-Bend Insensitive
- 12 Fibre strand count
- Specific staggered lengths to active equipment
- Nexus, Cisco MDS, Brocade and No stagger
- Low Loss performance 0.15 dB for LC and 0.20 dB for Multimode MTP
- Standard Loss performance 0.25 dB for LC and 0.60 dB for Singlemode MTP
- Integrated cable manager on breakout

EG:

- SM-T2BAALF3LB007M = LIGHTSTACK 7METRE SINGLE MODE FIBRE FEMALE MTP TRUNK TO LC BREAKOUT WITH STAGGER TO SUIT CISCO NEXUS WITH PULLING EYE ON MTP END

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01403 754 233  enquiries@networkscentre.com  www.networkscentre.com
LITHTSTACK™ TRUNK CABLES

Siemon’s next generation MTP to MTP trunks are redesigned to achieve 100lb pull strength to handle more aggressive pathway environments. They come with a foamed zipper pulling eye for quick removal saving on installation time and are reusable if relocation of a trunk is required after the initial installation.

Features:
- OM3/OM4 Bend Insensitive Fibre (BIF)
- SM Non-Bend Insensitive Fibre
- 12 and 24 fibre strand counts
- Polarity methods A, B and C options
- Low loss performance (0.20 dB multimode and 0.6 dB singlemode MTP)
- Integrated breakout and zipper pulling eye work together to achieve 100lb. tensile pull strength
- Zipper pulling eye allows for quicker installs
- Allows pulling eyes to be reused when relocating trunks during MAC work

HOW TO CREATE SIEMON LIGHTSTACK MTP TRUNK CABLE PART NUMBERS

Fibre Type:
- L = OM3 XGLO 300 50/125 Multimode
- V = OM4 XGLO 550 50/125 Multimode
- A = OS1 / OS2 Single Mode

Polarity:
- A = Method A
- B = Method B
- C = Method C

Strand Count:
- B = 12 Strand
- C = 24

Jacket Rating:
- L = LSZH

Length must be 3 digits:
- 003 = 3m
- 005 = 5m
- 010 = 10m etc..

EG: SM-FR2-C-VL010MB = LIGHTSTACK 10METRE LOW LOSS 24 OM4 BEND INSENSITIVE FIBRE MTP TO MTP TRUNK CABLE WITH FOAM ZIPPER PULLING EYE
Siemon’s VersaPOD enables a completely new and efficient approach to your physical data centre infrastructure. By leveraging the vertical space between bayed cabinets and at the end of row for patching, power distribution and cable management, the VersaPOD frees critical horizontal space for active equipment, providing improved air flow while optimising data centre floor space.

The VersaPOD’s innovative Zero-U vertical patch panels (VPP’s) dramatically simplify even the most dense patching needs while its vertical patching channels (VPC) offer a clean, orderly and easy method of high-density cable routing.

All of the VersaPOD’s unique features are integrated into a full-featured modular enclosure that is equally effective as a standalone cabinet or in a multi-unit bayed configuration, offering a simple, scalable expansion path in any data centre.

Includes: 4 levelling feet, 50 cage nuts and 4 stabilizing bracket.

**HOW TO CREATE SIEMON VERSAPOD® CABINET PART NUMBERS**

<table>
<thead>
<tr>
<th>SM-VP</th>
<th>A</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>x</td>
<td>x</td>
<td>1</td>
</tr>
</tbody>
</table>

**Populate this field with the required Rear Door:**
- 0 = No Rear Door
- A = Full Vented/Dual Handle
- B = Split Vented/Dual Handle
- C = Split Solid/Dual Handle

**Populate this field with the required Front Door:**
- 0 = No Front Door
- A = Full Vented/Dual Handle
- B = Split Vented/Dual Handle
- C = Split Solid/Dual Handle

**Populate this field with the required Lock:**
- 1 = Keyed Lock
- 2 = Tumbler Combination Lock

**Populate this field with the required Colour:**
- 1 = Black
- 2 = Castors

**Populate this field with the Dimensions:**
- 1 = 1000 x 762mm
- 2 = 1200 x 762mm

**Populate this field with the Side Panels:**
- 0 = No Side Panels
- 1 = 1 Side Panel
- 2 = 2 Side Panels

**Populate this field with the Castors:**
- 1 = None
- 2 = Castors

**Populate this field with the required Height:**
- 42 = 42U
- 45 = 45U

**EG:** SM-VP1A-1B0111-42 = 1000MM DEEP X 762MM WIDE BLACK CABINET WITH ONE SIDE DOOR, SPLIT VENTED/DUAL HANDLE, NO REAR DOOR, KEYED LOCK, NO CASTORS, 42U
Siemon’s V600™ and V800™ cabinets are robust, cost effective enclosures that provide additional ‘Zero-U’ space on each side of the cabinet. These cabinets are ideal for high density data centre environments, enabling increased cabling and equipment density whilst providing excellent accessibility and thermal efficiency. Effective as a stand-alone network and server cabinets units or bayed together, they share a common appearance as the VersaPOD® flagship cabinet.

➤ Lightweight Stability - Design provides an extremely stable high-capacity cabinet without excessive weight.

➤ Zero-U Modularity* - Half-height Zero-U panels can be mounted in any of the four quadrants (top, left, bottom left, top right and bottom right) of both the front and rear of the cabinet.

➤ Full Accessibility Doors - Quick release, field reversible single piece front and split rear doors.

➤ Integrated Side Panel Grounding - Spring loaded grounding clips eliminate need for dedicated grounding conductors.

➤ High-Flow Doors - Profiled high density perforated door provides 86% perforation exceeding major IT equipment air flow requirements.

➤ Fully Adjustable Equipment Rails - Can be readily configured to support any range of equipment depths.

➤ A wide range of accessories are available including baying kits, cooling fan panels, PDU brackets, mounting rails, brush guards and thermal exhaust kits. Contact Networks Centre for further details.

*V800 TM only

HOW TO CREATE SIEMON V600™ OR V800™ CABINET PART NUMBERS

EG: SM-V61A-2AB201-45 = 1000 DEEP X 600 WIDE BLACK CABINET WITH 2 SIDE PANELS, FULLY VENTED FRONT DOOR AND SPLIT VENTED REAR DOOR WITH TUMBLER LOCKS, NO CASTORS, 45U HEIGHT.
Siemon’s PowerMax™ line of PDUs range from basic and metered for simple, reliable and cost-effective power distribution, to a full line of intelligent PDUs that deliver realtime power information with varying degrees of intelligent functionality for valuable troubleshooting, control and monitoring of power usage, capacity and environmental conditions. Available in both single phase and either Delta or Wye three phase power, PowerMax™ PDUs feature multiple IEC output options to distribute 230V to a wide range of rack-mounted IT equipment, ranging from 1.8kW to 22kW.

All PowerMax™ PDUs come in both horizontal and vertical styles. Horizontal PDUs mount easily in any standard EIA 19-inch rack, while vertical PDUs are ideal for mounting within a cabinet’s Zero-U space, such as the Zero-U space offered with Siemon’s VersaPOD® and V800™ cabinets.

**HOW TO CREATE SIEMON POWERMAX PDU PART NUMBERS**

Intelligent PDU Type
- B = Basic
- W = Managed
- N= Smart
- M = Monitored
- T = Metered
- S = Switched

Populate this field with side Orientation
- H = Horizontal
- V = Vertical

**Input Current | Input Voltage | Power | Input Plug**
- 01 = 15A | 120V | 1.4kW | NEMA 5-15P
- 04 = 15A | 120V | 1.4kW | NEMA L5-15P
- 07 = 20A | 208V | 20A | 3.3kW | NEMA L6-20P
- 08 = 30A | 208V | 4.9kW | NEMA L6-30P
- 11 = 20A | 120/208V | 5.7kW | NEMA L21-20P
- 20 = 16A | 230V | 3.6kW | IEC 60309
- 32 = 32A | 230V | 7.3kW | IEC 60309
- 46 = 16A | 230V/400V | 11kW | IEC 60309
- 27 = 32A | 230V/400V | 22kW | IEC 60309
- 33 = 16A | 230V | 3.6kW | IEC C20
- 26 = 16A | 230V/400V | 11kW | IEC 60309
- 27 = 32A | 230V/400V | 22kW | IEC 60309
- 33 = 16A | 230V | 3.6kW | IEC C20

**Output Receptacle Quantities / Type**
- AA08Z = 8 / 0 5-15R
- BA08Z = 8 / 0 C13
- BA10Z = 10 / 0 C13
- BA12Z = 12 / 0 C13
- BA18E = 18 / 6 C13 + C19
- BA21C = 21 / 3 C13 + C19
- BA24E = 24 / 6 C13 + C19
- AA24Z = 24 / 0 5-20R
- BA24Z = 24 / 0 5-20R
- BA36Z = 36 / 0 C13

**Example:** SM-8NV20-BA21C-K1A = SIEMON POWERMAX 16A, 230V, 3.6KW SMART MONITORING VERTICAL MOUNTED PDU WITH IED 60309 INPUT PLUG WITH 3M LEAD, 21 X C13 OUTPUT SOCKET AND 3 X C19 OUTPUT SOCKET
### PLUG AND PLAY

#### PLUG AND PLAY FIBRE MODULES

The Siemon range of plug and play modules provide a quick and easy way to deploy up to 24 LC or 12 SC fibres in a single module. Offering factory tested reliable high performance in an enclosed module, the 12 way MTP ports provide a quick and simple interface. Modules are available in Multimode 62.5/125, 50/125 and XGLO laser optimised 50/125 OM3/OM4 and Singlemode.

Replace **XX** to specify **LC** or **SC**.

Replace **X** to specify fibre type: 
- **6** = OM1,
- **5** = OM2,
- **5L** = OM3,
- **5V** = OM4,
- **SM** = OS2

Use **X** to specify loss: 
- **L** = low loss,
- **BLANK** = Standard

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>SM-PP2-12-(X)(X)-01(X)</td>
<td>12 Fibre Plug and Play Module with 1 MTP port, black</td>
</tr>
<tr>
<td>SM-PP2-24-LC(X)-01(X)</td>
<td>24 Fibre Plug and Play Module with 2 MTP port, black</td>
</tr>
</tbody>
</table>

**MTP TO MTP ADAPTOR PLATES**

MTP adaptor plates offer a simple pass through option for MTP connectors and an upgrade path for 40Gb/s and 100Gb/s over multimode OM4 fibre. Fitting within Siemons fibre enclosures, VersaPOD vertical patch panels and Combo panel, these panels allow efficient implementation of MTP to MTP reels and extenders and MTP to LC trunks for direct equipment and patching options.

Replace **XX** to specify fibre count: 
- **12/24/48/72/96** = (1/2/4/6/8 MTP adaptors)

Use **X** to specify adaptor colour: 
- **Blank** = Black or (Q=Aqua)

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>SM-RIC-F-MP(XX)(X)-01</td>
<td>MTP Adaptor Plate, Black</td>
</tr>
</tbody>
</table>

**COPPER/FIBRE COMBO PANEL**

The copper/fibre Combo Panel provides users with exceptional versatility and robustness. Facilitating copper outlets and Fibre Plug & Play modules within the same rackspace, the compact 1U design offers integrated cable management, supporting Cat5e to Cat7A

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>SM-PPM-SPNL4-01</td>
<td>Panel, high density, shielded copper and fibre combo</td>
</tr>
<tr>
<td>SM-PPM-SMX6-01</td>
<td>Copper Adaptor Plate, 6-port, black</td>
</tr>
</tbody>
</table>
TEST & MEASUREMENT

FLUKE NETWORKS

➤ Versiv Range 128
➤ Linkware™ Live 129
➤ DSX2-8000 Cable Analyser 130
➤ DSX2-5000 Cable Analyser 132
➤ Cable IQ, Intellitone™ & Microscanner2 135
➤ CertiFiber Pro OTDR 138
➤ MultiFiber Pro 141
➤ OptiFiber Pro OTDR 142
➤ Fibre Fault, Loss & Inspection Tools 144
➤ Fibre Acessories & Gold Support 151

NETSCOUT

➤ Aircheck G2™ 154
➤ LinkRunner G2 155
➤ LinkRunner AT 156
➤ LinkSprinter 300 156
➤ OneTouch AT 157
➤ AirMagnet Mobile 158
VERSIV RANGE

The Versiv™ family accelerates every step of the certification process. Future-ready design supports copper certification, fibre loss, OTDR testing and hardware upgrades. The revolutionary ProjX™ management system and Taptive™ user interface ensures jobs are done right the first time. Analyse test results and create professional test reports using LinkWare management software.

➤ DSX2 CABLE ANALYZER™
Most advanced copper certification tester
➤ Unmatched speed for Cat8, Cat6A, Class FA and all current standards
➤ Graphical display of failures
➤ Surpasses IEC Level V: the industry’s most stringent accuracy requirement
➤ Endorsed by cabling vendors worldwide
➤ Built in Alien Crosstalk testing
➤ First field tester to support balance measurements

➤ CERTIFIBER® PRO OLTS
Fast and simple fibre certification
➤ Fastest time to certify - two fibres at two wavelengths in three seconds.
➤ Full Encircled Flux compliance, required by ANSI/TIA and ISO/IEC
➤ Merged Tier 1 (Basic)/ Tier 2 (Extended) testing and reporting
➤ Convenient quad module supports both multimode and singlemode loss testing
➤ Integrated fibre inspection camera and Visual Fault Locator
➤ Extended singlemode distance range to 130k

➤ OPTIFIBER® PRO OTDR
Accelerates fibre troubleshooting and certification
➤ Industry’s shortest event and attenuation dead zones
➤ Accelerate fibre certification with the fastest set-up and trace times
➤ EventMap™ view negates the need for OTDR Trace Analysis
➤ Integrated fiber inspection camera and Visual Fault Locater
➤ Merged Tier 1 (Basic)/ Tier 2 (Extended)
What is Linkware Live...?

LinkWare Live is a Test Results Management Service from Fluke Networks for cabling professionals managing multiple projects that quickly, easily and affordably provides unmatched job visibility and superior project control from anywhere at any time.

Dashboards

The ability to quickly get an understanding of how jobs are progressing is priceless. Now with LinkWare Live you can quickly get a snapshot of the progress on multiple projects. This not only lets you ensure that jobs are completed on time but also enable you to more efficiently schedule resources and equipment. Using the dashboard you can get the following info for each project in the Dashboard View:

- Project name
- Last updated
- Number of results uploaded
- Indication of test results that passed
- Indication of test results that failed
- Project start date
- Days remaining to complete the project
- Target project end date
- Project description
- Project address
DSX CABLEANALYZER™ SERIES

➤ DSX2-8000 CABLE ANALYSER V2

➤ Versiv™ modular design supports copper certification, fibre optic loss, OTDR testing and fibre end-face inspection

➤ Unmatched speed for Cat6A, 5, Class FA, VII and all current standards

➤ ProjX™ system manages job requirements and progress from set-up to systems acceptance, making sure all tests are completed correctly

➤ Taptive™ user interface simplifies set-up and eliminates errors

➤ Analyze test results and create professional test reports using LinkWare™ management software

➤ Graphically displays the source of failures including crosstalk, return loss and shield faults for faster troubleshooting

➤ Intertek Verified to TIA Level 2G – the most stringent accuracy requirement

➤ Endorsed by cabling vendors worldwide

➤ Built in Alien Crosstalk testing capability

➤ Compatible with Linkware™ Live. Linkware Live enables to easily track job progress, get real-time access to test results to quickly fix problems in the field.

Part No & Description:

**DSX2-8000 INT**
1 Versiv mainframe & remote, (2) DSX2-8000 CableAnalyzer modules, Set of Cat6/Class I Permanent Link Adapters, Set of Cat6/Class I Channel Adapters, (2) Headsets, (2) HandStrap, (2) Shoulder straps, Carry case, USB interface cable, Versiv open source software CD, (2) AC chargers, (2) Universal couplers, (2) AxTalk terminators, Integrated Wi-Fi, Statement of calibration and getting started guide

**DSX2-8000-GLD**
1 Versiv mainframe & remote, (2) DSX2-8000 CableAnalyzer modules, set of Cat6/Class I Permanent Link Adapters, Set of Cat6/Class I Channel Adapters, (2) Headsets, (2) HandStrap, (2) Shoulder straps, Carry case, USB interface cable, Versiv open source software CD, (2) AC chargers, (2) Universal couplers, (2) AxTalk terminators, Integrated Wi-Fi, Statement of calibration and getting started guide with 1 year Gold Support
### Part No. & Description:

**DSX2-8000MI**
1 Versiv mainframe & remote, (2) DSX2-8000 CableAnalyzer Modules, (2) CertiFiber Multimode OTLS Modules, Set of Cat6/Class I Permanent Link Adapters, Set of Cat6/Class I Channel Adapters, (2) Headsets, (2) Handstraps, (2) Shoulder straps, Carrying case, USB interface cable, Versiv open source software CD, (2) Universal couplers, (2) AxTalk terminators, USB video inspection probe w/ 4 Tips, (2) Quick clean cleaners (1.25/2.50 mm), (2) LC/SC simplex adapters, SC/SC EF-compliant MM TRC kit 50 μm, TRC carry case, Integrated Wi-Fi, Statement of calibration and getting started guides.

**DSX2-8000MI-GLD**
1 Versiv Mainframe & remote, (2) DSX2-8000 CableAnalyzer Modules, (2) CertiFiber Multimode OTLS Modules, Set of Cat6/Class I Permanent Link Adapters, Set of Cat6/Class I Channel adapters, (2) Headsets, (2) Handstraps, (2) Shoulder straps, Carrying case, USB interface cable, Versiv open source software CD, (2) Universal couplers, (2) AxTalk terminators, USB video inspection probe w/ 4 Tips, (2) Quick clean cleaners (1.25/2.50 mm), (2) LC/SC simplex adapters, SC/SC EF-Compliant MM TRC kit 50 μm, TRC carry case, Integrated Wi-Fi, Statement of calibration and getting started guides. With 1 year Gold Support.

**DSX2-8000QI**
1 Versiv Mainframe & Remote, (2) DSX2-8000 CableAnalyzer Modules, (2) CertiFiber Quad OTLS Modules, Set of Cat6/Class I Permanent Link Adapters, Set of Cat6/Class I Channel Adapters, (2) Headsets, (2) Handstraps, (2) Shoulder straps, Hard sided carry case, USB interface cable, Versiv open source software CD, (2) AC chargers, (2) Universal couplers, (2) AxTalk terminators, (2) Quick clean cleaners (1.25/2.50 mm), SC/SC simplex adapters, 2 SC/SC Multimode launch cables—50 μm, 2 SC/SC Singlemode launch cable—9 μm, USB fibre inspection video probe w/ 4 Tips, (2) LC/SC simplex adapters, (2) SC/SC MM launch cables, SC/SC SM launch cables, SC/SC MM TRC kit 50 μm, SC/SC SM TRC kit, TRC carry case, Integrated Wi-Fi, Statement of calibration and getting started guides.

**DSX2-8000QI-GLD**
1 Versiv Mainframe & Remote, (2) DSX2-8000 CableAnalyzer Modules, (2) CertiFiber Quad OTLS modules, OptiFiber Quad OTDR module, Set of Cat6/Class I Permanent Link Adapters, Set of Cat6/Class I Channel adapters, (2) Headsets, (2) Handstraps, (2) Shoulder straps, Hard sided carry case, USB interface cable, Versiv open source software CD, (2) AC chargers, (2) Universal couplers, (2) AxTalk terminators, (2) Quick clean cleaners (1.25/2.50 mm), SC/SC simplex adapters, 2 SC/SC Multimode launch cables—50 μm, 2 SC/SC Singlemode launch cable—9 μm, USB fibre inspection video probe w/ 4 Tips, (2) LC/SC simplex adapters, SC/SC EF-compliant MM TRC kit 50 μm, SC/SC SM TRC kit, TRC carry case, Integrated Wi-Fi, Statement of calibration and getting started guides. With 1 year Gold Support.
DSX2-5000 CABLE ANALYSER V2

The DSX2-5000 CableAnalyzer V2 improves the efficiency of copper certification with unmatched speed for testing Cat6A and Class EA and all current standards.

The ProjX Management System helps ensure jobs are done correctly the first time and helps tracks progress from set-up to systems acceptance. Versiv platform supports modules for fibre testing (Both OLTS and OTDR). The platform is easily upgradeable to support future standards.

Troubleshoot faults faster with the Taptive user interface which graphically displays the source of failures including crosstalk, return loss and shield faults.

Analyse test results and create professional test reports using LinkWare™ Management Software. Fluke Networks’ DSX2-5000 CableAnalyzer V2 has the Intertek (ETL) Certification in accordance with the IEC-61935-1 specifications for accuracy Level IV, and draft accuracy Level V, and in accordance with the ANSI/TIA-1152 specifications for Level III.

Part No: & Description:

DSX2-5000
1 Versiv Mainframe & Remote, (2) DSX2-5000 CableAnalyzer Modules, Set of Cat6A/Class EA Permanent Link Adapters, Set of Cat6A/Class EA Channel Adapters, (2) Headsets, (2) Hand strap, (2) Shoulder straps, Carry case, USB interface cable, Versiv open source software CD, (2) AC chargers, (2) universal couplers, Integrated Wi-Fi, Statement of calibration and getting started guide.

DSX2-5000-GLD
1 Versiv Mainframe & Remote, (2) DSX2-5000 CableAnalyzer Modules, Set of Cat6A/Class EA Permanent Link Adapters, Set of Cat6A/Class EA Channel Adapters, (2) Headsets, (2) hand strap, (2) Shoulder straps, Carry case, USB interface cable, Versiv open source software CD, (2) AC chargers, (2) Universal couplers, Integrated Wi-Fi, Statement of calibration and getting started guide. With 1 Year Gold Coverage.
DSX2-5000 KITS

Part No: & Description:

**DSX2-5000QI**
1 Versiv Mainframe & Remote, (2) DSX2-5000 CableAnalyzer Modules, (2) CertiFiber Quad OLTS Modules, Set of Cat6A/Class EA Permanent Link Adapters, Set of Cat6A/Class EA Channel Adapters, (2) Headsets, (2) Hand straps, (2) Shoulder straps, Carry case, USB interface cable, Versiv open source software CD, (2) AC chargers, (2) Universal couplers, Integrated Wi-Fi, USB video inspection probe w/ 4 tips, (2) Quick clean cleaners (1.25/2.50 mm), (2) LC/LC simplex adapters, SC/LC EF-Compliant MM TRC kit 50 μm, SC/LC SM TRC kit, TRC carry case, statement of calibration and getting started guide.

**DSX2-5000QI-GLD**
1 Versiv Mainframe & Remote, (2) DSX2-5000 CableAnalyzer Modules, (2) CertiFiber Quad OLTS Modules, Set of Cat6A/Class EA Permanent Link Adapters, Set of Cat6A/Class EA Channel Adapters, (2) Headsets, (2) Hand straps, (2) Shoulder straps, Carry case, USB interface cable, Versiv open source software CD, (2) AC chargers, (2) Universal couplers, Integrated Wi-Fi, USB video inspection probe w/ 4 tips, (2) Quick clean cleaners (1.25/2.50 mm), (2) LC/LC simplex adapters, SC/LC EF-Compliant MM TRC kit 50 μm, SC/LC SM TRC kit, TRC carry case, statement of calibration and getting started guide. With 1 year Gold Support.
## DSX SERIES ACCESSORIES

Browse our range of accessories for the Fluke Networks DSX CableAnalyzer Pro range. If you require anything else, please contact us on +44 01403 754 233 or email enquiries@networkscentre.com

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>DSX-PLA004S</td>
<td>DSX Cat6A/Class EA PLA Set</td>
</tr>
<tr>
<td>DSX-PLA011S</td>
<td>DSX TERA Cat7A/Class FA PLA Set</td>
</tr>
<tr>
<td>DTX-PLA002PRP</td>
<td>CAT6A permanent link adapter replacement parts</td>
</tr>
<tr>
<td>DSX-CHA003</td>
<td>DSX COAX Adaptor</td>
</tr>
<tr>
<td>DSX-COAX</td>
<td>DSX COAX Adaptor Set</td>
</tr>
<tr>
<td>DSX-CHA004S</td>
<td>DSX Cat6A/Class EA CHA Set</td>
</tr>
<tr>
<td>DSX-CHA011S</td>
<td>DSX TERA Cat7A/Class FA CHA Set</td>
</tr>
<tr>
<td>DSX-TERA-KIT</td>
<td>DSX TERA Cat7A/Class FA PLA &amp; CHA Kit</td>
</tr>
<tr>
<td>DSX-CHA012S</td>
<td>DSX GG45 Class FA Channel Adaptor Set</td>
</tr>
<tr>
<td>DSX-CHA021S</td>
<td>DSX M12 4-Position Adaptor Set</td>
</tr>
<tr>
<td>DSX-PC5ES</td>
<td>DSX Patch Lead Test Adaptor Set for Cat5e Patch Leads</td>
</tr>
<tr>
<td>DSX-PC6S</td>
<td>DSX Patch Lead Test Adaptor Set for Cat6v Patch Leads</td>
</tr>
<tr>
<td>DSX-PC6AS</td>
<td>DSX Patch Lead Test Adaptor Set for Cat6A Patch Leads</td>
</tr>
<tr>
<td>DSX-5000-MOD</td>
<td>1 GHZ DSX Replacement Module</td>
</tr>
<tr>
<td>PWR-SPLY-30W</td>
<td>Universal Versiv charger, 15V 2A with USA, Euro &amp; UK adapters</td>
</tr>
<tr>
<td>VERSIV-BATTERY</td>
<td>Versiv Replacement Battery</td>
</tr>
<tr>
<td>VERSIV-LG-CASE</td>
<td>Versiv Soft Carry Case</td>
</tr>
</tbody>
</table>

## DSX-8000 (ONLY) ACCESSORIES

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>DSX-CHA804S</td>
<td>DSX-8000 Cat8 Channel Adapter Set</td>
</tr>
<tr>
<td>DSX-PLA804S</td>
<td>DSX-8000 Cat8 Permanent Link Adapter Set</td>
</tr>
<tr>
<td>DSX-PLA804SPRP</td>
<td>CAT8 Permanent link adapter replacement parts</td>
</tr>
<tr>
<td>DSX-REFCAL2G</td>
<td>Set reference artifact for GG45 testing</td>
</tr>
</tbody>
</table>
CABLE IQ

CableIQ is the ideal tester for the installation and maintenance technician. It has storage capabilities and fault finding functions and is capable of testing twisted pair, coax and audio cables. CableIQ is the first cabling bandwidth tester for network technicians. It gives even the most novice tech the vision to see what speeds existing cabling can support, quickly isolate cabling from network problems, and discover what is at the far end of any cable. That means network technicians can close trouble tickets faster, reduce on-call time, and save money by better utilising their existing infrastructure.

Features:
➤ Qualifies - Sees if your existing cabling has the bandwidth to support voice, 10/100, VoIP or Gigabit Ethernet
➤ Troubleshoots - shows why existing cabling cannot support the network’s bandwidth requirement (e.g. crosstalk at 11 metres)
➤ Discovers - detects what’s at the end of any cable and displays device configuration (speed/duplex/pairing)
➤ Identifies unused switch ports that can be reallocated
➤ Graphically maps wiring configuration and shows distance to faults with Intelligent Wiremap
➤ Tests all copper cabling media: twisted-pair, coax, and audio cabling

<table>
<thead>
<tr>
<th>Part No:</th>
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</tr>
</thead>
<tbody>
<tr>
<td>CIQ-100</td>
<td>CableIQ Qualification Tester (with remote adaptor and soft carrying case)</td>
</tr>
</tbody>
</table>

CABLE IQ KITS

CableIQ Advanced IT Kit includes CableIQ main unit with remote adapter, CableIQ Reporter software CD, IntelliTone 200 Digital Probe, Remote Ids #1-2, (2) RJ45-RJ45 patch cord, USB cable, coax ‘F’ push-on adapter, 75-ohm coax patch cord, RJ45/11 universal coupler, RJ11-RJ11 patch cord, owners CD and quick start guide, (4) AA batteries, test accessory soft pouch, duffel style bag.

Part No: Description:
CIQ-FTKSFP Copper and Fibre Technician’s Kit – Includes the CableIQ (CIQ-KIT) and SimpliFiber Pro (FTK1000) Fibre Test Kit.
CIQ-KIT CableIQ Advanced IT Kit includes CableIQ main unit with remote adapter, CableIQ Reporter software CD, IntelliTone 200 Digital Probe, Remote Ids #1-2, (2) RJ45-RJ45 patch cord, USB cable, coax ‘F’ push-on adapter, 75-ohm coax patch cord, RJ45/11 universal coupler, RJ11-RJ11 patch cord, owners CD and quick start guide, (4) AA batteries, test accessory soft pouch, duffel style bag.
Enhance the value of your investment with a wide range of accessories for the CableIQ to aid cable fault finding. We offer the latest coax adaptors, remote office identifiers and more.

<table>
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<tr>
<th>Part No:</th>
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</tr>
</thead>
<tbody>
<tr>
<td>CIQ-WM</td>
<td>Replacement for CableIQ Wiremap Adaptor</td>
</tr>
<tr>
<td>CIQ-RJA</td>
<td>For attaching Remote ID's to hard-to-reach RJ45 and RJ11 jacks</td>
</tr>
<tr>
<td>CIQ-SPKR</td>
<td>Expands CableIQ tested interfaces to include speaker wire</td>
</tr>
<tr>
<td>CIQ-CIT</td>
<td>FNET hard carry case featured in the CableIQ Real Accessory Kit; room for CableIQ, IntelliTone Probe, 8 Remote IDs, and extra room for various adapters and patch cables</td>
</tr>
<tr>
<td>CIQ-COAX</td>
<td>Expands CableIQ tested interfaces to include Coax F, BNC, and RCA connectors</td>
</tr>
<tr>
<td>CIQ-IDK24</td>
<td>Remote Identifiers used for easily locating and tagging cabling in the enterprise or residential environment</td>
</tr>
<tr>
<td>CIQ-IDK57</td>
<td>Remote Identifiers used for easily locating and tagging cabling in the enterprise or residential environment</td>
</tr>
</tbody>
</table>

Get advanced vision for locating network cables more effectively at patch panels, switches, termination blocks, or hidden within bundles. Our new IntelliTone Pro 200 LAN Toner and Probe Kits finds the cables others can’t.

The IntelliTone™ Pro 200 LAN Toner and Probe Series from Fluke Networks gives you superior vision for locating cables hidden in floors, ceilings, walls, and in bundles. This network cable toner and probe’s breakthrough digital technology makes it the first tool to tone and trace safety and effectively on active networks.

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>MT-8200-60-KIT</td>
<td>IntelliTone Pro 200 LAN Toner and Probe Kit Includes: IntelliTone 200 LAN Toner and 200 Probe, Coax F Connector Adaptor, (2) RJ11 and (2) RJ45 Patch Cables, Test Leads with alligator clips, (2) lanyards, Quick Start Guide, and (2) 9-Volt Batteries</td>
</tr>
<tr>
<td>MT-8200-61-TNR</td>
<td>IntelliTone Pro 200 LAN Toner Includes: IntelliTone Pro 200 LAN Toner, Coax F connector adaptor, RJ11 and RJ45 Patch Cables, Test Leads with alligator clips, lanyard, Quick Start Guide, and 9-Volt Battery</td>
</tr>
<tr>
<td>MT-8200-63A</td>
<td>IntelliTone Pro 200 Probe Includes: IntelliTone Pro 200 Probe, RJ11 and RJ45 Patch Cables, lanyard, Quick Start Guide, and 9-Volt Battery</td>
</tr>
<tr>
<td>MT-8202-05</td>
<td>IntelliTone Case Heavy-duty pack cloth padded and lined case with belt loops and d-ring</td>
</tr>
<tr>
<td>MT-8203-20</td>
<td>Test Leads with Bed of Nails Set of two Banana Jack test leads with piercing pin ‘Bed of Nails’ alligator clips with vinyl sleeves</td>
</tr>
<tr>
<td>MT-8203-22</td>
<td>Test Leads with Alligator Clips Set of two Banana Jack test leads with standard alligator clips with vinyl sleeves</td>
</tr>
</tbody>
</table>
Today’s communications technicians have a lot more problems to deal with than just the cabling. They have to rule out a whole host of potential cable and service issues before determining the cause of a connection problem. Is there telephone voltage? What’s the polarity? Is there an Ethernet switch at the far end? Is PoE available? MicroScanner2 acknowledges this, giving technicians high power vision to verify today’s most common voice, data, and video services. That means faster, more comprehensive troubleshooting.

**Features:**
- Revolutionary Interface – graphical wiremap, length, cable ID, and distance to fault displayed on one screen
- Multimedia Support – tests all common media types including RJ11, RJ45, Coax, with no need for adaptors
- IntelliTone Toning – locates virtually any cable or wire pair with IntelliTone digital and analogue toning
- VDV Service Detection – verifies today’s media services, including 10/100/1000 Ethernet, POTS, and PoE
- Rugged Housing – integrated rubber holster enhances grip and makes it durable enough for the toughest jobs
- Oversized Display – large, backlit LCD makes results crystal clear whether in bright sunshine or in a dark closet

**Part No:** | **Description:**
--- | ---
MS2-100 | MicroScanner2 Cable Verifier. Model includes: MicroScanner2, Main Wiremap Adaptor, (2) AA Alkaline Batteries, Printed Multi-language Getting Started Guide
MS2-FTK | Copper/Fibre Basic Technicians Kit (MS2-100 and FTK-KIT)
MS2-TTK | MicroScanner2 Termination Test Kit, includes MicroScanner2 Cable Verifier, IntelliTone Pro 200 Probe, IS60 Pro Tool Kit, and a deluxe carrying case.
MS2-KIT | MicroScanner2 Professional Kit. Model includes: MicroScanner2, Main Wiremap Adaptor, Remote Identifiers #2-7, IntelliTone Pro 200 Probe, (2) AA Alkaline Batteries, Printed Multi-language Getting Started Guide, Various Patch Leads and Adaptors
MS2-CPK | MicroScanner2 Professional Kit Carry Case
MS2-IDK27 | MicroScanner2 Remote Identifier KIT 2-7
MS2-POUCH | MicroScanner2 Pouch
MS2-WM | MicroScanner2 Wiremap
FIBRE TESTING

Fibre optics cabling is the core of today’s datacom networks. Optical fibre is the predominant media type for mission-critical data centre links, backbone within buildings, and longer distances for campus networks. As network speeds and bandwidth demands increase, distance and loss limitations have decreased, making fibre optic cabling certification more important than ever.

Fibre optic testers include tools to perform basic inspection and cleaning, basic troubleshooting and verification testers, certification testers, and advanced OTDR testers for troubleshooting and analysis of existing cabling.

Fluke Network’s fiber line is expanding

CERTIFIBER PRO OPTICAL LOSS TEST SET

Fluke Networks CertiFiber® Pro Optical Loss Test Set improves productivity. It can certify two fibres at two wavelengths in 3 seconds.

The Taptive user interface simplifies set-up, eliminates errors and speeds troubleshooting. A set reference wizard ensures correct reference setting and eliminates negative loss errors. Built on the future-ready Versiv platform, CertiFiber Pro provides merged Tier 1 (Basic) / Tier 2 (Extended) testing and reporting when paired with an OptiFiber Pro module.

A convenient quad module supports both singlemode and multimode and is multimode Encircled Flux compliant. Analyze test results and create professional test reports using LinkWare Management Software.

Part No: & Description:

**CFP2-100-M**

1 Versiv Mainframe & Remote, (2) CertiFiber Pro Multimode OLTS Modules, SC/LC EF-compliant MM TRC Kit 50 μm, TRC Carrying Case, (2) LC/LC Adaptors, (2) Shoulder Straps, Carry Case, USB Interface Cable, LinkWare Software CD, User Manual CD, (2) AC Chargers, Integrated Wi-Fi, Statement of Calibration and Getting Started Guide.

**CFP2-100-S**

1 Versiv Mainframe & Remote, (2) CertiFiber Pro Singlemode OLTS modules, SC/LC SM TRC Kit, TRC Carrying Case, (2) LC/LC Adaptors, (2) HandStraps, (2) Shoulder Straps, Carry Case, USB Interface Cable, LinkWare Software CD, User Manual CD, (2) AC Chargers, Integrated Wi-Fi, Statement of Calibration and Getting Started Guide.

**CFP2-100-Q**

1 Versiv Mainframe & Remote, (2) CertiFiber Pro Quad OLTS modules, SC/LC EF-compliant MM TRC Kit 50 μm, SC/LC SM TRC Kit, TRC Carrying Case, (2) LC/LC Simplex Adaptors, (2) HandStraps, (2) Shoulder Straps, Carry Case, USB Interface Cable, LinkWare Software CD, User Manual CD, (2) AC Chargers, Integrated Wi-Fi, Statement of Calibration and Getting Started Guide.
DISCOVER INTELLIGENT POWER SOLUTIONS WITH THE GREATEST FUNCTIONALITY AVAILABLE
## CERTIFIBER PRO ACCESSORIES

Browse our selection of Certifiber Pro accessories. If you require anything else please contact us on +44 (0)1403 754 233 or Email: enquiries@networkscentre.com.

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CFP-MM-MOD</td>
<td>Certifiber Pro Multimode Replacement Module</td>
</tr>
<tr>
<td>CFP-SM-MOD</td>
<td>Certifiber Pro Singlemode Replacement Module</td>
</tr>
<tr>
<td>CFP-QUAD MOD</td>
<td>Certifiber Pro Quad Replacement Module</td>
</tr>
<tr>
<td>FI-1000-KIT</td>
<td>A USB Fibre Inspection Video Probe for Versiv Products Plus Tip Set (LC, FC/SC Bulkhead, 1.25 and 2.5mm Universal Tips in a box).</td>
</tr>
<tr>
<td>CFP-Q-ADD</td>
<td>CertiFiber Pro Quad Add-On Kit: CertiFiber Pro Quad OLTS module</td>
</tr>
<tr>
<td>CFP2-Q-ADD-R</td>
<td>CertiFiber Pro Quad Add-On Kit w/ Remote: Versiv Remote + CertiFiber Pro Quad OLTS module</td>
</tr>
<tr>
<td>CFP-MM-ADD</td>
<td>CertiFiber Pro MultiMode Modules Add-On Kit: CertiFiber Pro Multimode OLTS modules (2)</td>
</tr>
<tr>
<td>CFP-SM-ADD</td>
<td>CertiFiber Pro SingleMode Modules Add-On Kit: CertiFiber Pro SingleMode OLTS modules (2)</td>
</tr>
<tr>
<td>SRC-9-SCSC-KIT</td>
<td>Singlemode TRC Kit 2m (4 SC/SC)</td>
</tr>
<tr>
<td>SRC-9-SCLC-KIT</td>
<td>Singlemode TRC Kit 2m (2 SC/LC, 2 LC/LC)</td>
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<tr>
<td>SRC-9-SCFC-KIT</td>
<td>Singlemode TRC Kit 2m (2 SC/FC, 2 FC/FC)</td>
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<tr>
<td>SRC-9-SCST-KIT</td>
<td>Singlemode TRC Kit 2m (2 SC/ST, 2 ST/ST)</td>
</tr>
<tr>
<td>SRC-9-SCSCAPCKIT</td>
<td>Singlemode TRC Kit 2m (2 SCUPC/SCAPC, 2 SCAPC/SCAPC)</td>
</tr>
<tr>
<td>SRC-9-SCLCAPCKIT</td>
<td>Singlemode TRC Kit 2m (2 SCUPC/LCAPC, 2 LCAPC/LCAPC)</td>
</tr>
<tr>
<td>SRC-9-SCE2KAPCKIT</td>
<td>Singlemode Simplex Test Reference Cord SC/SC APC Kit</td>
</tr>
<tr>
<td>MRC-50EFC-SCLKIT</td>
<td>LC TRC LVM Kit with 2x MC-50-LVM-SLCL</td>
</tr>
<tr>
<td>MRC-50EFC-SCSKIT</td>
<td>EF TRC Kit 50 for Testing SC Fibers</td>
</tr>
<tr>
<td>MRC-625EFC-SCLKIT</td>
<td>EF TRC Kit 62.5 for Testing LC Fibers</td>
</tr>
<tr>
<td>MRC-625EFC-SCSKIT</td>
<td>EF TRC Kit 62.5 for Testing SC Fibers</td>
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<tr>
<td>MRC-50EFC-SCSTKIT</td>
<td>EF TRC Kit 50 for Testing ST Fibers</td>
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<tr>
<td>MRC-50EFC-SCFCKIT</td>
<td>EF TRC Kit 50 for Testing FC Fibers</td>
</tr>
<tr>
<td>MRC-625EFC-SCSTKIT</td>
<td>EF TRC Kit 62.5 for Testing ST Fibers</td>
</tr>
<tr>
<td>MRC-625EFC-SCFCKIT</td>
<td>EF TRC Kit 62.5 for Testing FC Fibers</td>
</tr>
<tr>
<td>NFA-ST</td>
<td>ST Test Adapters - Set of 2</td>
</tr>
<tr>
<td>NFA-SC</td>
<td>SC Test Adapters - Set of 2</td>
</tr>
<tr>
<td>NFA-LC</td>
<td>LC Test Adapters - Set of 2</td>
</tr>
<tr>
<td>NFA-FC</td>
<td>FC Test Adapters - Set of 2</td>
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</tbody>
</table>
MULTIFIBER PRO

MultiFiber Pro Optical Power Meter and Source is the only fibre tester that can test MPO fibre trunks without the use of fan-out leads. This singlemode and multimode MPO fibre testing kit eliminates the complexity of polarity issues, and it makes MPO connections easier to test in the field.

Whether it is using 10 Gbps pre-terminated MPO fibre trunks or planning for next-generation 40/100 Gbps Ethernet performance, data centres are standardising on an MPO connector solution. Typical data centre fibre installation means time-consuming, manual and imprecise MPO validation.

MultiFiber Pro Optical Power Meter and Source is 90 percent faster than the single fibre cable testing method because it measures power loss and validates polarity on 12 fibre in a single connector – reducing test time from weeks to days.

➤ Automatic scanning & testing of all fibre in MPO connectors
➤ Support for both multimode and singlemode MPO fibre trunks
➤ Eliminates the need for fan-out leads when testing MPO fibre trunks
➤ Easy to interpret test results with minimal navigation
➤ The user interface displays all 12 fibres
➤ Automatic 8, 10 and 12 fibre measurements
➤ Troubleshoot MPO fibre links and drill down to single fibre results

Part No & Description:

<table>
<thead>
<tr>
<th>Part No</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>MFTK-1200</td>
<td>MultiFiber Pro Testing Base Kit includes MultiFiber Pro Power Meter, 850nm Light Source, Test Cords, MPO Adaptors, and Carrying Case.</td>
</tr>
<tr>
<td>MFTK-SM1310</td>
<td>MultiFiber Pro 1310 nm Singlemode Kit includes MultiFiber Pro Power Meter, 1310 nm Light Source, Test Reference Cords, MPO Adaptors, and Carrying Case.</td>
</tr>
<tr>
<td>MFTK-SM1550</td>
<td>MultiFiber Pro 1550 nm Singlemode Kit includes MultiFiber Pro Power Meter, 1550 nm Light Source, Test Reference Cords, MPO Adaptors, and Carrying Case.</td>
</tr>
</tbody>
</table>

Kits:

**MFTK-MM850-SM1310**
MultiFiber Pro Multimode & 1310 nm Singlemode Kit includes MultiFiber Pro Power Meter, 850 nm Light Source, 1310 nm Light Source, Test Reference Cords, MPO Adaptors and Carrying Case.

**MFTK-MM850-SM1550**
MultiFiber Pro Multimode & 1550 nm Singlemode Kit includes MultiFiber Pro Power Meter, 850 nm Light Source, 1550 nm Light Source, Test Reference Cords, MPO Adaptors and Carrying Case.

**MFTK-SM1310-SM1550**
MultiFiber Pro Singlemode test kit includes MultiFiber Pro Power Meter, 1310 nm laser light source, 1550 nm laser light source, Singlemode test leads (1 unpinned/unpinned; 1 unpinned/pinned; 2 pinned/pinned), 2 APC MPO Adaptors, and Carrying Case.

**MS2-MAG-KIT**
The MAG-KIT is a new holder and magnetic strap attachment for MicroScanner2 Cable Verifier, SimpliFiber® Pro, FI-500 FiberInspector™ Micro and the MultiFiber™ Pro. This holster allows technicians and contractors to use their testers “hands free” by enabling them to attach the tester to any magnetic surface.

PLUS A FULL RANGE OF ACCESSORIES
The OptiFiber Pro from Fluke Networks is the first purpose-built OTDR that meets the unique challenges of an enterprise fibre infrastructure. With its simple smartphone user interface and powerful feature set, the OptiFiber Pro turns anyone into an efficient and expert premise fibre troubleshooter or installer. As enterprises consume more storage resources and adopt higher bandwidth (40G, 100G) Data Centre architectures, the resilience of the cabling infrastructure becomes highly dependent upon maintenance tools to ensure fibre reliability.

OptiFiber Pro is the first OTDR built from the ground up for enterprise fibre optic cable testing. OptiFiber Pro is focused on reducing costs while enhancing productivity and improving network reliability.

➤ First OTDR with a smartphone user-interface
➤ Industry’s shortest event and attenuation dead zones
➤ Accelerate fibre certification with the fastest set-up and trace times
➤ SmartLoop OTDR introduces the testing of two fibres in a single test eliminating the need to travel to the far end of the connection to perform tests
➤ Improve resource utilisation with custom configurations for projects and users

➤ Simplify use with “DataCenter OTDR™” mode and EventMap™ view
➤ Custom project folders
➤ Compatible with Linkware™ Live. Linkware Live enables users to easily track job progress, get real-time access to test results to quickly fix problems in the field, and easily transfer and consolidate test results from the tester to LinkWare™ PC Cable Test Management Software

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description:</th>
</tr>
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<tbody>
<tr>
<td>OFP2-100-Q-NW</td>
<td>OptiFiber Pro Quad OTDR w/ Inspection</td>
</tr>
<tr>
<td>OFP2-100-QI</td>
<td>OptiFiber® Pro Quad OTDR</td>
</tr>
<tr>
<td>OFP2-100-M-NW</td>
<td>OptiFiber Pro Multimode OTDR</td>
</tr>
<tr>
<td>OFP2-100-MI</td>
<td>OptiFiber Pro Multimode OTDR w/ Inspection</td>
</tr>
<tr>
<td>OFP2-100-S-NW</td>
<td>OptiFiber Pro Singlemode OTDR</td>
</tr>
<tr>
<td>OFP2-100-SI</td>
<td>OptiFiber® Pro Quad OTDR</td>
</tr>
</tbody>
</table>
## OPTIFIBER® PRO KITS

**OFP2-CFP-QI**

OptiFiber Pro Quad OTDR and CertiFiber Pro Quad kit with inspection kit. This kit includes:
- 1 Versiv Mainframe & Remote
- 1 OptiFiber Pro Quad OTDR module
- 2 CertiFiber Pro Quad OLTS modules
- 2 Hand straps
- 2 Shoulder straps
- 2 Carry cases
- USB interface cable
- Versiv open source software CD
- 2 AC chargers
- 2 Quick clean cleaners (1.25/2.50 mm)
- 2 SC/LC multimode launch cables—50 μm
- 2 SC/LC singlemode launch cables—9 μm
- OTDR source port interchangeable LC adapters
- USB Fibre inspection video probe with 4 tips
- SC/SC simplex adaptor
- 2 LC/LC simplex adaptors
- SC/LC SM TRC kit 9 μm
- TRC carry case
- 2 Launch fibre hanging straps and magnets
- Integrated Wi-Fi
- Statement of calibration and getting started guides.

## OPTIFIBER® PRO ACCESSORIES

<table>
<thead>
<tr>
<th>Part No:</th>
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<tbody>
<tr>
<td>OFP-MM</td>
<td>OptiFiber® Pro Multimode OTDR Module</td>
</tr>
<tr>
<td>OFP-SM</td>
<td>OptiFiber® Pro Singlemode OTDR Module</td>
</tr>
<tr>
<td>OFP-QUAD</td>
<td>OptiFiber® Pro Quad OTDR Module</td>
</tr>
<tr>
<td>PA-SC</td>
<td>OTDR Source Port Interchangeable SC Adapter</td>
</tr>
<tr>
<td>PA-LC</td>
<td>OTDR Source Port Interchangeable LC Adapter</td>
</tr>
<tr>
<td>PA-ST</td>
<td>OTDR Source Port Interchangeable ST Adapter</td>
</tr>
<tr>
<td>PA-FC</td>
<td>OTDR Source Port Interchangeable FC Adapter</td>
</tr>
<tr>
<td>FI-1000-KIT</td>
<td>FI-1000 USB video probe and tip set</td>
</tr>
</tbody>
</table>
FIBRE FAULT FINDING

➤ FIBER QUICKMAP

The Fluke Networks Fibre QuickMap is an enterprise fibre troubleshooter that quickly and efficiently locates connections and breaks in multimode fibre. By instantly providing distances to failures such as high loss and high reflectance incidents, Fibre QuickMap is the must-have troubleshooter for any technician who works with fibre.

Other troubleshooting solutions in today’s data centres are too inefficient and take up too much time. Lasers are simple, but the repetitive process of shining it down a link and checking the far end is imprecise, tedium and time-consuming. On the other end of the spectrum, OTDRs work well as troubleshooters, but their advanced analysis and trace capabilities make them best used for certifying and documenting cable installation quality. Today, network technicians need a first-line diagnostic tool to help them fix their fibre cabling problems. Fibre QuickMap’s one-button ease-of-use, speed and detailed insight into fibre connectivity make it the technician’s troubleshooter of choice.

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description:</th>
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<tbody>
<tr>
<td>FQM-M</td>
<td>FQM-MAIN, Fiber Quickmap Main Instrument Only</td>
</tr>
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</table>

➤ FIBER QUICKMAP KITS

Combining VFL, inspection scope and power meter make the fibre Quickmap kits powerful fault finding kits.

<table>
<thead>
<tr>
<th>Part No:</th>
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<tbody>
<tr>
<td>FQM-100-M-VFL</td>
<td>Fibre troubleshooting Kit including FQM-100-M, VisiFault VFL and Carrying Case</td>
</tr>
<tr>
<td>FQM-SFP-M</td>
<td>Fibre troubleshooting Kit including FQM-100-M, VisiFault VFL, SimpliFiber Pro Power Meter and Multimode Source Carrying Case</td>
</tr>
<tr>
<td>FQM-100-M</td>
<td>FQM-100-M, Fiber QuickMap, Launch Cords and Carrying Case</td>
</tr>
</tbody>
</table>

➤ FIBER ONESHOT™ PRO

Fiber OneShot Pro’s one-button-test capability will quickly and accurately verify if a fibre is active and find the distance to a break or end, dirty end face or reflective event – going from zero to 23,000m. This portable FTTx tester is designed to be lightweight and accurate.

Built to last, the Fiber OneShot incorporates an energy-absorbing holster over an impact-resistant case to withstand drops, impacts and the tough outside plant environment, ensuring years of trouble-free operation.

Testing benefits that increase your productivity

➤ Measure the length of your fibre quickly and accurately
➤ New CheckActive™ feature alerts you if an optical signal is on the fibre
➤ Instant-on – no boot/load time
➤ Test fast – expedite your fibre testing with one button in a few seconds

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<tbody>
<tr>
<td>FOS-S</td>
<td>Fiber OneShot Pro</td>
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</tbody>
</table>

Fiber OneShot Pro is a pocket-sized optical test set designed to take the complexity out of singlemode fibre to increase productivity and decrease training time. The Fiber OneShot allows testing anywhere in the network (central office, node, hub, drop or optical network terminal (ONT)) and fast, affordable, testing.
FIBER ONESHOT KITS & ACCESSORIES

Combining test leads, power meter and visual fault locator with the Fiber OneShot make a comprehensive fault finding package.

<table>
<thead>
<tr>
<th>Part No:</th>
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</thead>
<tbody>
<tr>
<td>FIBR-AC-CH</td>
<td>FIBR-AC-CH, Case, HOLSTR-FIBR, Oneshot</td>
</tr>
<tr>
<td>FIBR-AC-UUPC</td>
<td>FIBR-AC-UUPC, 1M UPC-UPC Launch CRD</td>
</tr>
<tr>
<td>FIBR-AC-UAPC</td>
<td>FIBR-AC-UAPC, 1M UPC-APC Launch CRD</td>
</tr>
</tbody>
</table>

VISIFAULT

Bright laser-powered Visual Fault Locator (VFL) traces fibres, verifies continuity and polarity, and aids in fault location. Compatible with 2.5mm and 1.25mm connectors. Rugged design, long battery life, lanyard attachment and a carrying case.

<table>
<thead>
<tr>
<th>Part No:</th>
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<tbody>
<tr>
<td>VISIFAULT</td>
<td>Bright Laser-Powered Visual Fault Locator (VFL)</td>
</tr>
<tr>
<td>NF-380</td>
<td>Universal 1.25mm Ferrule Adaptor</td>
</tr>
</tbody>
</table>

CLEANING KITS

Prevent the primary cause of fibre link failure: end-face contamination. Everything needed for precision cleaning of end-faces on both patch leads and inside adaptor ports.

- Specially formulated solvent dissolves contaminants, neutralises static charge and encapsulates particles for removal.
- A range of wipes and swabs enable cleaning of all styles of fibre optic connections.

Kit includes:
- Cleaning cube with wipes
- Ten cards with sealed cleaning zones
- Solvent pen
- 2.5mm port cleaning swabs and 1.25mm port cleaning swabs
- Rugged carrying case

<table>
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<tr>
<th>Part No:</th>
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<tbody>
<tr>
<td>NFC-KIT-CASE</td>
<td>Fiber Optic Cleaning Kit - includes cleaning cube with wipes, ten cards with sealed cleaning zones, solvent pen, 2.5mm port cleaning swabs and 1.25mm port cleaning swabs in a rugged carrying case</td>
</tr>
<tr>
<td>NFC-KIT-CASE-E</td>
<td>Enhanced Fibre Cleaning Kit with Quick Clean 1.25mm cleaner, an Quick Clean 2.5mm cleaner, an Quick Clean MPO cleaner, a solvent pen, a cleaning cube and a softcase.</td>
</tr>
</tbody>
</table>
**FIBRE LOSS TEST KITS**

➤ **SIMPLIFIBER® PRO**

Rugged dual wavelength LED multimode and Laser singlemode sources with SC adaptor, power meter has six calibrated wavelengths and result storage.

<table>
<thead>
<tr>
<th>Part No:</th>
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<tbody>
<tr>
<td>SFSINGLESOURCESOURCE</td>
<td>Simplifiber® Pro Singlemode Source 1310-1550nm</td>
</tr>
<tr>
<td>SFSINGLEMODE2</td>
<td>1490 and 1625nm Dual Wavelength Singlemode Light Source</td>
</tr>
<tr>
<td>SFPOWERMETER</td>
<td>Simplifiber® Pro Optical Power Meter</td>
</tr>
<tr>
<td>SFMULTIMODESOURCE</td>
<td>Simplifiber® Pro Multimode Source 850-1300nm</td>
</tr>
</tbody>
</table>

➤ **SIMPLIFIBER® PRO KITS**

SimpliFiber® Pro Optical Power Meter and Fibre Test Kits include all the tools necessary to verify and troubleshoot optical fibre cabling systems, measure loss and power levels and inspect and clean connector end-faces. Replacing the popular SimpliFiber® series, this next generation optical loss test kit boasts industry-leading functions such as dual-wavelength testing and automatic-wavelength detection, in addition to unique features such as CheckActive™, FindFiber™, and Min/Max. With such advanced, yet easy-to-use, capabilities that reduce test times, SimpliFiber® Pro is simply the best first-line fibre test kit on the market.

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<thead>
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<tbody>
<tr>
<td>FTK100</td>
<td>Includes SimpliFiber Pro Optical Power Meter, 850/1300 Multimode source, Carrying Case, and SC Power-Meter adaptor.</td>
</tr>
<tr>
<td>FTK1200</td>
<td>SimpliFiber® Pro Full-Featured Inspection and Certification Kit (SimpliFiber Pro Optical Power Meter &amp; Multimode 850/1300nm Source, VFL Visual Fault Locator, FindFiber™ Remote ID source, SC, LC- and ST connector adapter, Magnetic Strap Attachments, and carrying case)</td>
</tr>
<tr>
<td>FTK2100</td>
<td>Includes SimpliFiber® Pro Optical Power Meter, two Singlemode sources (1310/1550 and 1490/1625 nm), Carrying Case, and SC Power-Meter adaptor.</td>
</tr>
<tr>
<td>FTK1375</td>
<td>Multimode Fibre verification Kit with RI-500 FiberInspector Micro – Includes SimpliFiber Pro optical power meter, 850/1300 multimode source, VisiFault VFL, RI-500 FiberInspector, FindFiber Remote ID source, and carrying case; SC, ST, and LC power meter adapters.</td>
</tr>
<tr>
<td>FTK1475</td>
<td>Complete Fibre verification Kit with RI-500 FiberInspector Micro – Includes SimpliFiber Pro optical power meter, 850/1300 multimode source, 1310/1550 singlemode source, VisiFault VFL, RI-500 FiberInspector, two (2) FindFiber Remote ID sources, Magnetic strap attachments and carrying case; SC, ST, and LC power meter adapters, NFC-KIT-BOX fiber optic cleaning kit.</td>
</tr>
</tbody>
</table>
Fibre optic connector end-face contamination is a leading cause of fibre failures. Dirt and contaminant will cause insertion loss and back-reflection that inhibits optical transmission and causes havoc with transceivers. Fibre loss and OTDR testing can expose this problem, but in many cases, dirty connections make fibre testing time consuming and inaccurate.

The FI2-7000 FiberInspector Pro is a fibre optic inspection scope that allows you to inspect and certify fibre optic connector end-faces in 2 seconds so you can get the job done the first time. This fibre optic inspection scope provides automated PASS/FAIL certification to take the guess work out of fibre inspection so anyone can be a fibre expert.

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<tbody>
<tr>
<td>Flk2-7000-NW</td>
<td>The Flk2-7000 FiberInspector Pro contains: Versiv mainframe, USB fibre inspection video proper with 4 tips in a box (LC, FC/SC bulkhead, 1.25 and 2.5mm universal), blank module to protect the mainframe’s rear connector, AC charger, shoulder strap, USB interface cable, LinkWare software CD, Integrated Wi-Fi user manual CD, getting started guide and soft carrying case.</td>
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Fibre Inspection

**Accessories:**

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>FI1000-SCFC-TIP</td>
<td>SC and FC bulkhead video probe tip</td>
</tr>
<tr>
<td>FI1000-LC-TIP</td>
<td>LC bulkhead video probe tip</td>
</tr>
<tr>
<td>FI1000-ST-TIP</td>
<td>ST bulkhead video probe tip</td>
</tr>
<tr>
<td>FI1000-MU-TIP</td>
<td>MU bulkhead video probe tip</td>
</tr>
<tr>
<td>FI1000-E2KAPC-TIP</td>
<td>E2000/APC bulkhead video probe tip</td>
</tr>
<tr>
<td>FI1000-SCAPC-TIP</td>
<td>SC/APC bulkhead video probe tip</td>
</tr>
<tr>
<td>FI1000-E2K-TIP</td>
<td>E2000 bulkhead video probe tip</td>
</tr>
<tr>
<td>FI1000-LCAPC-TIP</td>
<td>LC/APC bulkhead video probe tip</td>
</tr>
<tr>
<td>FI1000-2.5-UTIP</td>
<td>2.5 mm universal video probe tip for patch leads</td>
</tr>
<tr>
<td>FI1000-1.25-UTIP</td>
<td>1.25 mm universal video probe tip for patch leads</td>
</tr>
<tr>
<td>FI1000-2.5APC-UTIP</td>
<td>2.5 mm APC universal video probe tip for patch leads</td>
</tr>
<tr>
<td>FI1000-MPO-UTIP</td>
<td>MPO/MTP probe tip and translator knob for patch leads &amp; bulkheads</td>
</tr>
<tr>
<td>FI1000-MPOAPC-UTIP</td>
<td>MPO/APC MPO/MTP probe tip and translator knob for patch leads &amp; bulkheads</td>
</tr>
<tr>
<td>FI1000-1.25APC-TIP</td>
<td>1.25 mm APC universal video probe tip for patch leads</td>
</tr>
<tr>
<td>FI1000-MPOAPC-RT</td>
<td>MPO/MTP APC replacement tip with no translator knob</td>
</tr>
</tbody>
</table>

**Kits:**

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>FI2-7000MPO</td>
<td>The FI-2000 FiberInspector Pro with MPO tip and cleaning contains: Versiv mainframe, USB fibre inspection video probe with 4 tips in a box (LC, FC/SC bulkhead, 1.25 and 2.5 mm universal), MPO fibre inspection adaptor tip, click cleaners for 1.25 mm &amp; 2.5 mm ferrules and MPO/MTP connectors, blank module to protect the mainframe’s rear connector, AC charger, integrated Wi-Fi, shoulder strap, USB interface cable, LinkWare software CD, user manual CD, getting started guide, soft carrying case.</td>
</tr>
<tr>
<td>FI-1000-KIT</td>
<td>A USB fibre inspection video probe which works with the Versiv products (CertiFiber Pro, OptiFiber Pro, DSX CableAnalyzer).</td>
</tr>
</tbody>
</table>
## Part No: & Description:

### FI-500

The FI-500 Fibre Optic Inspection System includes a handheld colour display, auto-focus inspection scope and 4 tips for LC and SC style bulkheads and 1.25 and 2.50mm patch leads. The patented camera includes PortBright™ to illuminate and easily connect in dark places.

### FI-525

The FI-525 includes a FI-500 Fibre Optic Inspection System with a handheld colour display, auto-focus inspection scope and 4 tips for LC and SC style bulkheads and 1.25 and 2.50mm patch leads. The patented inspection scope design includes PortBright™ to illuminate and easily connect in dark places. The FI-525 also include a wet and dry fibre end face cleaning kit.

See SimpliFiber Pro Kits on Page 260 for complete fibre Inspections kits including the FI-500 inspection system.
**FI-500 FIBERINSPECTOR ACCESSORIES**

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>FI-500TP-APC</td>
<td>Set of 4 APC Tip adapters including the FI 500TP ASFC, ALCF, A25F and A125F.</td>
</tr>
<tr>
<td>FI-500TP-SCF</td>
<td>Tip adapter for SC bulkhead fibre connectors</td>
</tr>
<tr>
<td>FI-500TP-FCF</td>
<td>Tip adapter for FC bulkhead fibre connectors</td>
</tr>
<tr>
<td>FI-500TP-STF</td>
<td>Tip adapter for ST fibre bulkhead connectors</td>
</tr>
<tr>
<td>FI-500TP-LCF</td>
<td>Tip adapter for LC bulkhead fibre connectors</td>
</tr>
<tr>
<td>FI-500TP-U25F</td>
<td>Tip adapter for 2.5mm (SC,FC,ST) fibre patch leads</td>
</tr>
<tr>
<td>FI-500TP-U125F</td>
<td>Tip adapter for 1.25mm (LC) fibre patch leads</td>
</tr>
<tr>
<td>FI-500TP-ASFC</td>
<td>Tip adapter for SC APC bulkhead fibre connectors</td>
</tr>
<tr>
<td>FI-500TP-ALCF</td>
<td>Tip adapter for LC APC bulkhead fibre connectors</td>
</tr>
<tr>
<td>FI-500TP-A25F</td>
<td>Tip adapter for 2.5mm APC (SC,FC,ST) fibre patch leads</td>
</tr>
<tr>
<td>FI-500TP-A125F</td>
<td>Tip adapter for 1.25mm APC (LC) fibre end face connectors</td>
</tr>
<tr>
<td>FI-500FP-AFCF</td>
<td>Tip adapter for FC APC bulkhead fibre connectors</td>
</tr>
<tr>
<td>FI-500TP-XLCF</td>
<td>Tip adapter for Extended LC bulkhead connectors, 46mm</td>
</tr>
<tr>
<td>FI-500CP</td>
<td>FI-500 Camera Probe</td>
</tr>
<tr>
<td>FI-500-BATTERY</td>
<td>Replacement Battery set (2 NiMH AA) for FI-500</td>
</tr>
<tr>
<td>FI-500-PWR SUPPLY</td>
<td>Replacement Power Supply for FI-500</td>
</tr>
</tbody>
</table>
OTDR’s require the use of long launch fibres at the beginning and end of a fibre link, in order to measure the loss and reflectance of connectors at the ends of the fibre being tested. Fluke Networks launch fibres come in a small convenient protective case and are available in common fibre types and connections.

HOW TO CREATE OUR LAUNCH FIBRE PART NUMBERS

- Populate this field with the fibre type:
  - OS1/2 9 µm = 9
  - OM2 62.5µm = 62
  - OM3 50 µm = 50

- Populate this field with the required connector type for the B End = SC / FC / LC / ST
- Populate this field with either:
  - Single Mode = SMC
  - Multi-Mode = MMC

EXAMPLE: SMC-9-SCLC SINGLEMODE LAUNCH CABLE 9µm SC/LC
DUPEX/SIMPLEX FIBRE TEST REFERENCE CORDS

Fluke Networks test reference leads are specially configured for accurate and efficient bi-directional testing. Connector end faces are hardened to increase durability and ensure good reference measurements.

To comply with industry standards multimode test reference leads are now supplied to support encircled flux launch conditions used in the certifier pro.

HOW TO CREATE OUR TEST REFERENCE CORDS PART NUMBERS

Populate this field with the fibre type:
- OS1/2 9 µm = 9
- OM2 62.5µm = 62
- OM3 50 µm = 50

Populate this field with the required connector type for the A End = SC / FC / LC / ST

Encircled Flux Cord = EFC (Multimode only)

Populate this field with the required connector type for the B End = SC / FC / LC / ST

Angle Polished = APC (or leave blank)

Kit = KIT (or leave blank)

EXAMPLE: MRC-50-EFC-SCLC-KIT = VERSIV MULTIMODE ENCRICLED FLUX COMPLIANT TEST REFERENCE CORD KIT 2M FOR TESTING 50µm LC TERMINATED FIBRES (2 X SC/LC, 2 X LC/LC)
Gold Support is Fluke Networks annual maintenance package. Membership ensures you are never without an up-to-date, calibrated tester in full working order.

Gold Support offers you all this great value for your money:

- **REPAIR**
  Should your testers need repair or suffer accidental damage, under Gold Support, you are entitled to unlimited, no charge repair services including labour, parts and shipping.

- **LOAN UNIT IN THE EVENT OF A REPAIR**
  Fluke will provide a loan unit to keep you up and running while your unit is away, with all shipping costs covered. Simply place your tester in the shipping container the loan unit arrives in, affix the pre-paid return shipping label and ship to Fluke Networks.

- **CALIBRATION**
  One annual calibration of your unit at a time of your choosing during the year.

- **ACCESSORIES**
  Free replacement of any failed accessory that was included in the box with the main unit at the time of delivery.
  For example:
  - Battery packs
  - Channel adaptors
  - Serial cables
  - Link adaptors
  - AC chargers
  - Personality modules
  - Technical support
  - Unlimited technical expertise with local language support
  - Unlimited access to our on-line Knowledge Base.
  - Special Offers members only access to extra discounts on selected test equipment.

For 1 Year Gold support on Versiv testers add ‘GLD’ in front of the part number.

For 3 years Gold support on Versiv testers add ‘GLD3’ in front of the part number.

**FLUKE NETWORKS GOLD SUPPORT COVERS:**

- **DSX 5000**
- **DSX 8000**
- **OPTIFIBER PRO**
- **CERTIFIBER PRO**

For Gold Support on Cable IQ, Simplifiber, F12-7000, Multifiber Pro, Simplifiber, Fibre Quickmap or Fibre OneShot, call for a quotation. *No Gold support available on MicroMapper, MicroScanner or Intellitone*
Digital Transformation is changing the business, and IT must also transform to achieve the speed, reliability, security, and rapid deployment required by today’s digital business initiatives. NETSCOUT’s Business Assurance solutions, anchored in our unique ASI technology, address the combination of needs for IT transformation initiatives, including large scale unified communications projects, custom application roll-outs, and increasingly frequent public and private cloud projects, which require unprecedented levels of visibility and insight in real time for timely implementation and consistently high service quality.

WIRELESS TESTERS

➤ AIRCHECK G2™ WIRELESS TESTER

AirCheck G2™ Wireless tester is purpose built for the front-line IT responders dispatched to the complaints of: The Wi-Fi is not working or the Internet is down. The AirCheck G2™ Wireless Tester provides fast, simple, and accurate isolation and troubleshooting, thereby reducing the time to resolution of wireless issues.

➤ A rugged, handheld purpose-built wireless tester supporting the latest Wi-Fi technologies (802.11a/b/g/n/ac)
➤ A one-button AutoTest, which quickly provides a pass/fail indication of the wireless environment and identifies common problem.
➤ An instant view of test results including network availability, connectivity, utilisation, security settings, rogue hunting, and interference detection.
➤ Connectivity to a centralised test results management platform, Link-Live, that facilitates greater job visibility, project control and fleet management for larger distributed environments.
➤ Networks Centre also provide in house training as well as a range of accessories and Gold support services.

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>AIRCHECK-G2</td>
<td>AIRCHECK G2™ WIRELESS TESTER. Includes soft case, AC charger, USB cable, Quick Start Guide</td>
</tr>
<tr>
<td>AIRCHECK-G2-TA-KIT</td>
<td>AIRCHECK-G2 PLUS EXT-ANT-RPSMA, AUTO CHARGER, HOLSTER. Includes test accessory, Small soft case, AC charger, USB cable, Quick Start Guide, external directional antenna, holster, automobile charger</td>
</tr>
</tbody>
</table>
**LINKRUNNER G2 SMART NETWORK TESTER**

The smart network tester for the connected world.

- Improves the effectiveness of network professionals by combining enhanced copper and fibre Ethernet testing with the Android™ OS
- Streamline installation and troubleshooting workflows using vendor/device apps for configuration and triage
- The first solution to offer a patented TruePower™ PoE test that supports 4-pair 51-Watt UPOE under load
- Automated documentation in LinkLive cloud-based results management database saves time and improves collaboration
- Full range of Accessories & Gold Support options available

### Accessories:

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU-WIFI-BT-USB</td>
<td>E dimax n150 Wi-Fi &amp; Bluetooth USB Adapter for Europe.</td>
</tr>
<tr>
<td>SFP-1000SX</td>
<td>SFP-1000SX, SX Gig Fiber DDM SFP Transceiver</td>
</tr>
<tr>
<td>SFP-1000ZX</td>
<td>SFP-1000ZX, ZX Gig Fiber DDM SFP Transceiver</td>
</tr>
<tr>
<td>SFP-1000FX</td>
<td>SFP-1000FX, 100BASE-FX Fiber DDM SFP Transceiver</td>
</tr>
<tr>
<td>WIREVIEW 1</td>
<td>Wreview 1, Wreview WireMapper #1</td>
</tr>
<tr>
<td>WIREVIEW 2-6</td>
<td>Wreview 2-6, Wreview Cable ID Set 2 through 6</td>
</tr>
<tr>
<td><strong>LR-G2-ACKG2-CBO</strong></td>
<td>Includes LinkRunner G2 with Li-ion battery, (2) Power supplies with regional power plugs, Car charger, Wreview Cable ID #1-#6, Inline RJ-45 coupler, (2) USB 2.0 to Micro USB Cable, 8 G Micro SD card, (2) Holsters, Accessories pouch, IntelliTone™ 200 Probe, Small, Medium, Large Soft Cases, AirCheck G2 Wireless Tester, Test Accessory, (2) Quick Start Guide, External directional antenna.</td>
</tr>
</tbody>
</table>
> **LINKRUNNER™ AT NETWORK AUTO-TESTER**

- Fast answers: AutoTest accurately identifies network problems in 10 seconds
- LRAT-2000 for copper and fibre, TruePower™ PoE loading, IPv6, reflection and 50 reports instead of 10
- Verify connections at 10M/100M/1G on copper and fibre: Instantly verify link status, connection type, and signal strength
- Nearest switch and VLAN information: Displays the VLAN and nearest switch model, slot and port
- Cabling: Test installed cabling and patch leads
- TruePower PoE testing: Quickly validate PoE performance by drawing actual power up to the 802.3at standard 25.5W
- Document results: Store up to 50 test results and download to your PC
- Instant-on: Boots in under 3 seconds; six-hour battery life
- Streamline management of connectivity test results, reports, projects and staff with the companion Link-Live Cloud Service

LinkRunner AT Network Auto-Tester is the fastest way to solve network connectivity problems. This rugged, handheld network tester takes the guesswork out of troubleshooting with its complete one-button AutoTest. AutoTest performs your required set of connectivity tests in 10 seconds, enabling you to accurately and quickly identify and solve network problems.

<table>
<thead>
<tr>
<th>Part No. &amp; Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>LRAT-1000</strong></td>
</tr>
<tr>
<td>Includes: LinkRunner AT 1000 Tester, LinkRunner Manager Software CD, USB cable, LinkRunner AT Getting Started Guide, and Soft Case</td>
</tr>
<tr>
<td><strong>LRAT-2000-KIT</strong></td>
</tr>
<tr>
<td><strong>LINKSOLUTIONS-KIT</strong></td>
</tr>
</tbody>
</table>

> **LINKSPRINTER™ NETWORK TESTER**

LinkSprinter provides network connectivity troubleshooting and identifies error in less than 10 seconds. Automated reporting to the included Link-Live Cloud Service Essentials ensures network connectivity status and path information is documented for every link.
- Test and Validate Network Connectivity in less than 10 seconds
- Diagnose and test Power over Ethernet (PoE), Link to the switch, DHCP, Gateway, and Internet connection
- Get VLAN, switch name, and port information via CDP/LLDP/EDP for your managed switches
- Expert network troubleshooting techniques delivered to colour graded LEDs
- Automated reporting to Link-Live Cloud Service
- Get detailed test results sent directly to your email
- Proxy support

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>LSPRNTR-300</td>
<td>LinkSprinter Network Tester includes Cable Fault Finder</td>
</tr>
</tbody>
</table>
ONETOUCHTM AT NETWORK ASSISTANT

All-in-one network tester: combined copper, fibre optic and Wi-Fi network troubleshooting resolves a broad range of problems with one testing tool

Versatile: dual 10/100/1G copper/fibre Ethernet test ports and an 802.11a/b/g/n/ac Wi-Fi radio for use in multiple environments. 10 Gigabit version available.

Fast: one-button automated testing with pass/fail analysis speeds identification of the most common problems in about a minute

Easy: standardised network troubleshooting and performance validation empowers technicians of various skill levels to solve more problems with confidence

Complete: a comprehensive client view of performance isolates the problem root cause starting from the physical layer, through the network and to server-hosted applications

Cloud: automated, cloud-based results trending and performance analytics to troubleshoot intermittent client problems from anywhere using a web-connected device with a browser

Discover: automated wired and Wi-Fi discovery and analysis provides visibility into connected devices, key device properties, device interconnections and problems

Performance: end-to-end L2/L3 wired and Wi-Fi path performance measurement to a peer or a reflector to validate and document link readiness and SLA compliance

VoIP: Inline VoIP call monitoring and comprehensive logging simplifies troubleshooting of desktop VoIP problems in real-time without taps or switch mirror ports

Capture: wired, Wi-Fi, VoIP and AutoTest packet capture streamlines collaboration and escalation of the most complex issues

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1T10G-1000</td>
<td>OneTouch AT 10G Network Assistant, includes 1G SX SFP Fibre Transceiver, 10G SR SFP+ Fibre Transceiver, SD Card, Frame Carry Strap, Hand Strap, AC Adaptor and Line Cord, RJ45 Patch Cable, Carrying Case, Getting Started Guide, and Resource CD with User Manual</td>
</tr>
<tr>
<td>ITG2-1500</td>
<td>OneTouch AT Network Assistant with the Copper/FibreLAN option, includes Module and test Frame, Frame Carry Strap, AC Adaptor and Line Cord, Wiremap Adaptor #1, RJ45 Coupler, RJ45 Patch Cable, Accessories Pouch, Carrying Case, Getting Started Guide, and Resource CD with User Manual</td>
</tr>
<tr>
<td>ITG2-3000</td>
<td>OneTouch AT Network Assistant with Copper/FibreLAN, Wi-Fi, Packet Capture and Advanced Tests options, includes Module and test Frame, Frame Carry Strap, AC Adaptor and line cord, Wiremap Adaptors #1 - #6, RJ45 Coupler, RJ45 Patch Cable, External Directional Antenna with Mounting Clip, SD card, USB SD Card Reader, USB flash drive, two 1000BASE-SX SFP Fibre Transceivers, Accessories Pouch, Carrying Case, Getting Started Guide, and Resource CD with User Manual</td>
</tr>
</tbody>
</table>
**AIRMAGNET MOBILE**

NETSCOUT offers portable tools that provide analysis of the wireless LAN for quick and effective Wi-Fi troubleshooting, remediation of rogue devices and compliance auditing. Intelligent insight into RF and network level information enables wireless network engineers and frontline technicians to pinpoint the source of issues that pose wireless network security risks or disrupt performance. Wireless network security solutions ensure WLAN applications, such as voice-over-wireless LAN maintain integrity throughout deployment and expansion phases.

➤ **AIRMAGNET WI-FI ANALYZER**

The industry standard software tool for mobile monitoring, auditing and troubleshooting enterprise Wi-Fi networks. AirMagnet Wi-Fi Analyzer helps IT staff quickly solve end-user issues while automatically detecting Wi-Fi signal strength, security threats and wireless network vulnerabilities. The Wi-Fi network analyzer enables wireless network managers to easily test and diagnose dozens of common wireless network performance issues including throughput issues, Wi-Fi connectivity issues, device conflicts and signal multipath problems.

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>AM/A1150G</td>
<td>AirMagnet Wi-Fi Analyzer PRO</td>
</tr>
</tbody>
</table>

➤ **AIRMAGNET SPECTRUM XT**

The real-time Wi-Fi spectrum analyzer's combined view of "impact analysis of RF interference" on the network's overall performance helps pin-point the root-cause of those problems.

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>AM/B4070</td>
<td>AirMagnet Spectrum XT (USB Based)</td>
</tr>
</tbody>
</table>

➤ **AIRMAGNET SURVEY PRO**

The industry's most accurate wireless site survey software solution for mapping, planning and designing 802.11n/a/b/g/ac wireless LANs for optimal performance, security and compliance. Survey software calculates the ideal quantity, placement and configuration of APs for a successful wireless LAN deployment.

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>AM/A4018G</td>
<td>AirMagnet Survey Pro (with Planner)</td>
</tr>
</tbody>
</table>
CABINETS & POWER

- Prism Cabinets
- Prism Cold & Hot Aisle Containment
- Prism Server Caging
- Nenco Network Cabinet
- Nenco Wall Mounted Cabinet
- Fan Trays
- PDUs
- Cable Management
- Plinths
- Shelves
- Raritan
- Sunbird
- Socomec
- Eaton Power

prism

Raritan®
A brand of legrand®

Socomec
Innovative Power Solutions

EATON
Powering Business Worldwide
PRISM CABINETS

HOW TO CREATE OUR PRISM CABINET PART NUMBERS

CAB - Populate this field with ‘CAB’ to reflect cabinet
SF - FS for floor standing
X - Populate this field with the height:
   12U
   18U
   27U
   42U
   45U
X - Populate this field with the depth:
   6 = 600mm
   8 = 800mm
   10 = 1000mm
   12 = 1200mm
Door type
   G = Glass
   M = Mesh
Width:
   6 = 600mm
   8 = 800mm
If you require a FI server cabinet insert SVR-FI
FP = Flat Packed
PR = PRISM

EG: CAB-FS-45U-8-10-M-SVR-FI-GY-PR = PRISM 45U 800 X 1000 FLOOR STANDING FI SERVER CABINET MESH DOOR GREY

PI DATA CABINETS

Cabinets can be fitted with a range of options including side panels, solid steel or wardrobe style mesh doors, vented glazed doors and vented steel doors all designed to offer the flexibility to meet everyday requirements.

Typical Applications:
➤ Networking/Cabling/Broadcast
➤ 19” electronic equipment housing
➤ Communication systems
➤ IT systems

Features:
➤ Enclosed glass front door with slam latch lock
➤ Lockable rear metal door with low level venting
➤ Vented and lockable side panels
➤ Raised and vented top cover with cable entry
➤ Transport castors
➤ Open base design
➤ Vertical cable management
➤ Fully adjustable 19” mounting profiles
➤ Earth bonding kit
➤ Full range of accessories available
➤ Supplied assembled or in flat pack option
➤ Multiple door configurations available
➤ Configurable roof options to cater for overhead cable installations
➤ Full range of airflow management accessories
PI SERVER CABINETS

The internal mounting profiles have been designed to accommodate all of today's server manufacturers products. With the use of the mid profiles supplied and number of different depths of products, they can be accommodated within the one enclosure.

Typical Applications:
- Data centres / comms rooms
- 19” Server equipment housing
- Communication systems
- Structured cabling / multi-vendor installations

Features:
- Enclosed glass front door with mesh surround or mesh as standard
- Lever latch lock with 3 point locking system
- Lockable rear metal door with 64% airflow mesh
- Lockable side panels with high and low level venting
- Raised and vented top cover with cable entry
- Open base design
- Vertical cable management
- Fully adjustable ‘vendor neutral’ 19” mounting profiles
- Mid style multiple depth mounting profiles
- Earth bonding kit
- Full range of complimentary accessories available
- Transport castors
- Supplied assembled or in flat pack option
- Multiple door configurations available
- Configurable roof options to cater for overhead cable installations
- Open base design with plate options to maintain security
- Full range of airflow management accessories
- High density power and cooling options

FI SERVER CABINETS

The range has been specifically designed to minimise weight where high densities of racks are required. The aluminium frame provides superior strength holding up to 1300kg and with its reduced weight is easily moved into any location. There are a number of cable access points supplied in the top of the cabinet as well as a complete open base type design.

Typical Applications:
- Data centres
- Networking/cabling
- 19” Electronic equipment housing
- Communication systems
- IT Systems

Features:
- Bolted aluminium frame construction
- Lockable front door with 83% airflow mesh and three point locking
- Lockable rear door with 83% airflow mesh and three point locking
- Pair of lockable side panels
- 4 x 19” universal adjustable (heavy duty) mounting profiles
- Pair of 19” mid style (heavy duty) mounting profiles
- Raised top cover with 3 x cable entry points
- Set of heavy duty castors
- Set of cabinet feet
- Standard colour black
- Split sliding side panels
- Overhead roof cabling channels
- Custom footprint sizes
PRISM'S BIG-O

Prism's Big ‘O’ advanced high density patching frame offers a dynamic solution to the challenges of cable management. It is designed to meet the evolving demands of high density cabling applications in the data centre field. It is user friendly, flexible and durable. The Big ‘O’ is easy to assemble, has a variety of configuration options, and guarantees the effective utilisation of available space. It promises your network protection, and peak performance.

The Big ‘O’ patching solution builds on the established foundation of the FI range of products and incorporates the key values and materials used. This product is available in a number of footprint sizes in single or double faced enclosures. The enclosure has been specifically chosen by today’s cable manufacturers to accommodate and maintain to correct level of bend radius required for high specification cabling systems. The internal cable channels are designed to accommodate the additional lengths supplied on all patch leads as well as providing access at a later date and throughout the life of the installation.

Options:
- Mesh or glass doors available, wardrobe or single piece design
- Central double width cable management panel with central 2 prong plastic management and cable retaining arms
- Lockable and split sliding slide panels
- Single end cable management panels with single and double depth cable rings
- Overhead cable raceway systems

Features:
- A complete solution which maximises network performance and ensures its longevity
- An ideal platform for the effective management and organisation of structured cabling equipment
- Negates the need for horizontal cable management
- Variable sizes designed to utilise space within data centre
- Top trough with built-in waterfall ensures optimal patch cabling routing, and complimentary bend radius control
- User friendly and easy to assemble on-site
- Can accommodate all types of cabinet door solutions
- Can be used on solid floors, plinths, or raised access floors
- Durable powder coat finish, available in three colours, protects against scratches and fingerprint damage

CABLE MANAGEMENT PART NUMBERS

PATCHING FRAME PART NUMBERS
Copper Cables

CPR
Saves Lives & Protects Buildings

Fire Safety Classification Colour Coding

- **Very High Fire Protection**
  Self Extinguishing – for very high risk areas, such as buildings with high people density or where people have limited mobility

- **High Fire Protection**
  Self Extinguishing – for high risk areas, such as commercial buildings with high people density

- **Moderate Fire Protection**
  Limited Emissions – for general installs in some regions

- **Basic Fire Protection**
  Basic Minimum – for general installs in some regions

Learn more about copper and fibre CPR-compliant cables at [brand-rex.com/cpr](http://brand-rex.com/cpr)
Cold Aisle Containment is all about keeping the hot air generated by your servers separate from the cold air generated by your cooling systems.

The waste heat is channelled into the room, and from there to your CRAC/CRAH units. This allows 95% of the CRAC/CRAH units cooling capacity to be channelled directly to your servers.

Features:
- Manual or automated self closing door options with vision panels
- Fixed, drop-in or shrinkable fm approved roof panel options easily removable for cleaning
- Retrofittable to any type and size of cabinets
- Can be fitted to 3rd party enclosures
- LED lighting options
- Doors upgrade to electronic locking & bms integration available
- Logo etching available

No More Hot-Spots or Temperature Spikes
Cold Aisle Containment limits thermal differential between the top and bottom racks, optimising server reliability at all rack positions.

Improved Performance & Lower Energy Costs
Get a huge efficiency boost. Over 95% of the cooling power is expended directly where you need it most. Large usage-based temperature fluctuations are all but eliminated. What that means for you is lower operating costs and more up-time.
Heat naturally rises. Rather than fighting this all-but-universal law of nature, HAC systems embrace it by channeling waste heat from your servers up and into a ceiling void or other overhead CRAC/CRAH system return.

This simple yet elegant system can make your cooling efforts not just more efficient but more reliable as well!

**Features:**
- Manual or automated self-closing door options with vision panels
- Fixed, drop-in or shrinkable FM approved roof panel options easily removable for cleaning
- Retrofittable to any type and size of cabinets
- Can be fitted to 3rd party enclosures
- LED lighting options
- Doors upgrade to electronic locking & BMS integration available
- Logo etching available

The key to efficiency is preventing cold and hot air mixing. HAC systems channel the hot, dry waste air from your servers directly to your CRAC intake, before it can mix with the cool air delivered to the servers. This makes cooling that air more efficient.

**Perfect for raised and slab floor data centres**
A strength of a Hot Air Containment system is that it does not rely on a floor void of any kind. The cool air from your CRAC/CRAH units can simply be supplied into the room, where it will naturally gravitate to the server intakes near the floor. The hot exhaust air can be vented into a suspended ceiling plenum, or a system of simple ducts.

What that means for you is a system that can be installed inexpensively in almost any data centre or server room, temperature fluctuations are all but eliminated. What that means for you is lower operating costs and more up-time & reduce energy costs by as much as 30%.
PRISM SERVER CAGING

Scalability, Modularity and Total Security all in One

As our IT systems become more and more critical to day to day operations, the physical security of these fragile, expensive and easy to manipulate systems becomes an even higher priority. A modular, strong and expandable Security cage for critical systems is the last word in both visual and physical system protection.

Features:

- Stronger than welded mesh
- Allows air to circulate freely – up to 70% free airspace
- Option for the cage panels to be installed raised off the floor to allow easy access to the raised floor void
- Roof can be added for additional security
- Under floor and above ceiling barriers for extra security
- Variety of cage pattern designs available.
- Cage panels steel thickness: 1.5mm - 4mm
- Cage height: up to 9m
- Cage & door panels can be customised with a logo
- Extensive choice of colours and finishes

Cage doors locking options:

- Key operated,
- Electronic,
- Electromechanical,
- Variety of emergency exit hardware.

Cage doors types:

- Sliding or hinged with self-closing option.
NENCO NETWORK CABINET

NENCO NETWORK CABINETS

A rack solution offering real value without compromise, with class leading 800kg load capacity. Designed, engineered and built in the UK, the application based configurations offer a practical yet highly versatile solution for housing common network infrastructure.

- 6 height variations 9U, 12U, 18U, 27U, 42U & 47U
- 2 width options 600 & 800mm
- 4 depths available 600, 800, 1000 & 1200mm
- Environmental protection IP20
- Static load 800kg
- Adjustable 19 inch mounting rails
- Upgradable plain top panels
- Open base design with optional plinth
- Front doors; various standards and options; glazed, plain steel, 80% perforated
- Rear doors; various standards and options; plain steel, single 80% perforated, double 80% perforated
- Lockable lift-off side panels
- Supplied fully assembled or flat packed
- Colours; Light Grey NCS 1502-Y or Black RAL 9005 (with black hardware)
- Jacking feet fitted as standard (option of castors)
- Baying options with or without side panels fitted
- Wide racks come with cable channels as standard

HOW TO CREATE OUR NENCO NETWORK CABINET PART NUMBERS

- FS for floor standing
- Width: 6 = 600mm 8 = 800mm
- Door type:
  - G = Glass
  - M = Mesh
  - W = Wardrobe
- FP = Flat Packed
- Populate this field with 'CAB' to reflect cabinet
- Populate this field with the height:
  - 12U
  - 18U
  - 27U
  - 42U
  - 45U
- Populate this field with the depth:
  - 6 = 600mm
  - 8 = 800mm
  - 10 = 1000mm
  - 12 = 1200mm
- Colour BK or GY (Black as Standard
  - NB: Any depth over 1000mm becomes a server)
NENCO WALL MOUNTED CABINETS

➤ NENCO WALL MOUNTED CABINET

Our wall mounted cabinets are designed for today’s front-office environment for equipment heat loads up to 1KW. The 600mm width range spans popular unit heights from 6U - 15U (450mm depth) and 6U - 21U (600mm depth).

This wall cabinet has been designed with ease of equipment installation and cabling in mind. The side panels and door are all easily detached to aid access both during and after equipment installation.

Top and bottom cable gland entry enables cabling to enter neatly and efficiently.

➤ Robust welded construction is fully assembled to enable quick & easy on-site installation
➤ 4 standard 19” adjustable rails to suit standard rack-mounted equipment
➤ Removable side panels and door allow for easy access to equipment and cabling during & after installation
➤ Easy installation to a wall structure using the removable rear mounting panel.

➤ Vented top and bottom allow for equipment convection ventilation or installation of fan units in top (order code NRWBFFK)
➤ Glazed door with lock as standard. The door can be hinged left or right.
➤ Cable gland entry on top and bottom
➤ Side panels may be retro-fitted with a 50mm lock (order code NRWBLOCK)
➤ Black powder coat finish as standard (light grey an option)

➤ NENCO WALL MOUNTED CABINET

HOW TO CREATE OUR NENCO WALL CABINET PART NUMBERS

- WM indicates it’s a wall mounted cabinet
- Populate this field with ‘NNCAB’ to reflect cabinet
- Populate this field with the depth. This will determine what type of cabinet you wish to have:
  - 4 = 450mm
  - 6 = 600mm
- Populate this field with the height:
  - 6U = 6U
  - 9U = 9U
  - 12U = 12U
  - 15U = 15U
  - 18U = 18U
  - 21U = 21U
- Door type:
  - G (as standard) = PERSPEX
  - S = STEEL

EG: NNCAB-WM-12U-4-G = 12U LOCKABLE WALL MOUNTED CABINET 600MM WIDE AND 450MM DEEP GLASS DOOR BLACK
**Fan Trays**

- **Roof Mounted**
  - Feature two or four fans per tray
  - Quick and easy to fit
  - Noise level 27-28 dB
  - Available in black and grey
  - Supplied with mains lead

- **High Speed Roof Mounted**
  - Feature two or four fans per tray
  - Quick and easy to fit
  - Available in black and grey
  - Supplied with mains lead
  - Low noise options available

- **Rack Mounted**
  - Three quiet fans (27dB) fitted as standard
  - Supplied with a 3 metre mains lead
  - Durable welded construction

---

**How to Create Our Fan Tray Part Numbers**

- **CAB**
  - Populate this field with 'CAB' to reflect cabinet

- **FT**
  - FT indicates it's a Fan Tray

- **X**
  - Populate this field with the required mounting method:
    - Rack Mount = RK
    - Roof Mount = RM
    - High Speed Rack Mount = HS

- **X**
  - Populate this field with the number of fans:
    - 2 way fan = 2
    - 3 way fan = 3
    - 4 way fan = 4

- **X**
  - Populate this field with any extra requirements:
    - Low Noise = LN
    - Thermostat = THERM

**EG:** CAB-FT-4-RM-LN = Roof mounting 4 way low noise fan tray
POWER DISTRIBUTION

Our cost effective PDUs are available in a wide range of configurations, both vertical and horizontal. The configurators below enable you to access the full range of standard products but please call if you have any other requirement as we are able to build to order.

➤ HORIZONTAL PDUS

Power Distribution Units (PDUs) are mounted into a data/server cabinet, to provide power for the housed equipment.

➤ Horizontal PDUs are 1.5U in height
➤ Built using a tough aluminium extrusion
➤ All PDUs have a 3m power lead with 13A UK plug as standard, with other options available.
➤ Optional switch cover and shrouded switch prevent the PDU from being accidentally turned on/off.

HOW TO CREATE OUR HORIZONTAL PDU PART NUMBERS

PDU indicates it’s a Power Distribution Unit

Populate this field with the type of sockets:
UK (4, 5 & 6 way) = 13A 3 pin
C13 (6, 8, 10 & 12 way) = IEC C13
C19 (6 & 8 way) = IEC C19
8C13-2C19 (10 way) = Hybrid with 8 x C13 & 2 x C19

Total Number of Sockets:
4 / 5 / 6 / 8 / 10 / 12 = Socket Qty* (*Subject to type of socket)

Plug Style:
(Supplied with 3m flex as standard)
16A = Commando 16A plug
32A = Commando 32A plug
(Available as standard for 8-16 way UK PDU-16 way
C13, 10 way C19 and hybrid PDU’s)
C20 = IEC C20 plug
C14 = IEC C14 plug

Options:
DA = Digital Amp Meter
* Available for 6 way UK & 12 way IEC C13 as standard
** Up to 16A Digital Amp & Voltmeter. 32A – Digital Amp meter
F = Filtered (Surge Protected)
(Available as standard for UK sockets and 6 & 12
way C13 PDU’s)
FUSED= Individually fused neon sockets
(available for IEC C13 & IEC C19 PDU’s)

EG: CAB-PDU-6-H-C13-16A-F: 6 WAY HORIZONTAL IEC C13 SURGE PROTECTED PDU WITH 16A COMMANDO PLUG
VERTICAL PDU'S

Power Distribution Units (PDUs) are units which are mounted into a data/server cabinet, to provide power for the housed equipment. Vertical PDUs are 0U in height, as they are mounted at the rear of a cabinet, leaving more rack space for equipment.

- Built using a tough aluminium extrusion,
- 3m power lead with 13A UK plug as standard, with other options available.
- Optional switch with shroud to prevent the PDU from being accidentally turned on/off

Options:

- Digital Amp Meter = DA
  - Available for 6 way UK & 12 way IEC C13 as standard
- **Up to 16A Digital Amp & Voltmeter.** 32A – Digital Amp meter
- Filtered (Surge Protected) = F
  - (Available as standard for UK sockets and 6 & 12 way C13 PDU’s)
- Individually Fused Neon Sockets = FUSED
  - (Available as standard for IEC C13, 16, 20 & 24 way PDU and 20x C13 & 4x C19 Hybrid)

HOW TO CREATE OUR VERTICAL PDU PART NUMBERS PART NUMBERS

**EG:** CAB-PDU-6-V-C13-16A-F: 6 WAY HORIZONTAL IEC C13 SURGE PROTECTED PDU WITH 16A COMMANDO PLUG

- **CAB** indicates it’s a Power Distribution Unit
- **PDU** indicates it’s a Power Distribution Unit
- **X** indicates the total number of sockets
- **V** indicates the plug style
- **X** indicates the number of sockets
- **X** indicates the type of socket

Total Number of Sockets:
4 / 5 / 6 / 8 / 10 / 12 / 16 / 20 / 24 = Number (Subject to type of socket)

Plug Style:
16A = Commando 16A plug
32A = Commando 32A plug
(C20 = IEC C20 plug
C14 = IEC C14 plug

* (Available as standard for 8-16 way UK PDU, 16 way C13, 10 way C19 and hybrid PDU’s)
CABLE MANAGEMENT

➤ CABLE TRAYS

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAB-CT-12-150</td>
<td>12U 150mm Cable Tray</td>
</tr>
<tr>
<td>CAB-CT-12-300</td>
<td>12U 300mm Cable Tray</td>
</tr>
<tr>
<td>CAB-CT-18-150</td>
<td>18U 150mm Cable Tray</td>
</tr>
<tr>
<td>CAB-CT-18-300</td>
<td>18U 300mm Cable Tray</td>
</tr>
<tr>
<td>CAB-CT-27-150</td>
<td>27U 150mm Cable Tray</td>
</tr>
<tr>
<td>CAB-CT-27-300</td>
<td>27U 300mm Cable Tray</td>
</tr>
<tr>
<td>CAB-CT-39-150</td>
<td>39U 150mm Cable Tray</td>
</tr>
<tr>
<td>CAB-CT-39-300</td>
<td>39U 300mm Cable Tray</td>
</tr>
<tr>
<td>CAB-CT-42-150</td>
<td>42U 150mm Cable Tray</td>
</tr>
<tr>
<td>CAB-CT-42-300</td>
<td>42U 300mm Cable Tray</td>
</tr>
<tr>
<td>CAB-CT-45-150</td>
<td>45U 150mm Cable Tray</td>
</tr>
<tr>
<td>CAB-CT-45-300</td>
<td>45U 300mm Cable Tray</td>
</tr>
</tbody>
</table>

➤ PASS THROUGH PANELS

- Comes in both 1U & 2U Variations
- Brush strips both front and rear

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAB-PTP-1U</td>
<td>19” 1U Pass Through Panel in Black</td>
</tr>
<tr>
<td>CAB-PTP-2U</td>
<td>19” 2U Pass Through Panel in Black</td>
</tr>
</tbody>
</table>

➤ 1U LETTERBOX STYLE BRUSH STRIP PANEL

- Available in 1U, 2U & 3U variations
- Black as standard, other colours available

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAB-BSP-1U</td>
<td>1U 19” Brush Strip Panel in Black</td>
</tr>
<tr>
<td>CAB-BSP-2U</td>
<td>2U 19” Brush Strip Panel in Black</td>
</tr>
<tr>
<td>CAB-BSP-3U</td>
<td>3U 19” Brush Strip Panel in Black</td>
</tr>
</tbody>
</table>

➤ RING CABLE MANAGEMENT BARS

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMB-4-1U-BK</td>
<td>1U 4 Ring Cable Management</td>
</tr>
<tr>
<td>CMB-4-2U-BK</td>
<td>2U 4 Ring Cable Management</td>
</tr>
</tbody>
</table>
METAL BLANKING PANELS

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>NC-BP-1U</td>
<td>Black 1U Blanking Panel</td>
</tr>
<tr>
<td>NC-BP-2U</td>
<td>Black 2U Blanking Panel</td>
</tr>
<tr>
<td>NC-BP-3U</td>
<td>Black 3U Blanking Panel</td>
</tr>
</tbody>
</table>

CABLELAY - CABLE MATTING

Cablelay is a Class ‘O’ fire rated, flexible, closed cell, elastomeric, nitrile rubber. It is a highly efficient method, ideal for the use of laying Cat6 structured cabling systems under raised floors or in traditional containment infrastructures such as cable tray or a basket equivalent. Cablelay is dust free, fibre free and CFC free with an ODP of zero which means an environmentally friendly product.

Cablelay is quick and easy to install and available in various widths to complement the construction environment. It can also be manufactured to any specific width and coloured to further enhance its versatility. Closed cell structure 1.5% water absorption by volume after 28 days.

HOW TO CREATE OUR CABLE MATTING PART NUMBERS

Population this field with the required width:
- 150 = 150mm wide
- 200 = 200mm wide
- 300 = 300mm wide
- 400 = 400mm wide
- 500 = 500mm wide
- 600 = 600mm wide

Population this field with the thickness of matting required:
- 1 = 6mm thick
- 3 = 13mm thick
- 5 = 25mm thick

Population this field with the required length:
- 10 = 10m length
- 20 = 20m length
- 30 = 30m length

EG: **NC-CL1500/30** = CABLELAY MATTING CLASS 0 – 6MM THICK X 500MM WIDE X 30M LONG
## PLINTHS

### PRISM PI DATA PLINTHS

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAB-PL-6-6</td>
<td>PI Data Cabinet Plinths  600mm X 600mm X100mm</td>
</tr>
<tr>
<td>CAB-PL-6-8</td>
<td>PI Data Cabinet Plinths  600mm X 800mm X100mm</td>
</tr>
<tr>
<td>CAB-PL-8-6</td>
<td>PI Data Cabinet Plinths  800mm X 600mm X100mm</td>
</tr>
<tr>
<td>CAB-PL-8-8</td>
<td>PI Data Cabinet Plinths  800mm X 800mm X100mm</td>
</tr>
</tbody>
</table>

### PRISM PI SERVER PLINTHS

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAB–PL-6-10-ARM</td>
<td>PI Server 600 X 1000 Plinth With Opening Stabilising Arm</td>
</tr>
<tr>
<td>CAB–PL-6-12-ARM</td>
<td>PI Server 600 X 1200 Plinth With Opening Stabilising Arm</td>
</tr>
<tr>
<td>CAB–PL-8-10-ARM</td>
<td>PI Server 800 x 1000 Plinth With Opening Stabilising Arm</td>
</tr>
<tr>
<td>CAB–PL-8-12-ARM</td>
<td>PI Server 800 x 1200 Plinth With Opening Stabilising Arm</td>
</tr>
</tbody>
</table>

### PRISM PI SERVER PLINTHS

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAB-FI-PL-6-10-ARM</td>
<td>FI 600 X 1000 Plinth With Opening Stabilising Arm</td>
</tr>
<tr>
<td>CAB-FI-PL-6-12-ARM</td>
<td>FI 600 X 1200 Plinth With Opening Stabilising Arm</td>
</tr>
<tr>
<td>CAB-FI-PL-8-10-ARM</td>
<td>FI 800 x 1000 Plinth With Opening Stabilising Arm</td>
</tr>
<tr>
<td>CAB-FI-PL-8-12-ARM</td>
<td>FI 800 x 1200 Plinth With Opening Stabilising Arm</td>
</tr>
</tbody>
</table>

### CABINET BAYING KIT

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAB-BAYKIT</td>
<td></td>
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### HEAVY DUTY CASTORS

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description:</th>
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<tbody>
<tr>
<td>CAB-CASTOR-HD</td>
<td></td>
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### ADJUSTABLE CABINET FEET

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description:</th>
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</thead>
<tbody>
<tr>
<td>CAB-FEET</td>
<td></td>
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</tbody>
</table>

### CAGE NUTS X 50

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAGENUT50</td>
<td></td>
</tr>
</tbody>
</table>
**SHELVES**

➤ **PRISM FIXED VENTED SHELVES**

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAB-SH-450-F</td>
<td>PI 450mm Fixed Vented Shelf</td>
</tr>
<tr>
<td>CAB-SH-570-F</td>
<td>PI 570mm Fixed Vented Shelf</td>
</tr>
<tr>
<td>CAB-SH-720-F-SVR</td>
<td>PI 720mm Fixed Vented Shelf</td>
</tr>
</tbody>
</table>

Available in Black, Light or Dark Grey and White.

➤ **PRISM FRONT MOUNT SHELVES**

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAB-SH-200-FM</td>
<td>PI 1U 200mm Front Mount Shelf</td>
</tr>
<tr>
<td>CAB-SH-300-FM</td>
<td>PI 1U 300mm Front Mount Shelf</td>
</tr>
<tr>
<td>CAB-SH-400-FM</td>
<td>PI 2U 400mm Front Mount Shelf</td>
</tr>
</tbody>
</table>

Available in Black, Light or Dark Grey and White.

➤ **PRISM TELESOPIC SHELVES**

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAB-SH-450-T</td>
<td>PI 450mm Telescopic Shelf</td>
</tr>
<tr>
<td>CAB-SH-720-T-SVR</td>
<td>PI 720mm Telescopic Shelf</td>
</tr>
<tr>
<td>CAB-SH-570-T</td>
<td>PI 570mm Telescopic Shelf</td>
</tr>
</tbody>
</table>

Available in Black, Light or Dark Grey and White.

➤ **PRISM ADJUSTABLE DEPTH SHELVES**

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAB-SH-ADJ</td>
<td>PI 1U Adjustable Depth Shelf</td>
</tr>
</tbody>
</table>

Available in Black, Light or Dark Grey and White.
RARITAN

Raritan is a proven innovator of power management solutions, DCIM software, and KVM-over-IP for data centres of all sizes. In over 76 countries and 50,000 locations worldwide, Raritan’s award-winning hardware and software solutions increase energy efficiency, improve reliability, and raise productivity.

Networks Centre is a stockist of Raritan PDUs and accessories ideal for all your power management, KVM and access needs. Discover the latest in technological control to aid power distribution in data servers, energy and IT devices. Raritan has a broad range of infrastructure management solutions for both domestic and commercial purposes.

➤ PX SERIES INTELLIGENT PDU’S

The PX Series of intelligent PDU’s simplify management of power usage and environmental conditions in the data centre. Raritan’s range of PDU’s offer hundreds of models to power all of your data centre applications, including models with outlet switching, individual outlet metering, high power for blade servers and high density applications, and 400V three-phase power distribution.

Providing real-time remote power monitoring, including current (amps), voltage, power (kVA, kW) and energy consumption (kWh) to +/- 1% accuracy. Compatible Raritan PDU’s are also sensor ready to support rack temperature and humidity monitoring.

PDView App

Turn your tablet or phone into a remote display. Raritan’s PDView app provides at-the-rack display of all critical data.

60°C (140°F) Max Temp

Although many data centres monitor cold aisle temperatures to provide optimal cooling for IT equipment, most rack PDUs are located at the rear of the rack where the exhaust temperatures from IT equipment are much higher.

Raritan’s intelligent PDU’s support a maximum operating temperature of up to 60°C / 140°F for reliable performance in dense high-heat environments so you can rest assured that they’ll continue to operate reliably in the harshest of conditions.

400V Three-Phase Model

We offer a broad range of 400V three-phase high power models that support up to 55kW per rack PDU. Running higher voltages at lower currents means smaller and fewer cables, which use less copper, weigh less, occupy less space, and cost less. Plugs and receptacles are also less expensive at higher voltages and lower current ratings, and additional savings are achieved by eliminating voltage transformations.

Camera

Built-in support for USB cameras allow you to remotely monitor your racks or take a snapshot when doors are opened.

Full Colour Chassis

In 2013 the average cost of downtime was an estimated $7,900 per minute with human error cited as a leading cause. Raritan’s intelligent PDUs are available in ten colours that help reduce errors, and make it easier to identify power feeds, and troubleshoot, thereby lowering the risk and duration of unplanned downtime.

*PX3 Series Only

Cascading

Easily cascade (daisy chain) multiple PDUs in a rack. Save money on IP drops, Ethernet ports, and patch ports.

Wi-Fi

Run out of network drops? No problem. With USB Wi-Fi, Raritan iPDUs can be networked without additional expense.

Quick Setup

Use ordinary USB sticks to configure hundreds of PDUs in mere minutes. Save big on deployment time and costs.

55kW

400V Three-Phase Model

rection of unplanned downtime.

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PX SERIES INTELLIGENT PDU’S

This is a small selection of our most popular lines. Call with your requirements.

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>RR-PX3-5493V</td>
<td>1PH, 230V AC, 32A, 24 Outlets: 20 x IEC C-13, 4 x IEC C-19, plug: IEC60309, 32A, 7.36kVA, Zero U vertical PDU, Ethernet, Serial, 2 x USB-A, USB-B and Sensor Connections</td>
</tr>
<tr>
<td>RR-PX2-1190R</td>
<td>1PH, 230V AC, 16A, 8 Outlets: IEC-C-13, input type: IEC C-20 plug: IEC60309-16A (PXI-E16AC19-2M), 3.68kVA, 1U Horizontal PDU, Ethernet, Serial, USB-A, USB-B and Sensor Connections</td>
</tr>
<tr>
<td>RR-PX3-5528V</td>
<td>3PH Wye, 400V AC, 32A, 24 Outlets: 15 x IEC C-13, 6 x IEC C-19, plug: IEC 60309 32A 3P+N+PE, 22.2kVA, Zero U Vertical PDU, Ethernet, Serial, 2 x USB-A, USB-B and sensor Connections</td>
</tr>
<tr>
<td>RR-PX2-3420</td>
<td>1PH, 100-240V AC, 16-32A, 4 lines, input type: 4 x AC terminal, Output type: 4 x AC terminal, 1U, Ethernet, Serial, USB-A, USB-B and sensor Connections USB-B and Sensor Connections</td>
</tr>
</tbody>
</table>

ENVIRONMENTAL SENSORS

Optional plug-and-play environmental sensors for temperature, humidity, airflow, differential air pressure and leaks connect to a dedicated PDU port & alert you to potential threats that can cause downtime. Contact closure sensors are also supported for use with third-party sensors, webcams, and door locks.

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>RR-DPX2-T1H1</td>
<td>1 Temperature 1 Humidity Sensor - RJ12 Connector - Replaceable Sensor Head - 4m Cable. Supported only in PX2 and PX3 products</td>
</tr>
<tr>
<td>RR-DPX-T2H2</td>
<td>Dual Combo Temperature and Humidity Sensors - 10ft (3m) Cable Length and Additional 10ft (3m) Between Combination Sensors - RJ-12 Connector</td>
</tr>
<tr>
<td>RR-DPX-T1DP1</td>
<td>Differential Air Pressure with Temperature Sensor</td>
</tr>
<tr>
<td>RR-DPX-T3H1</td>
<td>Combo of Three Temperature and One Humidity Sensors (T, T+H and T) - 10ft (3m) Cable Length and Additional 10ft (3m) Between Combi Sensors - RJ-12 Connector</td>
</tr>
</tbody>
</table>
Raritan’s hybrid rack transfer switch system is the first in the world to offer both electromechanical relays and silicon-controlled rectifiers (SCRs) to overcome the limitations of a traditional automatic transfer switch (ATS). It provides load transfer times that are comparable to that of a static transfer switch (STS), more energy, and at a far more accessible price point. It is also the first in the world to offer inlet, outlet, and branch circuit level power metering; and outlet-level switching for better remote power control.

Features:
► Current sampling at 4,800 times per second for load transfers within 4 to 8ms
► Oversized relays, rated at 48A, and SCRs, rated at 70A, even though the transfer switches are intended for 16A and 32A loads

► Relay contact air gap of 3.3mm vs. the 0.6mm gap used in most transfer switch relays on the market to prevent electric arcing
► Two single throw relays instead of one double throw relay (a single point of failure) to support reliable out-of-phase transfers
► Inlet, outlet, and branch circuit level metering
► Remote outlet switching

Raritan’s branch circuit meter (BCM) provides real-time views of electrical capacity and power usage on branch circuits, and mains, in an electrical service entrance or a remote power panel. Anytime a circuit’s current approaches a breaker’s limit, the BCM sends an alert that helps prevent potential problems.

► Measure on 3 mains lines and on 96 Branch circuits
► Instrument distribution systems where basic rack PDU’s are deployed
► Increase availability of power by preventing branch circuit overload
► Manage capacity of electric service panels or remote power panels
► Easily installed in existing environments [Retrofit]
► External environmental sensor support and up to 70 power meters
► Supports up to 32 external optional sensors
► Allocate costs to specific users, customers, and departments
► Complete, accurate view of branch circuit loading
► Web browser accessible
► CE, EAC rated

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<tr>
<th>Part No:</th>
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<tbody>
<tr>
<td>RR-PX3TS-1875R</td>
<td>1PH, 230V AC, 16A, 9 Outlets: 8 X IEC C-13, 1 x IEC C-19, Input: 2 x IEC 60309 16A, 3.3kVA, 1U Horizontal Transfer Switch, Ethernet, Serial, 2 x USB-A, USB-B and Sensor Connections</td>
</tr>
<tr>
<td>RR-PX3TS-1875CR</td>
<td>1PH, 230V AC, 16A, 9 Outlets: 8 X IEC C-13, 1 x IEC C-19, Input: 2 x IEC 60309 16A, 3.3kVA, 1U Horizontal Transfer Switch, Ethernet, Serial, 2 x USB-A, USB-B and Sensor Connections</td>
</tr>
<tr>
<td>RR-PX3TS-1469R</td>
<td>1PH, 230V AC, 32A, 20 Outlets: 16 X IEC C-13, 4 x IEC C-19, Input: 2 x IEC 60309 32A, 7.4kVA, 2U Horizontal Transfer Switch, Ethernet, Serial, 2 x USB-A, USB-B and Sensor Connections</td>
</tr>
<tr>
<td>RR-PX3TS-5191CR</td>
<td>1PH, 230V AC, 16A, 8 Outlets: 7x C13, 1x C19; Input: 2 x IEC C-20 Locking Plug: IEC C-20 (PXI-205-200-3M), 3.3kVA, Outlet Metered/ Switched, 1U Horizontal Transfer Switch, SecureLock Ready, Ethernet, Serial, 2x USB-A, USB-B and Sensor Connections</td>
</tr>
</tbody>
</table>

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<tr>
<th>Part No:</th>
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</tr>
</thead>
<tbody>
<tr>
<td>RR-BCM-2401-KIT-01</td>
<td>96 Channel Branch Circuit Meter Enclosure - Up to 415V 3Phase power metering with 16A Terminal input, Monitor 3Phase lines, Neutral &amp; Ground. Metering accuracy to 0.5%. Includes intelligent controller for remote access.</td>
</tr>
<tr>
<td>RR-BCM2-9610Y-GO</td>
<td>96 Channel Branch Circuit Meter Enclosure - Up to 415V 3Phase power metering with 16A Terminal input, Monitor 3Phase lines, Neutral &amp; Ground. Metering accuracy to 0.5%. No intelligent controller for remote access</td>
</tr>
<tr>
<td>RR-BCM2-250A-CT-3PK</td>
<td>3 x 250A Mains Split Core CT’s (Primary Current 5-250A, Max Current 360A)</td>
</tr>
<tr>
<td>RR-BCM2-60A-BCT-21PK</td>
<td>12 x 60A Branch Circuit Split Core CT’s (Primary current 1-60A, Max Current 120A)</td>
</tr>
</tbody>
</table>
**SECURELOCK – RACK PDU LOCKING POWER CORDS**

IEC outlets often fail to hold plugs as securely as data centre managers would like. Raritan’s PX intelligent rack power distribution units (iPDUs) are equipped with SecureLock outlets that work with standard power leads or lock when using SecureLock power leads to prevent cables from coming unplugged.

**Features:**
- Male connector automatically latches to Raritan SecureLock equipped rack iPDU outlets
- UL Listed (N. America)
- CE Listed (Europe / Int’l)
- 105ºC (221ºF) max temp

---

**HOW TO CREATE OUR SECURELOCK POWER CORD PART NUMBERS**

**Length:**
- 0.5 = 0.5 metres
- 1.0 = 1.0 metres
- 1.5 = 1.5 metres
- 2.0 = 2.0 metres
- 2.5 = 2.5 metres
- 3.0 = 3.0 metres
- 3.5 = 3.5 metres
- 5.0 = 5 metres

**Colour:**
- Leave Blank = Black
- K1 = Red
- K2 = Blue

**Connector Type:**
- C14C13 = IEC C13/C14
- C19C20 = IEC C19/C20
- C14C15 = IEC C14/C15

**Example:**
- **RR-SLC14C13-1.0M-6PK** = RARITAN SECURELOCK IEC CABLE, 1M LENGTH, BLACK, 17AWG, 1X IEC C14, 1 X IEC C14, PACK OF 6
ASSET MANAGEMENT SENSORS

Raritan’s Asset Management Tags (AMTs) and Asset Management Sensors (AMSs), provide data centre operators an accurate, automated, real-time inventory of all IT assets and their locations, down to the 1U level.
Integrates with Raritan’s data centre infrastructure management (DCIM) software to easily track assets, determine capacity in a number of areas, and manage adds, moves, or changes.

Why intelligent real-time asset management?

➤ Upward of 25% of IT assets go missing
➤ Know what you have and where it’s located?
➤ Detect asset moves, adds, changes
➤ Is your asset database (Configuration Management Database) accurate?
➤ How long does it take to do a physical inventory?
➤ Can you pass audits?

EMX SMART RACK CONTROLLER

The Raritan EMX is a central connection point for all of Raritan’s environmental sensors. The EMX smart rack controller offers up to eight sensor ports, eight feature ports for Raritan’s dynamic asset-tracking solution and eight RS-485 ports, all in a 1U form factor. Raritan’s rack monitoring solution helps data centre and facilities managers:

➤ Minimise the hours needed to track IT assets
➤ Ensure uptime by monitoring racks for possible hot spots
➤ Save on cooling costs by confidently raising data centre temperatures
➤ Maintain cabinet security with USB webcams and contact closure sensors (optional extra)
➤ Improve data centre uptime by receiving environment alerts
➤ Make strategic decisions on environmental design and modifications

<table>
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<tr>
<th>Part No:</th>
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<tbody>
<tr>
<td>RR-AMS-42</td>
<td>Asset Management Sensor Kit for 42U height rack</td>
</tr>
<tr>
<td>RR-AMS-45</td>
<td>Asset Management Sensor Kit for 45U height rack</td>
</tr>
<tr>
<td>RR-AMS-50</td>
<td>Asset Management Sensor Kit for 50U height rack</td>
</tr>
<tr>
<td>RR-AMS-100</td>
<td>100 pack of Intelligent Asset Management Tags</td>
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<tr>
<th>Part No:</th>
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</tr>
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<tbody>
<tr>
<td>RR-EMX2-111</td>
<td>Smart rack controller with 1 RJ-12 sensor port, 1 RJ45 feature port for AMS, 1 RJ45 RS-485 port, 1 USB-A port, 1 USB-B port, 1 RJ45 Ethernet port, 1 DB-9M console/modem, LCD display</td>
</tr>
<tr>
<td>RR-EMX2-888</td>
<td>Smart rack controller with 8 RJ-12 sensor ports, 8 RJ45 feature ports for AMS, 8 RJ45 RS-485 ports, 2 USB-A ports, 1 USB-B port, 1 RJ45 Ethernet port, 1 DB-9M console/modem, 2 contact closure, LCD display</td>
</tr>
</tbody>
</table>
DOMINION® KX II-101 - SINGLE PORT KVM-OVER-IP SWITCH

The Raritan Dominion KX II-101 is a single port, KVM-over-IP switch that provides the secure BIOS level IP access and control of a full-featured KVM-over-IP switch in an inexpensive, portable, non-blocking, palm-size package.

It’s perfect for branch offices, development test labs, and non-traditional environments like: Retail/point-of-sale displays, signage and kiosks; or temporary applications for conventions, construction, medical, and military applications.

Part No: RR-DKX2-101-V2  Description: Secure Single Port KVM-over-IP Switch

- Palm-size and highly portable, the Dominion KX II-101 V2 can be mounted vertically or horizontally on the side of a rack, making it ideal for small, remote locations with a limited number of servers
- Multiple Dominion KX II-101 V2 devices can be installed in a data centre, lab environment or remote offices to provide fully non-blocked, switchless access by any user to any server – even if the OS is unavailable – reducing downtime, MTTR and labour costs
- Dominion KX II-101 V2 features Absolute Mouse Synchronisation™, which reduces installation time and sets a new standard for mouse synchronisation
- Virtual media gives users the ability to transfer files for patches and upgrades from any location, speeding up the upgrade process and reducing travel costs
- Dominion KX II-101 V2 also provides a greater level of security than other remote access methods, feature-rich management functionality and the highest quality video available, all over an IP network

DOMINION® LX - KVM-OVER-IP FOR SMALL TO MIDSIZE BUSINESSES

Dominion® LX is Raritan’s affordable KVM-over-IP switch that provides IT managers in small and midsize business (SMB) environments with local and remote BIOS-level server management in 8 port and 16 port switches (expandable to 256 servers with tiering).

It’s ideal for small to midsize businesses looking for a small footprint and reliability with affordability

- Efficient, reliable server management
- Economical, secure remote access from anywhere
- Economical footprint
- Efficient server diagnostics and restore capabilities
- Reduced travel time and training costs
- Single switch to support VGA, DVI, HDMI and DisplayPort server video
- Cable package options for a minimum initial investment

Part No: RR-DLX-108  Description: 8 Port KVM over IP Switch, 1 remote, 1 local user, virtual media, single power & single LAN

Part No: RR-DLX-116  Description: 16 Port KVM over IP Switch, 1 remote, 1 local user, virtual media, single power & single LAN

Part No: RR-DLX-216  Description: 16 Port KVM over IP Switch, 2 remote, 1 local user, virtual media, single power & single LAN
DOMINION® KX III USER STATION

The Dominion® KX III User Station is a standalone appliance for high performance IP access to servers connected to Dominion® KX III switches. It can sit on a desk, be mounted in a standard 19" rack, or VESA-mounted on the back of a monitor. Deploy it using standard Cat5e cabling and Ethernet/IP technology. Simultaneously access, view, and control multiple servers, spread across single or dual monitors. The User Station can replace outdated analogue matrix switches, replace/supplement expensive, inflexible broadcast systems or be deployed anywhere hassle-free IP access is needed. It’s perfect for broadcast labs, studios, control rooms, offices, and data centres.

<table>
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<tr>
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<tbody>
<tr>
<td>RR-DSX3-USER</td>
<td>Standalone appliance for high performance IP access to servers connected to the Dominion KXIII switches. Desk, rack (optional 1U bracket) or VESA mounted on back of monitor</td>
</tr>
</tbody>
</table>

DOMINION® KX III SWITCH

The Dominion KX III is Raritan’s flagship enterprise-class KVM-over-IP switch. It provides 1, 2, 4 or 8 users with BIOS-level remote management of 8, 16, 32 or 64 servers in a single switch. It’s perfect for Server Rooms, Test Labs, and Large Enterprise Data Centres. The KX III switch offers high performance web-based remote management of servers, storage, and network devices. The KX III can be deployed individually, or centralised with Raritan’s CommandCenter Secure Gateway.

With standard features such as DVI/HDMI/DisplayPort digital video, VGA analogue video, audio, virtual media, smart card/CAC, and mobile access, the Dominion KX III switch is suitable for both general computer and dynamic broadcast applications when used in conjunction with the KXIII User Station.

<table>
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<th>Part No:</th>
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<tbody>
<tr>
<td>RR-DKX3-XX</td>
<td>Enterprise-class KVM-over-IP switch providing 1 to 8 users with remote BIOS-level server control of 8 to 64 servers with DVI/HDMI/DisplayPort digital and analog video, audio, virtual media, smart card/CAC, blade server support, and mobile access</td>
</tr>
</tbody>
</table>

X = Number of Users (1,2,4,8)  
XX = Number of Ports (08,16,32,64)

DOMINION® SX II - NEXT GENERATION SERIAL CONSOLE SERVER

The Dominion SX II is Raritan’s next-generation serial console server / terminal server. It provides serial-over-IP access and control of devices, anytime, anywhere. It’s the most powerful, secure, reliable, and easy-to-use console server on the market. Enjoy unrivaled control over servers, networking devices, security appliances, rack PDUs, virtual hosts, and wireless / telecom equipment.

The SX II supports the widest variety of serial-over-IP connections via SSH/Telnet Client, web-browser, CommandCenter, telephony modem, cellular modem, and at-the-rack access. Raritan offers thirteen different 1U appliances to connect to 4, 8, 16, 32 or 48 serial devices. All models have dual power supplies (AC or DC) and dual Gigabit Ethernet LAN ports.

<table>
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<tr>
<th>Part No:</th>
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<tbody>
<tr>
<td>RR-DSX2-4</td>
<td>4 Port Serial Console Server with Dual Power AC and Dual Gigabit LAN</td>
</tr>
<tr>
<td>RR-DSX2-8</td>
<td>8 Port Serial Console Server with Dual Power AC and Dual Gigabit LAN</td>
</tr>
<tr>
<td>RR-DSX2-16</td>
<td>16 Port Serial Console Server with Dual Power AC and Dual Gigabit LAN</td>
</tr>
<tr>
<td>RR-DSX2-32</td>
<td>32 Port Serial Console Server with Dual Power AC and Dual Gigabit LAN</td>
</tr>
<tr>
<td>RR-DSX2-48</td>
<td>48 Port Serial Console Server with Dual Power AC and Dual Gigabit LAN</td>
</tr>
</tbody>
</table>

➤ Powerful 1GHz CPU engine, with an 8-fold increase in RAM  
➤ 4, 8, 16, 32 and 48 port 1U secure appliances (optional telephone modem)  
➤ Flash memory, up to 8 GB, for storage and logging  
➤ Dual power supplies and dual gigabit Ethernet LAN ports, with automatic failover
DCIM is a new class of software that gives data centre operators the ability to run efficient data centre operations. It provides the ability to better manage assets, change and capacity. DCIM software also enables power monitoring, environmental monitoring and energy management.

➤ **DC TRACK - DCIM SOFTWARE**

Sunbird’s DCIM Operations software, dcTrack® is an award-winning, easy-to-use data centre infrastructure management (DCIM) solution that provides real-time information about your power, networks and IT equipment. It offers a visual mapping of your infrastructure and helps you to manage the physical provisioning of IT equipment, improve capacity planning, and keep track of data centre space, power, data connectivity and their relationships to IT equipment, applications and services.

**Capacity Management**
Sunbird’s dcTrack DCIM Solution provides you with complete and accurate views of capacity, including physical space, power and network ports available in racks, plus the capacity of infrastructure devices like UPSs, CRACs, and circuit panels. With a centralised database that includes all connection and capacity information, you no longer need to run back and forth to the data centre.

**Power and Energy Management**
Seamless integration with Power IQ, Sunbird’s DCIM software for complete data centre power monitoring. Power IQ provides a clear picture of available power, energy and environmental trends and helps operators to improve data centre energy efficiency.

**Asset Management**
Accurate real-time views of your entire data centre including servers, storage, networking equipment, rack PDUs, patch panels and applications. See floor PDUs, branch circuit panels, UPSs and CRAC units. Map physical relationships between all of these devices and see how the entire power and network chain in the data centre is connected down to the port level.

**Change Management**
Powerful and intelligent tools for workflow automation enable you to generate change requests, automate device moves, and maintain a complete audit trail of requests and work orders for compliance. It enables you to maintain best practices, improve operational efficiency, and people productivity.
POWER IQ - DCIM MONITORING SOFTWARE

Sunbird's DCIM Monitoring Software, Power IQ®, enables data centre and facility managers to closely monitor and efficiently utilise their existing data centre power infrastructure. Data centre health maps, power analytics, cooling charts and reports provide the tools to alert you to potential trouble and understand real-time power load, trends, and capacity at all levels of infrastructure. A configurable dashboard provides vendor agnostic views of power capacity, environmental health and energy consumption.

Environment Management
Power IQ offers a complete environmental management solution that not only helps you identify potential trouble areas, but also helps you save energy and maintain a safe environment for your IT equipment. Our DCIM monitoring solution combines the power of Raritan’s PX® intelligent rack PDUs or EMX environment appliance designed to work with Raritan’s plug-and-play environment sensors – temperature, humidity, air flow and air pressure. See trends, get alerts, save energy, and increase uptime.

Vendor Agnostic Management
Through one Web browser, the scalable Power IQ DCIM monitoring software manages any SNMP-metered device. You have the ability to add new devices on your own. Support is preinstalled and tested for APC®, Avocent®, Cyber Switching®, Cyclades®, Eaton, Geist, HP®, Knurr®, Liebert, MRV®, NetBotz, Raritan, Rittal®, Server Technology®, Sinetica, Starline Track Busway, Tripp Lite and UNITE™ devices. Dynamic plugins provide added support for other manufacturer CRAC units, Floor PDU, Floor UPS, Power panel, Rack PDU, and standalone meters.

Energy Management
Understand what is drawing energy in your facility and find ways to save – while maintaining a safe environment for your IT equipment. With built in ASHRAE cooling charts and Smart Rack views, Power IQ monitors and measures all the energy usage in your facility including building meters, UPS’s, Floor PDU’s, RPP’s, busways, intelligent rack PDU’s, Branch Circuits, and CRACS. Increase data centre temperature without risk, calculate Green Grid’s PUE Level 1, 2 and 3, and drive your green data centre and sustainability initiatives with bill-back reports.

Power Management
See how much power you’re using at a moment’s notice, down to individual servers, when coupled with PX® intelligent rack PDUs with individual outlet metering. Our enterprise class power monitoring software has been battle-tested in some of the largest data centres in the industry. An intuitive configurable dashboard provides power utilisation trends and capacity across your power chain, locates stranded power, and improves data centre uptime.
Ensuring the availability of high-quality power for critical applications.

With its wide range of continuously evolving products, solutions and services, Socomec are recognised experts in the cutting-edge technologies used for ensuring the highest availability of the electrical power supply to critical facilities and buildings, including:

➤ Static uninterruptible power supplies (UPS) for high-quality power free of distortions and interruptions occurring on the primary power supply
➤ Changeover of static, high availability sources for transferring the supply to an operational back-up source
➤ Permanent monitoring of the electrical facilities to prevent failures and reduce operating losses
➤ Energy storage for ensuring the proper energy mix of buildings and for stabilisation of the power grid

➤ **STEPWAVE UPS**

➤ Single phase input/output range.
➤ This Socomec UPS System has battery, 4+2 output, BS STD Socket, 1xUSB and mobile device charging.
➤ The 800VA/480W & 600VA/360W UPS comes standard with USB ports.
➤ The Socomec UPS System is available with an overload and deep discharge functionality.
➤ The device includes short circuit protection.
➤ The Socomec UPS is designed for cash registers, interactive terminals and PCs.
➤ Compatible with LCD or CRT monitors, scanners and printers.
➤ Networks centre is a premier UPS supplier of Socomec solutions including Line Interactive and Online UPS devices.

➤ **NETYS PE SERIES 600-2000 VA UPS**

From 600 to 2000 VA. Practical and cost-effective UPS

**The solution for**

➤ **CAD, graphic workstations**
➤ **Multimedia workstations and peripherals**
➤ **LCD screens and monitors**
➤ **POS (Points of Sale)**

**Advantages**

➤ Ideal and cost-effective protection for SOHO or POS applications
➤ Adapted to protect IT applications in home, office and retail environments.
➤ A complete range of six models to adapt the power to the equipment’s consumption or to required back-up time.

**Easy to use**

➤ Control panel with graphical icons LCD / LEDs allowing the operating mode to be easily monitored.

<table>
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<tbody>
<tr>
<td>SOC-NPL-0800-B</td>
<td>Socomec 800VA/480W 230V 50/60HZ Stepwave Offline UPS</td>
</tr>
<tr>
<td>SOC-NPL-0600-B</td>
<td>Socomec 600VA/360W 230V 50/60HZ Stepwave Offline UPS</td>
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</tbody>
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<tr>
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</thead>
<tbody>
<tr>
<td>SOC-NPE-0850</td>
<td>850VA/480W 230v 50/60HZ Battery Included with AVR, Stepwave Plugs Protected RJ45, 1 x USB</td>
</tr>
<tr>
<td>SOC-NPE-1000-LCD</td>
<td>1000VA/600W 230v 50/60HZ Battery Included with AVR, Stepwave, LCD Plugs Protected RJ45, 1 x USB</td>
</tr>
<tr>
<td>SOC-NPE-1500-LCD</td>
<td>500VA/300W 230v 50/60HZ Battery Included with AVR, Stepwave, LCD Plugs Protected RJ45, 1 x USB</td>
</tr>
<tr>
<td>SOC-NPE-2000-LCD</td>
<td>2000VA/1200W 230v 50/60HZ Battery Included with AVR, Stepwave, LCD Plugs Protected RJ45, 1 x USB</td>
</tr>
</tbody>
</table>
NETYS PR SERIES RACK TOWER 1700 TO 3300 VA UPS

- From 1700 to 3300 VA - Rack/Tower
- Versatile, convertible high performance UPS

The solution for
- Professional and IT equipment
- Servers and networking devices
- CAD/ Graphic workstations with monitors and peripherals
- Control systems

Advantages
- A secure and professional supply continuity
- Ideal solution for protecting small servers, networking devices and peripherals
- Assures service continuity to critical applications
- Designed for professional applications: the sine wave inverter technology assures full compatibility with any kind of load and power supply

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<tbody>
<tr>
<td>SOC-NPR-1700-RT</td>
<td>1700VA/1350w 230v 50/60HZ with AVR, Sinewave, LCD Plugs Protected RJ45, 1XUSB, 1XRS232 Battery Included</td>
</tr>
<tr>
<td>SOC-NPR-2200-RT</td>
<td>2200VA/1800w 230v 50/60HZ with AVR, Sinewave, LCD Plugs Protected RJ45, 1XUSB, 1XRS232 Battery Included</td>
</tr>
<tr>
<td>SOC-NPR-3300-RT</td>
<td>3300VA/2700w 230v 50/60HZ with AVR, Sinewave, LCD Plugs Protected RJ45, 1XUSB, 1XRS232 Battery Included</td>
</tr>
</tbody>
</table>

NETYS RT SERIES 1.1 TO 11 KVA UPS

Easy to use
- No configuration necessary on first startup
- Wide range of communication protocols for integration into LAN networks or Building Management Systems (BMS)
- Clear LED interface with buzzers that immediately indicate the operating status of the UPS, even for less specialist users (1100 - 3000 VA)
- LCD display with menu available in 6 languages (5000-11000 VA)

Meets practical needs
- Online double conversion technology with sinusoidal waveform, completely filters out all disturbances from / to the mains power supply and ensures maximum protection of the utility
- Modular battery extension (EBM) to meet all back-up time requirements, even after installation
- Possibility of 1+1 parallel redundant configuration to maximise the availability of critical utilities, even in the event of a module breakdown (5000 - 11000 VA)

<table>
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<tr>
<th>Part No:</th>
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<tbody>
<tr>
<td>SOC-NRT-U1700</td>
<td>1700VA/1200w 230v 50/60HZ On-Line Double Conversion (VF) tel line protection, 1XUSB, 1XRS232 Battery Included</td>
</tr>
<tr>
<td>SOC-NRT-U2200</td>
<td>2200VA/1600w 230v 50/60HZ On-Line Double Conversion (VF) tel line protection, 1XUSB, 1XRS232 Battery Included</td>
</tr>
<tr>
<td>SOC-NRT-U3000</td>
<td>3000VA/2100w 230v 50/60HZ On-Line Double Conversion (VF) tel line protection, 1XUSB, 1XRS232 Battery Included</td>
</tr>
<tr>
<td>SOC-NRT2-7000K</td>
<td>7000VA/5400w 230v 50/60HZ On-Line Double Conversion (VF) built-in web/ snmp, 1XRS232 Battery Included</td>
</tr>
</tbody>
</table>

➤ Simple to install
- IEC input and output connections (1100-3000 VA) or terminal input and output connections with built in magneto thermal input switch (5000-11000 VA).
- Compact footprint for installation in rack cabinets.
- Attractive design.
NETYS PR SERIES RACK VERSION - 1000 TO 1500 VA UPS

Applications
- Professional and IT equipment
- Servers and networking devices
- CAD / graphic workstations with monitors and peripherals
- Control systems

A professional UPS
- Designed for professional environments, protection against power cuts and over voltage is ensured by Line Interactive technology with Automatic Voltage Regulation (AVR)

Installation adapted to the networking environment
- NETYS PR rack provides high power density (1U - 45 mm) which conserves valuable space in the rack for other equipment
- Can be easily installed in 19" and 23" Rack cabinets, depending on the user’s needs. The UPS is provided with rails and mounting accessories

Part No: Description:
SOC-NET-1500-PR-1U 1500VA/1000w 230v 50/60HZ with AVR, Sinewave Plugs Protected RJ45, 1XUSB, 1XRS232 Battery Included 1U Rack Version

NETYS PR SERIES MINI TOWER - 1000-2000 VA UPS

The solution for
- Professional and IT equipment
- Servers and networking devices
- CAD/ Graphic workstations with monitors and peripherals
- Control systems

Professional Line Interactive UPS
- Ideal solution for protecting small servers and high performance CAD or graphic workstations
- Assures service continuity to critical applications
- Designed for professional applications: the sinewave inverter technology assures full compatibility with any kind of load and power supply
- Mini tower case to easily fit close to the IT load to be supplied and protected

Solution for network power cuts and fluctuations
- The integrated AVR function (Automatic Voltage Regulation) stabilizes the output voltage and avoids the switching to Battery Mode operation, therefore saving the battery to support critical power cut events

Part No: Description:
SOC-NPR-1000-MT 1000VA/700w 230v 50/60HZ with AVR, Sinewave, LCD Plugs Protected RJ45,USB Battery Included
SOC-NPR-1500-MT 1500VA/1050w 230v 50/60HZ with AVR, Sinewave, LCD Plugs Protected RJ45, USB Battery Included
SOC-NPR-2000-MT 2000VA/1400w 230v 50/60HZ with AVR, Sinewave, LCD Plugs Protected RJ45, USB Battery Included
Every data centre is unique, reflecting the needs of each individual business. Data centres continually change to serve shifting priorities, applications and advancing computing technologies. Selecting the correct power protection solution is critical to ensuring the flexibility and scalability needed for data centre growth. That’s why Eaton is focused on providing the power solutions for enterprise and business information technology (IT) systems, from network closets to large data centres.

The latest range of Eaton UPS delivers the security Eaton products are known for but at the reduction in energy usage and cost to meet your needs:

**EATON 5P UPS (650-1550 VA)**

The Eaton 5P is the next generation of 650VA-1550VA line-Interactive UPS with advanced LCD and energy metering feature. 5P is the perfect UPS to protect IT & networking devices such as servers, switches, routers and storage devices, in tower or rack format.

- Next-generation graphical LCD display (7 languages)
- Energy efficient (up to 98% efficiency)
- Energy metering
- Advance Battery Management (ABM)
- Switched outlet groups
- Sinewave output
- Wide communication offer (compatible with virtual environment)
- 3 years warranty on electronics, 2 years on batteries

<table>
<thead>
<tr>
<th>Part Number</th>
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<th>Run Time 100%/ 50% 0.7pf</th>
<th>Power Rating VA / Watts</th>
<th>Input plug</th>
<th>Output sockets</th>
</tr>
</thead>
<tbody>
<tr>
<td>ETN-5P650I</td>
<td>Eaton 5P 650i</td>
<td>9/6 MIN</td>
<td>650 / 420</td>
<td>C14</td>
<td>(4) C13</td>
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<td>ETN-5P850I</td>
<td>Eaton 5P 850i</td>
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<td>850 / 600</td>
<td>C14</td>
<td>(6) C13</td>
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<tr>
<td>ETN-5P1150I</td>
<td>Eaton 5P 1150i</td>
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<td>1150 / 770</td>
<td>C14</td>
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<td>850 / 600</td>
<td>C14</td>
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<td>ETN-5P1150IR</td>
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<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
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<tbody>
<tr>
<td>Eaton 5P Accessories</td>
<td></td>
</tr>
<tr>
<td>ETN-NETWORK-MS</td>
<td>Eaton Network Management Card</td>
</tr>
<tr>
<td>ETN-MBP3KIB</td>
<td>Eaton HotSwap MBP BS</td>
</tr>
<tr>
<td>ETN-MBP3KI</td>
<td>Eaton HotSwap MBP IEC</td>
</tr>
<tr>
<td>ETN-MBP3KIH</td>
<td>Eaton HotSwap MBP HW</td>
</tr>
</tbody>
</table>
EATON 5PX UPS (650-1550 VA)

Combining extended runtime capabilities and exceptional efficiency, the Eaton 5PX UPS is a powerful enterprise class backup solution. It provides line-interactive backup power and scalable runtimes for servers, storage systems, VoIP gear and network equipment. With a next-generation intuitive LCD display, energy consumption metering down to the outlet group level, and up to 99% efficiency, the 5PX is the perfect UPS to protect modern IT equipment.

- Available in a rack/tower convertible version – pedestal and rail kits included.
- Fully integrates with Intelligent Power Software Suite
- Stronger, longer battery life: Eaton ABM battery management technology only recharges the battery when necessary. Service life is prolonged by up to 50%.
- Hot-swappable batteries. Optional, hot-swap maintenance bypass module to replace the entire UPS.
- Add more runtime with up to four external hot-swappable battery modules (EBM’s).
- Advanced integration with virtualization platforms from VMware, Citrix, Red Hat and Microsoft
- Full array of communications capabilities with bundled network card
- Optimum protection for NetApp and Cisco ExpressPod converged infrastructure platform
- 3 years warranty on electronics, 2 years on batteries

<table>
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<tr>
<th>Part Number</th>
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<th>Run Time 100%/ 50% 0.7pf</th>
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<th>Output sockets</th>
</tr>
</thead>
<tbody>
<tr>
<td>ETN-5PX1500IRTN</td>
<td>Eaton 5PX 1500VA Netpack*</td>
<td>11/9</td>
<td>1500 / 1350</td>
<td>C14</td>
<td>(8) C13</td>
</tr>
<tr>
<td>ETN-5PX3000IRTN</td>
<td>Eaton 5PX 3,000VA Netpack*</td>
<td>14/9</td>
<td>3000 / 2700</td>
<td>C20</td>
<td>(8) C13, (1) C19</td>
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</tbody>
</table>

*Network Card included in Netpack version

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
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<tbody>
<tr>
<td>Battery Packs</td>
<td></td>
</tr>
<tr>
<td>ETN-5PXEBM48RT</td>
<td>Eaton 5PX 1500VA &amp; 2200VA EBM</td>
</tr>
<tr>
<td>ETN-5PXEBM72RT3U</td>
<td>Eaton 5PX 3000VA EBM 3U</td>
</tr>
<tr>
<td>ETN-5PXEBM72RT2U</td>
<td>Eaton 5PX 3000VA EBM 2U</td>
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</tbody>
</table>

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<tr>
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<tr>
<td>ETN-NETWORK-MS</td>
<td>Eaton Network Management Card</td>
</tr>
<tr>
<td>ETN-MBP3KIB</td>
<td>Eaton HotSwap MBP BS</td>
</tr>
<tr>
<td>ETN-MBP3KI</td>
<td>Eaton HotSwap MBP IEC</td>
</tr>
<tr>
<td>ETN-MBP3KIH</td>
<td>Eaton HotSwap MBP HW</td>
</tr>
<tr>
<td>ETN-EMP001</td>
<td>EMP Environmental Monitoring Probe</td>
</tr>
</tbody>
</table>
**EATON 9PX UPS (3kVA – 11kVA)**

The Eaton 9PX UPS provides energy-efficient power protection for small & medium data centres, IT rooms and infrastructure. Delivering double conversion protection with 40% less energy usage and 28% more power, the 9PX is the perfect UPS for IT and Facilities managers that are concerned by energy cost and are looking for next generation power protection solutions.

- **Efficient**: First in class with Unity Power Factor. Monitors power conditions constantly maintaining and regulating voltage and frequency.
- **Compact**: Compact rack/tower versatile form factor, delivering up to 5.4Kw in only 3U and 10Kw in only 6U.
- **Reliability**: With extended battery runtime options, hot-swappable batteries, internal bypass and optional maintenance bypass, the 9PX maximizes the availability of your IT systems.
- **More power**: The 9PX allows you to connect more devices by providing up to 28 percent more wattage compared to traditional UPSs.
- **3 years warranty on electronics, 2 years on batteries**

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<th>Power Rating VA / Watts</th>
<th>Input plug</th>
<th>Output sockets</th>
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<tbody>
<tr>
<td>UPS - 9PX RACK</td>
<td>Eaton 9PX 3000i RT2U Netpack*</td>
<td>9.5/3.0</td>
<td>3000 / 3000</td>
<td>C20</td>
<td>8 X C13 &amp; 2 X C19</td>
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<tr>
<td><strong>ETN-9PX3000IRTN</strong></td>
<td><strong>Eaton 9PX 5000i HotSwap</strong></td>
<td>13/10</td>
<td>5000 / 4500</td>
<td>1PH HARDWIRED</td>
<td>TB, (4) C13, (2) C19*</td>
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<td><strong>ETN-9PX5KIBP</strong></td>
<td><strong>Eaton 9PX 5000i RT3U Netpack</strong></td>
<td>13/10</td>
<td>5000 / 4500</td>
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<tr>
<td><strong>ETN-9PX5KIRTN</strong></td>
<td><strong>Eaton 9PX 6000i HotSwap</strong></td>
<td>11/8</td>
<td>6000 / 5400</td>
<td>1PH HARDWIRED</td>
<td>TB, (4) C13, (2) C19*</td>
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<tr>
<td><strong>ETN-9PX6KIBP</strong></td>
<td><strong>Eaton 9PX 6000i RT3U Netpack</strong></td>
<td>11/8</td>
<td>6000 / 5400</td>
<td>1PH HARDWIRED</td>
<td>TB, (4) C13, (2) C19</td>
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<tr>
<td><strong>ETN-9PX6KIRTN</strong></td>
<td><strong>Eaton 9PX 8000i HotSwap</strong></td>
<td>20/15</td>
<td>8000 / 7200</td>
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<td>1PH HARDWIRED**</td>
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<tr>
<td><strong>ETN-9PX8KIBP</strong></td>
<td><strong>Eaton 9PX 8000i RT6U HotSwap Netpack</strong></td>
<td>20/15</td>
<td>8000 / 7200</td>
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<td><strong>ETN-9PX8KIRTNBP</strong></td>
<td><strong>Eaton 9PX 11000i HotSwap</strong></td>
<td>13/9</td>
<td>11000 / 10000</td>
<td>1PH HARDWIRED</td>
<td>1PH HARDWIRED**</td>
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**Battery Packs**

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<tbody>
<tr>
<td><strong>ETN-9PXEBM72RT2U</strong></td>
<td>Eaton 9PX EBM 72V RT2U 2.2kVA &amp; 3kVA</td>
</tr>
<tr>
<td><strong>ETN-9PXEBM72RT3U</strong></td>
<td>Eaton 9PX EBM 72V RT3U 2.2kVA &amp; 3kVA</td>
</tr>
<tr>
<td><strong>ETN-9PXEBM180</strong></td>
<td>Eaton 9PX EBM 180V 6kVA &amp; 6kVA</td>
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<tr>
<td><strong>ETN-9PXEBM240</strong></td>
<td>Eaton 9PX EBM 240V 8kVA &amp; 11kVA</td>
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</table>

**Eaton 9PX Accessories**

<table>
<thead>
<tr>
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</tr>
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<tbody>
<tr>
<td>Eaton Network Management Card</td>
</tr>
<tr>
<td>EMP Environmental Monitoring Probe</td>
</tr>
</tbody>
</table>

* when Hotswap Maintenance Bypass is used Outputs are: Terminal block + 3 x C13 & 2 x C19
** when Hotswap Maintenance Bypass is used Outputs are: Terminal block + 4 x C19

Netpack Versions include Network-MS card and Rail Kit
HotSwap versions include HotSwap MBP, but no rail kit
HotSwap Netpack Versions includes HotSwap MBP Network-MS card and Rail Kit
EATON EPDU G3 PLATFORM

The ePDU G3 platform is designed to provide reliable, cost effective power distribution together with highly accurate monitoring and control for IT equipment in the data centre. This Industry-leading platform enables you to:

➤ Reliably distribute power to your IT equipment
➤ Accurately meter and control power consumption
➤ See where you have available power and are most efficient
➤ Choose the level of metering to provide the level of information that you require
➤ Choose equipment switching to allow remote data centre control

<table>
<thead>
<tr>
<th>Part Number</th>
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<tbody>
<tr>
<td>IP Metered Output IEC G3</td>
<td>ePDU: Metered Outlet IEC, zero U. In: C20 16A 1P - Out C13 (20) : C19 (4)</td>
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<tr>
<td>ETN-EMOB22</td>
<td>ePDU: Metered Outlet IEC, zero U. In: IEC 32A 1P - Out C13 (20) : C19 (4)</td>
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<tr>
<td>ETN-EMOB05</td>
<td>ePDU: Metered Outlet IEC, zero U. In: IEC 32A 1P - Out C13 (20) : C19 (4)</td>
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<tr>
<td>IP Switched IEC G3</td>
<td>ePDU: Switched IEC, zero U. In: C20 16A 1P - Out C13 (20) : C19 (4)</td>
</tr>
<tr>
<td>ETN-ESWB22</td>
<td>ePDU: Switched IEC, zero U. In: IEC 32A 1P - Out C13 (20) : C19 (4)</td>
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<tr>
<td>ETN-ESWB05</td>
<td>ePDU: Switched IEC, zero U. In: IEC 32A 1P - Out C13 (20) : C19 (4)</td>
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<tr>
<td>IP Managed IEC G3</td>
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<tr>
<td>ETN-EMAB22</td>
<td>ePDU: Managed IEC, zero U. In: IEC 32A 1P - Out C13 (20) : C19 (4)</td>
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<tr>
<td>ETN-EMAB05</td>
<td>ePDU: Managed IEC, zero U. In: IEC 32A 1P - Out C13 (20) : C19 (4)</td>
</tr>
</tbody>
</table>

EATON ATS - POWER SOURCE TRANSFER SWITCH

Eaton ATS are designed to provide power supply redundancy for single connection equipment. With ATS, power from two independent sources can be supplied to IT equipment, which have only one input power supply.

➤ The ATS 16 Netpack and ATS 30 provide network connectivity.
➤ Metering and basic configuration capabilities are possible through ATS 16’s LCD.
➤ Input connections (2 x IEC C20)
➤ Outputs (8 x IEC C13 + 1 x IEC C19)
These advances have reduced the time to certify each cable link to just a few seconds. Faster testers have certainly shaved costs required for cable installers to test and certify their work. Still, there are additional steps in any installation that consume valuable time, which ultimately translate to additional costs.

Savvy business owners and test device providers now realize there are more opportunities to reduce time spent for many test-related functions, helping cable operators to reap new profits in the process.

The old adage, “Time is Money” applies in a big way to cable testing.

Over the last 20 years, the enterprise cabling installation industry has benefitted from advances in testing and certification tools and technologies.

**Since we Got Smart and deployed Versiv™ and Linkware™ Live...**

**Life is Easy!**

DOWNLOAD the new “How to increase profits in cable installations? Save time.” White Paper.
Scan the QR Code to find out...
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### CUTTERS

#### RIPLEY FIBRE OPTIC KEVLAR CUTTER

- Designed to cut Kevlar strength members in fibre optic cables
- Powerful quick cutting action
- Full serrated edge for consistent, fast and clean cuts
- Lightweight and compact
- Return spring designed for precise repeated cuts
- Ergonomic handles with cushioned non-slip grips
- Made of high carbon steel specially treated for long life and trouble free cuts

<table>
<thead>
<tr>
<th>Part No:</th>
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<tbody>
<tr>
<td>TO-FOKC</td>
<td>Kevlar Cutters</td>
</tr>
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</table>

#### CABLE CUTTER FOR COPPER & FIBRE

- Used for cutting fibre and copper cables
- Curved blade design enhancing cutting action and prevents cable from crushing
- Can be locked shut to help protect blades

<table>
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<tr>
<th>Part No:</th>
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<tbody>
<tr>
<td>TO-HT-206</td>
<td>Cable Cutter for Copper and Fibre up to 10.5mm</td>
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</table>

#### PRECISE COPPER WIRE SIDE CUTTER

- Precision cutter for copper cables
- The blades will enable copper cores to be trimmed accurately and flush

<table>
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<tr>
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<tbody>
<tr>
<td>TO-HT-222</td>
<td>Precise Electrical Wire Side Cutter</td>
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</table>

#### KEVLAR SCISSORS

- Hardened steel Kevlar scissors with serrated edge blade for efficient removal of Kevlar from cables

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<tr>
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<tbody>
<tr>
<td>TO-HT-C151</td>
<td>Kevlar Scissors</td>
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</table>
STRIPPERS

➤ JACKET STRIPPING AND SLITTING TOOL

- Jacket slitting and ringing tool for 4.5mm to 25mm diameter cables.
- Adjustable height cutting blade for different sheath thickness
- Cuts horizontally and longitudinally for end or mid-span jacket removal

<table>
<thead>
<tr>
<th>Part No:</th>
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<tbody>
<tr>
<td>TO-HT-325</td>
<td>Jacket Stripping and Slitting Tool 4.5mm to 25mm</td>
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</table>

➤ TRI-HOLE BUFFER STRIPPER

- Tri-Hole fibre stripper ideal for use in fibre preparation
- Precision cutting blades for 2-3mm jacket cable, 900um buffer and 250um buffer
- Comfortable handles and a lock for the protection of the blades

<table>
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<tbody>
<tr>
<td>TO-HT-S144H</td>
<td>Tri-hole Buffer Stripper for 250um-900um-3mm</td>
</tr>
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</table>

➤ PEG STRIPPER

- Peg style universal stripping tool with adjustable blade for cables of 3.2mm to 9mm
- Includes cutting blade for copper cables and dual cutting blade ideal for duplex cable

<table>
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<th>Description:</th>
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<tbody>
<tr>
<td>TO-HT-S501B</td>
<td>Peg Stripper 3.5mm to 9mm, Duplex Cable Stripper, Cable Cutter</td>
</tr>
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</table>
MILLER FIBRE OPTIC STRIPPING TOOL

For stripping 250 micron buffer coating from 125 micron optical fibre
- Precision diameter hole and V-opening in blade allows for accurate buffer coating removal
- Factory set, requires no adjustment
- Prevents scratching or nicking of optical fibre
- All cutting surfaces are precision formed, hardened, tempered and ground, assuring precise buffer removal

<table>
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<tbody>
<tr>
<td>TO-FO-103-S</td>
<td>Miller Fibre Optic Stripper FO-103-S (80355)</td>
</tr>
<tr>
<td>TO-FO-103-T-250-J</td>
<td>Miller Tri-Hole Stripper</td>
</tr>
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</table>

CRIMPERS

CRIMP TOOL

Rugged Crimp Tool for most standard fibre optic connectors including LC, SC, ST and FC
- It has a ratchet mechanism ensuring a good quality consistent crimp is performed with every operation

<table>
<thead>
<tr>
<th>Part No:</th>
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<tbody>
<tr>
<td>TO-HT-336J</td>
<td>Crimp Tool for ST-SC-FC-LC</td>
</tr>
</tbody>
</table>

RJ45 CRIMPING TOOL

Rugged crimp tool for RJ45, RJ11 and RJ12 style plugs
- Ratchet mechanism to ensure a good quality consistent crimp is performed with every operation

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<tbody>
<tr>
<td>TO-HT-568R</td>
<td>RJ45 Crimping Tool with Cutter</td>
</tr>
</tbody>
</table>
➤ **CLEAVING PLATE**

- Used for removing the fibre sprig during connector terminations
- Made from ceramic
- Dimensions 50mm square
- Two sides ground down to form cutting edge
- Supplied with plastic guard to protect cutting edge

<table>
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<tr>
<td>CP-UNI</td>
<td>Ceramic Fibre Cleave Plate (stripper F780-136-000)</td>
</tr>
</tbody>
</table>

➤ **CARBIDE TIP FIBRE OPTIC SCRIBE**

- The CS-30-W is a 30-degree wedge-tip carbide scribe 3.8mm wide for long life and simple fibre termination
- Housed in a rugged, anodized aluminum casing 112mm long and 25mm in diameter
- The CS-30-W includes a convenient pocket clip. Protective "squeeze and pull" cap for easy and quick tool selection

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>CS-30-W</td>
<td>Ripley Carbide Scribe</td>
</tr>
</tbody>
</table>

➤ **SCRIBE**

- **CARBIDE SCRIBE**

- Pen style carbide scribe
- Complete with protective lid for blade
- The wedge shape provides a more durable lasting edge
- Features a pocket clip for convenience

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>TO-HT-MJ018A</td>
<td>Carbide Scribe</td>
</tr>
</tbody>
</table>
POLISHING PUCKS

➤ 2.5MM AND 1.25MM STAINLESS STEEL POLISHING PUCKS

- High quality hand polishing disc for fibre optic connectors
- "Universal" design fits most 2.5mm ferrule connectors including: ST, SC and FC connectors
- Inside and outside rims designed for improved hand positioning while performing the polishing operation
- Channelled, raised base allows debris to escape easily and provide easy polishing action
- Precision machined stainless steel design for long life
- Diameter: 194 inches (492mm)
- Weight: 15oz (43g)
- Available for LC connectors (aluminum disc for 1.25mm ferrule LC connectors)

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>PUCK-2.5M</td>
<td>2.5mm Polishing Puck</td>
</tr>
<tr>
<td>PUCK-1.25M</td>
<td>1.25mm Polishing Puck</td>
</tr>
</tbody>
</table>

➤ UNIVERSAL POLISHING PUCKS

- Universal metal polishing pucks for polishing fibre connectors
- "Universal" design fits most 2.5mm ferrule connectors including: ST, SC and FC connectors (LC 1.25mm ferrule connectors require TO-HT-MMB020)

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>TO-HT-MMB005</td>
<td>2.5mm Universal Polishing Puck, Metal</td>
</tr>
<tr>
<td>TO-HT-MMB020</td>
<td>1.25mm Universal Polishing Puck</td>
</tr>
</tbody>
</table>

PUNCHDOWN

➤ IMPACT PUNCHDOWN TOOL

- Ergonomically designed punch down tool with variable impact pressure and built in hook and tracer
- Blades are interchangeable
- Storage for spare blade available in the handle

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>TO-HT-364BKR</td>
<td>Impact Punch Down Tool with Krone style Blade</td>
</tr>
<tr>
<td>TO-HT-364BR</td>
<td>Impact Punch Down Tool with 110 Blade</td>
</tr>
<tr>
<td>TO-HT-3133B</td>
<td>Impact Punch Down Tool with Krone style &amp; 110 Blades</td>
</tr>
<tr>
<td>TO-HT-14TB</td>
<td>110 Style Blade for Impact Punch Down Tool</td>
</tr>
<tr>
<td>TO-HT-14TBK</td>
<td>Krone Style Blade for Impact Punch Down Tool</td>
</tr>
</tbody>
</table>
JackRapid™ is a patented jack termination tool that saves time and increases accuracy by seating and terminating all wires at once with a simple squeeze of the handle. JackRapid™ allows you to terminate jacks eight times faster than traditional impact tools - with accuracy that’s unmatched. The built-in blade cuts off the excess wire after it is seated in the connector, eliminating the need for a secondary trim step. Simple, one-handed operation, with an ergonomically designed handle, reduces hand fatigue.

**NENCO EASY TOOL**

The Nenco 4 Pair termination tool is a robust, reliable product that offers fast, faultless gas-tight termination of all four pairs of solid cable simultaneously. The termination tool frame is manufactured of high grade steel and is used with die-cast termination heads. Designed specifically for use with Nenco 90 degree Keystone style jacks, the tool frame is supplied ready to use with C5e or C6 UTP jacks.

Operation is simple and efficient. Lace the wires onto the Nenco Jack with the cable entry at 90 degrees. Seat the jack onto the termination head. Firmly squeeze the handles of the frame. The tool also features an RJ45 crimping die within the handle so 2 functions are available in one tool.

**INSPECTION SCOPES**

**FIBRE INSPECTION MICROSCOPES**

Rugged, hand held microscope for viewing connector end faces. Available as x200 magnification or x400 magnification for viewing either singlemode or multimode connectors. Supplied as standard with 2.5mm universal ferrule adaptor, 1.25mm adaptor also available.
**HOBBES FIBRE CHECKER PRO**

The FC-2005 Fibre Checker Pro is used for checking the defects of a fibre cable. It sends a visible 650nm wavelength red laser light though a fibre optic cable, the breaks or faults in the fibre will refract the light, creating a bright glow around the faulty area.

**Features:**
- Wavelength: 650nm
- Range: visibility up to 3km
- Easy to check fibre faults with visual red laser light
- Tests for both singlemode and multimode cables with standard 2.5mm fibre optic connectors to 1.25mm adaptor
- Highly effective power circuits allow stable laser power
- Operates in both CW (Continuous wave) and pulse mode
- Dust-proof design
- Two AAA-size alkaline batteries provide 15 hours of stable continuous operation
- LED indicator for power, battery low, and CW / pulse indicators

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description:</th>
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<tbody>
<tr>
<td>OVLP-650</td>
<td>650nm Optical Visual Light Pen (2.5mm +1.25mm Adaptors)</td>
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</tbody>
</table>

**TOOL KITS**

**TOOL ROLL**

Networks Centre presents the cutting and stripping tools for splicing in a cloth roll as part of our fibre optic range. This handy tool roll includes every tool needed for fibre preparation prior to splicing including:

- 1 x Small tool roll with 9 pockets 380mm x 200mm
- 1 x Cable cutter for copper and fibre up to 10.5mm
- 1 x Jacket stripping and slitting tool 4.5mm to 25mm
- 1 x Kevlar cutting scissors
- 1 x Peg stripper 3.5mm to 9mm (duplex cable stripper)
- 1 x Tri-hole buffer stripper for 250um – 900um - 3mm
- 1 x Precise electrical wire side cutter

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>NC-TO-SPLICER</td>
<td>Cutting and Stripping Tools For Splicing in a Cloth Tool Roll</td>
</tr>
</tbody>
</table>

**FLUKE PROTOOL KIT**

The Fluke ProTool Kit provides electrical and telecom technicians a secure and sleek pouch for tool storage. The PVC Dur-A-GripTM Tool Pouch holds tools securely, even upside down. Choose from six tool kits for various applications.

- All kits include an ergonomically designed Dur-a-Grip pouch for convenient tool storage on belt
- D914™ and D814™ industry standard punchdown tools make for solid terminations
- Easy to use cable stripper quickly rings and slits many types of cable
- Use the Probe Pic to check for loose or damaged connections
- Cut and strip wire cleaner and faster with the Electricians’ D-Snips™

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>11293000</td>
<td>Fluke Protoool Kit IS60</td>
</tr>
</tbody>
</table>
Simplify labelling with the DYMO® XTL™ 300. A life-like on screen print preview and built-in label applications help save time on the job. Prints labels from 6 mm (¼”) up to 24 mm (1”), including heat-shrink tubes, barcode and pre-sized labels. Labels are available in a full range of UL-rated materials and colours.

**Features:**
- Life-like on screen print preview and colour display shows exactly how labels will look when applied to cables, pipes, panels, and more
- Built-in label applications make getting started from the home screen easy
- Pre-loaded templates ensure perfect formatting to save time
- Pre-set layouts for almost 100 patch panel models eliminate size and spacing guesswork
- Prints 6 mm (1/4") up to 24 mm (1") durable labels including continuous length tape, laminated wire/cable wraps, heat-shrink tubes and pre-sized labels
- 3-Year Limited Warranty

**In the Box:**
- DYMO XTL™ 300 Label Maker
- AC Charging Adaptor
- USB Cable
- Rechargeable Lithium Polymer Battery
- 24 mm x 7m (1 1 in x 23ft) All-Purpose Vinyl, Black on White Cartridge
- Lanyard
- Quick Start Guide
- Software Download Card

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description</th>
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<tbody>
<tr>
<td>DYMO-1873228</td>
<td>DYMO XTL 300 24 mm Label Maker, QWERTY, UK/IRE</td>
</tr>
<tr>
<td>DYMO-1873305</td>
<td>DYMO XTL 300 24 mm Label Maker Kit, QWERTY, UK/IRE</td>
</tr>
</tbody>
</table>
End frustration and simplify labelling with the DYMO® XTL™ 500. A life-like on screen print preview shows exactly how labels will look, while a colour touch screen and built-in label applications make getting started easy. Prints labels from 6 mm (¼") up to 54 mm (2") wide in a full range of UL-rated materials and colours.

Features:
➤ Life-like on screen print preview and colour display shows exactly how labels will look when applied to cables, pipes, panels, and more
➤ Built-in label applications make getting started from the home screen easy
➤ Touchscreen helps make label creation easier and faster
➤ Pre-loaded templates ensure perfect formatting to save time
➤ Prints 6 mm (¼") to 54 mm (2") durable labels including continuous length tape, laminated wire/cable wraps, heat-shrink tubes and pre-sized labels
➤ 3-Year Limited Warranty

The Kit includes:
➤ DYMO XTL™ 500 Label Maker
➤ Carrying Case
➤ AC Charging Adaptor
➤ USB Cable
➤ Rechargeable Lithium Polymer Battery
➤ 54 mm x 7 m ((1) 2 in x 23 ft) All-Purpose Vinyl, Black on White Cartridge
➤ 38 mm x 39 mm ((1) 1 ½ in x 1 9/16 in) Laminated Wire / Cable Wrap, Black on White, 150 labels
➤ Quick Start Guide
➤ Software Download Card

Part No: Description:
DYMO-1873306  DYMO XTL 500 54 mm Label Maker Kit, QWERTY, UK/IRE
Dymo XTL™ labels are durable and made for a variety of surfaces. Whether you are labelling to OSHA, ISO and ANSI colour standards or labelling in harsh conditions, Dymo XTL labels have you covered. Jobsite-tested and UL-recognised, these labels won’t smear or fade. Compatible with Dymo XTL label makers.

Features:

➤ Choose from 6 mm to 54 mm (¼” to 2”) label widths, including laminated wire/cable wraps and pre-sized labels, for labelling everything from wires and cables to bins, beams, pipes, and more

➤ Industrial-strength labels withstand the toughest conditions – moisture, chemicals, a wide range of temperatures, UV light and more

➤ Durable thermal transfer printing technology – label text won’t smear or fade

➤ UL recognised labels for virtually every labelling job; heat-shrink tubes tested to SAE, ASTM and military specifications

➤ Broad colour assortment fits with OSHA, ANSI and ISO standards to enhance workplace communication and safety

➤ Labels comply with ANSI/TIA 606-B standards

➤ Easy-to-peel split back design or pre-sized labels make applying labels quick and easy

➤ Compatible with all Dymo XTL™ label makers

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PRE-SIZED LABELS</strong></td>
<td></td>
</tr>
<tr>
<td>DYM0-XTL-1868665</td>
<td>DYM0 XTL 1/2” x 1/2” (12 mm x 12 mm) Pre-Sized Label, Black on White</td>
</tr>
<tr>
<td>DYM0-XTL-1868666</td>
<td>DYM0 XTL 1/2” x 1” (12 mm x 25 mm) Pre-Sized Label, Black on White</td>
</tr>
<tr>
<td><strong>LAMINATED WIRE/CABLE WRAP</strong></td>
<td></td>
</tr>
<tr>
<td>DYM0-XTL-1868704</td>
<td>DYM0 XTL 13/16” x 13/16” (21 mm x 21 mm) Laminated Wire/Cable Wrap, Black on White</td>
</tr>
<tr>
<td>DYM0-XTL-1868705</td>
<td>DYM0 XTL 13/16” x 1-9/16” (21 mm x 39 mm) Laminated Wire/Cable Wrap, Black on White</td>
</tr>
<tr>
<td><strong>PRE-SIZED SAFETY/RTK LABELS</strong></td>
<td></td>
</tr>
<tr>
<td>DYM0-XTL-1868713</td>
<td>DYM0 XTL 2” x 4” (51 mm x 102 mm) Pre-Sized Label, Black on White w/ Orange Header</td>
</tr>
<tr>
<td>DYM0-XTL-1868714</td>
<td>DYM0 XTL 2” x 4” (51 mm x 102 mm) Pre-Sized Label, Black on White w/ Yellow Header</td>
</tr>
<tr>
<td><strong>PERMANENT FLAT SURFACE</strong></td>
<td></td>
</tr>
<tr>
<td>DYM0-XTL-1868735</td>
<td>DYM0 XTL 1/4” (6 mm) Permanent Flat Surface, Black on White</td>
</tr>
<tr>
<td>DYM0-XTL-1868736</td>
<td>DYM0 XTL 3/8” (9 mm) Permanent Flat Surface, Black on White</td>
</tr>
<tr>
<td><strong>HEAT-SHRINK TUBE (continuous)</strong></td>
<td></td>
</tr>
<tr>
<td>DYM0-XTL-1868809</td>
<td>DYM0 XTL 1/4” (6 mm) Heat-Shrink Tube, Black on White</td>
</tr>
<tr>
<td>DYM0-XTL-1868810</td>
<td>DYM0 XTL 1/2” (12 mm) Heat-Shrink Tube, Black on White</td>
</tr>
<tr>
<td><strong>FLEXIBLE CABLE WRAP</strong></td>
<td></td>
</tr>
<tr>
<td>DYM0-XTL-1868806</td>
<td>DYM0 XTL 1/2” (12 mm) Flexible Cable Wrap, Black on White</td>
</tr>
<tr>
<td>DYM0-XTL-1868807</td>
<td>DYM0 XTL 3/4” (19 mm) Flexible Cable Wrap, Black on White</td>
</tr>
</tbody>
</table>
The Rhino 5200 professional labeller has been designed for use in any industrial workplace. A tough exterior machine that produces durable labeling, the 5200 labeller can offer your business labeling results that meet with ANSI, TIA/EIA-606 labelling standards.

Enhance your labeling requirements quickly and efficiently, with the many exclusive features of the Rhino 5200 labeller. These include time saving hot keys for cabling, flags, patch panels, terminals and vertical labels, as well as, over 100 built-in industrial symbols.

Designed for use in the electrical, audio/visual, construction and datacoms industries, the portable and versatile Rhino 5200 industrial labeller, will ensure your labels are of a professional quality that lasts.

Features:
➤ Large backlit two line display screen
➤ Complies with labeling standards ANSI, TIA/EIA-606-A
➤ Produces Code 39 and Code 128 barcodes (19mm labels)
➤ ‘Hot key’ for auto sizing, spacing and format of labels
➤ Integrated symbol library of industry symbols, fractions, punctuation and currency
➤ Slip resistant grip
➤ Rubber bumper to protect from everyday bumps
➤ Integrated lanyard loop
➤ Utilises Rhino ‘easy peel’ IND tapes
➤ Requires 6 AA batteries or a rechargeable Lithium-ion battery supplied with kit
➤ Auto power shut off when not in use
➤ FREE 19mm black on white flexible nylon label cassette

The Rhino 5200 Kit includes:
➤ RHINO 5200 Professional Label Printer
➤ Hard carry case
➤ AC mains power adaptor
➤ Rechargeable Lithium-ion battery
➤ Quick reference guide
➤ 19mm Black on White flexible nylon tape cassette
➤ 12mm Black on White vinyl tape cassette

Part No: Description:
RO-S0841460 Rhino 5200 UK - Yellow
RO-S0841390 Rhino 5200 Kit UK - Yellow
The DYMO® Rhino™ 4200 printer gets labelling jobs done fast – and done right. Easily navigate the familiar QWERTY keyboard. Use one-touch “Hot Key” shortcuts to quickly create and format wire/cable wraps, flags, Code 39 and Code 128 barcodes, fixed length labels, breaker labels and more.

Print labels up to 19mm wide in flexible nylon, permanent polyester and durable vinyl materials – PLUS print directly on heat-shrink tubes. Save even more time with great new features – like the ‘Favourites’ key which provides single-key access to your most commonly used labels, symbols and terms; and the ‘Custom’ key which eliminates repeated steps by saving customised settings.

### Features:
- Familiar computer-style QWERTY keyboard for fast and easy text entry
- Patented “Hot Keys” provide shortcuts for creating and formatting wire/cable wraps, flags, Barcode 39 and Barcode 128, fixed-length, general and module labels
- Print 6mm, 9mm, 12mm and 19mm wide industrial-strength labels in a variety of materials and colours – PLUS print directly on heat-shrink tubes
- “Favourites” key provides single-key access to your most commonly used labels, symbols and terms
- Avoid repeated steps with the “Custom” key – customise and save settings for individual label formats
- Pre-programmed library with 150 symbols and terms for security, electrical, pro AV, and facilities management
- Integrated rubber bumpers help prevent damage from accidental drops and falls
- Large back-lit display is easy to read, even in dimly-lit work areas
- Auto save/auto power-off – extend battery life without losing current work
- Runs on 6 AA batteries (not included) – also compatible with quick-charging Lithium-Ion battery (sold as an accessory)

### Box includes:
- Rhino™ 4200 printer
- Quick reference guide
- 19 mm white flexible nylon tape

### Product specifications:
- Runs on optional rechargeable lithium-ion battery pack or 6 AA batteries
- 1 year warranty + 1 year extra when registering
- Unit weight: 770 grams

### Part No: Description:

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>RO-S0955950</td>
<td>Rhino 4200 QWERTY 19mm PB1 UK - Orange</td>
</tr>
</tbody>
</table>
The Rhino 6000 machine that is so easy to use, at the same time offering you great professional labelling.

The Rhino 6000 industrial labeller boasts many time saving features that any installation industry would benefit from. (Rhinos exclusively designed hot keys for wiring, patch panels, flags and vertical labeling along with over 250 pre-programmed industrial symbols.) Creating your own custom labels is a simple task on the Rhino 6000, these can be saved and instantly retrieved when required.

The DYMO thermal technology is a key benefit along with highly durable labels, available for use with the Rhino 6000 labeller. You can be sure of a label that lasts with strong adhesive and resistance to UV, heat, moisture and chemicals, these labels will not smear or move.

The Rhino 6000 also offers the capability of PC connectability when used with the Rhino connect software (included in kit). Uploading or downloading labels is an easy process, enabling you to create the right label, for the right application, every time.

Features:
➤ Prints Rhino IND labelling tapes up to a 24mm width
➤ Over 250 integrated industry symbols and terms
➤ Produces 6 different barcodes
➤ Memory capability of over 1000 labels including logos and graphics
➤ Serialised numbering via a built in wizard
➤ Powered label cutter
➤ Powered by a rechargeable Lithium-ion battery (included)
➤ Slip resistant grip
➤ Rubber bumper to protect from everyday bumps
➤ Utilises the RHINO CONNECT™ software when connect via a USB cable to your computer (upload and download label files, insert graphics and logos, import data from Windows® based programmes, create label via integrated wizard, print labels directly from computer)

In The Box:
➤ RHINO 6000 Professional Label Printer
➤ AC mains power adaptor
➤ Rechargeable Lithium-ion battery
➤ 24mm Black on White flexible nylon label cassette
➤ CD with user guide
➤ Quick reference guide
➤ Product registration card

The RhinoPRO 6000 Kit includes:
➤ Rugged carry case
➤ RhinoPRO 6000 printer
➤ Rhino CONNECT software
➤ 1 x 24mm flexible nylon label cassette (Black on White)
➤ 1 x 9mm Vinyl RhinoPRO label cassette
➤ Li-ION rechargeable battery pack
➤ AC power adaptor
➤ User manual
➤ Registration card
➤ USB cable

Part No: Description:
RO-S0773780 Rhino 6000 UK - Yellow
RO-S0771940 Rhino 6000 Kit UK - Yellow
LABELS

DYMO® industrial labels are tough, jobsite tested and UL recognised. Labels won’t smear or fade and are built with industrial-strength adhesives to resist moisture, UV light and extreme temperatures. Whether you are labelling to OSHA, ISO and ANSI colour standards or labelling in harsh conditions, DYMO® industrial labels have you covered. DYMO® industrial labels are designed to work exclusively with Rhino™ printers and to perform on a variety of surfaces.

<table>
<thead>
<tr>
<th>LABEL APPLICATIONS</th>
<th>LABEL COLOUR</th>
<th>6 mm</th>
<th>9 mm</th>
<th>12 mm</th>
<th>19 mm</th>
<th>24 mm</th>
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</thead>
<tbody>
<tr>
<td>VINYL</td>
<td>BLACK ON WHITE</td>
<td>–</td>
<td>RO-18443</td>
<td>RO-18444</td>
<td>RO-18445</td>
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</tr>
<tr>
<td>✅ UL Recognised Component to UL969</td>
<td>BLACK ON YELLOW</td>
<td>–</td>
<td>–</td>
<td>RO-18432</td>
<td>RO-18433</td>
<td>–</td>
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<tr>
<td>✅ RoHS compliant</td>
<td>BLACK ON ORANGE</td>
<td>–</td>
<td>–</td>
<td>RO-18435</td>
<td>RO-18436</td>
<td>–</td>
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<tr>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PERMANENT POLYESTER</td>
<td>BLACK ON WHITE</td>
<td>–</td>
<td>RO-18482</td>
<td>RO-18483</td>
<td>RO-18484</td>
<td>RO-1734523</td>
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<tr>
<td>✅ UL Recognised Component to UL969</td>
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<td>–</td>
<td>–</td>
<td>RO-18508</td>
<td>–</td>
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<tr>
<td>✅ RoHS compliant</td>
<td>BLACK ON METALLIC</td>
<td>–</td>
<td>RO-18485</td>
<td>RO-18486</td>
<td>RO-18487</td>
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<td></td>
</tr>
<tr>
<td>HEAT SHRINK TUBES</td>
<td>BLACK ON WHITE</td>
<td>RO-18051</td>
<td>RO-18053</td>
<td>RO-18055</td>
<td>RO-18057</td>
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</tr>
<tr>
<td>✅ UL Recognised Component to UL224</td>
<td>BLACK ON YELLOW</td>
<td>RO-18052</td>
<td>RO-18054</td>
<td>RO-18056</td>
<td>RO-18058</td>
<td>–</td>
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<tr>
<td>✅ Meets MIL-STD-202G, MIL-M-81531 and SAE-DTL 23053/5 (Class 1 and 3)</td>
<td>✅ RoHS compliant</td>
<td>✅ Length: 1.5m</td>
<td>✅ Length: 3.5m</td>
<td>✅ Length: 5.5m</td>
<td>✅ Length: 1.5m</td>
<td>✅ Length: 3.5m</td>
</tr>
<tr>
<td>✅ RoHS compliant</td>
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<td>–</td>
<td>–</td>
<td>RO-18488</td>
<td>RO-18489</td>
<td>RO-1734524</td>
</tr>
<tr>
<td>✅ Length: 5.5m</td>
<td>BLACK ON YELLOW</td>
<td>–</td>
<td>–</td>
<td>RO-18490</td>
<td>RO-18491</td>
<td>RO-1734525</td>
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<td>✅ RoHS compliant</td>
<td>BLACK ON WHITE</td>
<td>RO-18111</td>
<td>–</td>
<td>RO-18113</td>
<td>–</td>
<td>–</td>
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<td>✅ Length: 5.5m</td>
<td>✅ RoHS compliant</td>
<td>✅ Length: 5.5m</td>
<td>✅ Length: 5.5m</td>
<td>✅ Length: 5.5m</td>
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SUMITOMO SPLICERS

➤ T-72C CORE ALIGNING SPLICER

The T-72C core alignment fusion splicer from Sumitomo offers many new key features. It is smaller, lighter, faster and more durable than its predecessor weighing in at just 2.2kgs with the battery in place and a footprint of just 128 x 154 x 130mm. Battery life is in excess of 300 cycles with a 5 second splice time and an incredible 9 second heat shrink cycle for a 60mm sleeve. With Sumitomo’s characteristic dual oven technology, engineer output can be vastly increased. Supplied as standard in a lightweight and rugged carrying case which has a flat surface for the splicer to sit on and a convenient fold out work platform for the cleaver and other tools.

➤ T-201E-VS - HANDHELD FUSION SPLICER FOR SINGLE FIBRE

Features:
➤ Handheld V-Groove splicer
➤ Fast 12 second splice time
➤ Robust touchscreen with protector film
➤ Automatic Arc power adjustment
➤ In splicer battery charging whilst working
➤ Approximately 100 heat and splice cycles
➤ Passcode protected
➤ Can be used with Lynx2 splice on connectors
➤ Improved environmental durability includes shock, water and dust resistance and windproof features (including splicing drop cables at a wind velocity of 15 m/s)

KIT INCLUDES
➤ T-201E-VS splicer unit
➤ Power cord
➤ Power supply module
➤ Splice cooling tray
➤ Hand strap
➤ Electrodes
➤ Operation CD
➤ Quick guide
➤ Hard carrying case
➤ Battery

Part No: SUM-T-201E-VS
Description: Single Fibre Fusion Splicer

KITS INCLUDES
➤ T-72C splicer unit
➤ Power cord
➤ Power supply module
➤ Hand strap
➤ Operation CD
➤ Quick guide
➤ Hard carrying case
➤ Battery

Part No: SUM-T-72C-KIT-STD1
Description: Sumitomo T-72C Core Aligning Splicer Kit

Part No: SUM-T-72C
Description: Sumitomo T-72C Core Aligning Splicer
FIBRE OPTIC CABLING
➤ standard cables

TOOLS & LABELLING
➤ Fusion Splicers

The T-57 uses Automatic Adaptive Core processing technology to make fibre alignments and loss estimates. This technology provides a higher level of accuracy and performance than Active Clad Alignment as the T-57 can see the core.

Features:
➤ Rapid 6 second splice time
➤ 20 second heat time
➤ Typical 0.02 splice loss for SMF G652 fibres
➤ Compact and light weight, only 2.0kgs with battery on board
➤ Touchscreen operation for intuitive and easy operation
➤ Up to 300 splice programs, 200 splice images and storage for 10000 splice results. More storage is available with the addition of an SD card
➤ High environmental protection, IPx2 for water protection

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>SUM-T-57</td>
<td>Sumitomo T-57 Active Clad Alignment Splicer</td>
</tr>
</tbody>
</table>

The T-71M12 ribbon splicer from Sumitomo is a compact and reliable, ultra-fast high speed splicer. With a built in fully navigational touchscreen and intuitive GUI, it achieves a splice cycle time of 14s for 12core fibre ribbon. It also features the industry’s only dual independent heaters and auto clamping adjustment system (ACAS) for higher productivity. The durable and rugged unit is shock, water and dust resistant and weighs just 1.9Kg (with battery BU-11S) and can be used in harsh environments. As well as built in videos for tuition, software updates and remote diagnosis are available via the internet.

Features:
➤ 12 Fibre ribbon cable splice time 14s
➤ Single fibre & ribbon with 2, 4, 5, 6, 8, 10 or 12 fibres.
➤ Heat shrink time approx. 55s for 12c ribbon in 40mm sleeve
➤ Dual, fully independent ovens with auto start on loading fibre
➤ Store 1000 splice results to internal memory (64 images without SD card)
➤ Approx. 110 splice & heat cycles for ribbon splices (BU-11 battery)
➤ Fibre holders with auto clamp adjustment system (ACAS)
➤ Carrying case includes a work platform
➤ Splice on Lynx field termination connectors and MPO

KIT INCLUDES
➤ T-71M12 Ribbon Splicer
➤ Power cord
➤ Power supply module
➤ Hand strap
➤ Operation CD
➤ Hard carrying case
➤ Splice cooling tray
➤ Electrodes
➤ Quick guide
➤ Battery

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>SUM-T-71M12</td>
<td>Sumitomo T-71M12 Ribbon Splicer</td>
</tr>
</tbody>
</table>

Part No: 01403 754 233 @ enquiries@networkscentre.com www.networkscentre.com 209
The Sumitomo T-400S is the latest splicer in with a fully redesigned and improved user interface. Fast splicing and heating times ensure that the job done is completed as quickly as possible.

One of the key features of the T-400S is the Super-Wide concept, which provides an extended adjustment range of fibre position in the X & Y axes compared to conventional splicers. Super-Wide makes the T-400S tolerant to imperfectly cleaned fibres and less sensitive to fibres misplaced by unskilled operators, saving time and effort spent on site and reduces the possibility of re-work.

T-400S with Super-Wide helps even unexperienced operators conduct splicing work quickly and accurately pushing down the cost of FTTx installation.

- Rapid 7s splice time and 24s heating time
- Universal Multi-Clamp and removable fibre holders allow splicing of a wide variety of fibre coating media.
- Handles FTTH drop cables, ruggedised leads, loose buffer and tight buffer secondary coated fibres, primary coated fibres, and splice-on field assembly connectors.
- Typical splice loss: 0.03dB SMF; 0.01dB MMF; 0.05dB DSF; 0.05dB NZDSF
- Splice & Heat cycles per BU-15 battery charge: Approx 200
- Splice Image Capture: 100 Images / 10,000 splice data (internal memory)
- Comes complete with Carrying case, battery pack (BU15), AC adaptor, Power cord

**Part No:** SUM-T400S

**Description:** Sumitomo T400S Active V Groove Fusion Splicer

#### ELECTRODES, BATTERIES & POWER LEADS

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SUM-ER10</td>
<td>Pair of Electrodes for T-39, T-25e and T-71 Fusion Splicer ER10’s (orange caps)</td>
</tr>
<tr>
<td>SUM-ER8</td>
<td>Pair of Electrodes for T-37</td>
</tr>
<tr>
<td>SUM-ER9</td>
<td>Pair of Electrodes for T-25</td>
</tr>
<tr>
<td>SUM-ADC-1430</td>
<td>AC/DC Adaptor Power Supply Module 4071C</td>
</tr>
<tr>
<td>SUM-ADC-1240M</td>
<td>AC/DC Adaptor 12v DC Out, For use with Type 25e</td>
</tr>
<tr>
<td>SUM-ADC-1635</td>
<td>AC/DC Adaptor 16v DC Out, For use with Charger for T-39</td>
</tr>
<tr>
<td>SUM-PC-V11</td>
<td>DC Power Cord for Vehicle 12V Outlet</td>
</tr>
</tbody>
</table>
FC-5S FIBRE CLEAVER

- Integral Offcut Collector
- Stable base for table top operation
- Accepts SMF, MMF, NZDSF, BIF Fibres
- Blade life up to 40,000 fibres – 24 blade positions
- Single Fibre Adaptor for:
  - 250μm primary coated fibre
  - 900μm secondary coated fibre
  - 3mm ruggedized cord

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>SUM-FC-5S</td>
<td>Table Top Cleave Tool with Offcut Collector</td>
</tr>
</tbody>
</table>

FC-6R SERIES FIBRE CLEAVER

Sumitomo’s flagship benchtop high precision cleave tool, FC-6R has an auto rotating blade ensuring no routine adjustment is required. It features an off-cut collector (“C” type) with removable bin for safe removal of fibre sharps.

- Easy handling and light weight
- Automatic off-cut collection on “C” type
- Quick and easy to use
- Large collector for fibre sharps ensures safe operation
- Auto rotating blade

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>SUM-FC-6R-S</td>
<td>Single Fibre Cleaver</td>
</tr>
<tr>
<td>SUM-FC-6R-S-C</td>
<td>Single Fibre Cleaver with off-cut collector</td>
</tr>
<tr>
<td>SUM-FC-6RM</td>
<td>Ribbon Fibre Cleaver</td>
</tr>
<tr>
<td>SUM-FC-6RM-C</td>
<td>Ribbon Fibre Cleaver with off-cut collector</td>
</tr>
</tbody>
</table>

FC-8R FIBRE CLEAVER

- Smart cleave counter
- 1 to 12-fibre ribbon cleaver
- Automatic blade rotation
- Ideal cleaver for mechanical connectors
- Ideal for high volume precision cleaving in any environment
- Compatible with all Sumitomo Electric fusion splicers
- Precision blade performs 60,000 cleaves
- Built in scrap collector

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>SUM-FC-8R</td>
<td>Automatic Blade Rotation Cleaver</td>
</tr>
<tr>
<td>Category</td>
<td>Page</td>
</tr>
<tr>
<td>--------------------------------</td>
<td>------</td>
</tr>
<tr>
<td>Loose Tube Cable</td>
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<tr>
<td>Tight Buffered Cable</td>
<td>216</td>
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<tr>
<td>Flat Twin &amp; Zipcord</td>
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<tr>
<td>Specialist Cable</td>
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<td>Pre-Terminated Cables</td>
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<td>MTP-MPO Solutions</td>
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<td>Attenuators</td>
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<td>Patch Leads</td>
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<td>Connectors</td>
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<td>Adaptors</td>
<td>232</td>
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<td>Panels, Wall Boxes &amp; Enclosures</td>
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<tr>
<td>Accessories</td>
<td>247</td>
</tr>
<tr>
<td>Fibre Cleaning &amp; Consumables</td>
<td>249</td>
</tr>
</tbody>
</table>
STANDARD CABLES

Up to 96 core cables available on a next day delivery

We hold stock of Loose Tube, Tight Buffered, Steel Tape Armoured, Steel Wire Armoured and Zipcord cables. We are always able to offer the best price on our in-stock cables. All stocked cables are available on a next day delivery service; we provide a FREE cable cutting service, there’s NO minimum-order-quantity and we accept orders for next day delivery up to 6pm!

HOW TO CREATE OUR STANDARD FIBRE CABLE PART NUMBERS

- Populate this field with the required number of fibre cores:
  - Eg: 04 = 4 core
  - 08 = 8 core
  - 12 = 12 core
  - 16 = 16 core
  - 24 = 24 core
  - 48 = 48 core
  - 96 = 96 core
  - (Higher fibre counts also available)

- Populate this field with the type of fibre you require:
  - 3 = 50/125um OM3
  - 4 = 50/125um OM4
  - 5 = 50/125um OM2
  - 6 = 62.5/125um OM1
  - 9 = 9/125um OS2

- Populate this field with the type of cable required:
  - TB = Tight Buffered
  - LT = Loose Tube
  - LT-CST = Corrugated Steel Tape Armoured
  - LT-SWA = Steel Wire Armoured
  - MLT = Multi-Loose Tube
  - MLT-CST = Multi-Loose Tube Corrugated Steel Tape Armoured
  - MLT-SWA = Multi-Loose Tube Steel Wire Armoured

- Populate this field with the required grade of outer sheath:
  - IX = Euroclass Eca HFRR-LS
  - EX = Polyethylene

- Populate this field with the required colour:
  - Eg: GN = Green
  - BK = Black
  - BE = Blue

EG: 9-04-LT-IX-BK = SINGLEMODE 4 CORE LOOSE TUBE CABLE LSZH, INT/EXT, BLACK

LOOSE TUBE

- SINGLE LOOSE TUBE

- Suitable for internal/external duct
- Ducts, aerial installations and direct burial
- Suitable for internal cable tray in building backbone
- Cable consists of a single tube containing 2 to 24 fibres
- Water blocking gel gives a moisture protection for cable installation in ducts
- Physical protection and tensile strength are provided by water blocked E-glass fibre elements
- Fire resistant to CPR Euroclass Eca (HFRR-LS sheath)
- A ripcord is located under the jacket to facilitate jacket removal
- Suitable for occasional flooded ducts
- Polyethylene jacket available
- UV stabilised sheath
- Wide operating temperature range
- Wide range of jacket options
- Rodent resistant
- Available in OS2, OM1, OM2, OM3, and OM4
- Cables ordered with LSZH jackets meet IEC-60332-1 standard.
- Standard colour black, other colours available upon request

TECHNICAL SPECIFICATION

<table>
<thead>
<tr>
<th></th>
<th>2 – 16 core</th>
<th>18 – 24 core</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outer Diameter</td>
<td>6.0mm</td>
<td>6.5mm</td>
</tr>
<tr>
<td>Weight</td>
<td>40kg / km</td>
<td>45kg / km</td>
</tr>
<tr>
<td>Tensile Strength (during installation)</td>
<td>1000N</td>
<td></td>
</tr>
<tr>
<td>Tensile Strength (long term)</td>
<td>500N</td>
<td></td>
</tr>
<tr>
<td>Bend Radius</td>
<td>R = 60mm loaded</td>
<td></td>
</tr>
<tr>
<td></td>
<td>R = 100mm unloaded</td>
<td></td>
</tr>
<tr>
<td>Operating Temperature Range</td>
<td>-50 / +60</td>
<td></td>
</tr>
</tbody>
</table>
MULTI LOOSE TUBE

The cables can be ordered with a central strength member, either made of resin bonded glass or made of solid or stranded steel coated with polyethylene.

2 – 12 colour coded fibres are loosely laid in each tube that is filled with a water blocking gel.

Standard tube diameters are 2.5mm.

Available in OS2, OM1, OM2, OM3, and OM4.

Armoured versions available – Corrugated Steel Tape and Steel Wire Armour.

Ripcord is located under the jacket to facilitate jacket removal.

Cables ordered with HFFR-LS jackets meet CPR Euroclass Eca standard.

Peripheral strength members may be added in order to reach the specified tensile load.

TECHNICAL SPECIFICATION

| Number of fibres | 12 - 216 core |
| Max. pulling load | 1500-2000N or the equivalent of the cable weight per km, whichever is higher |
| Min. bend radius for installation | 15 times the cable OD |
| Min. long term bend radius | 20 times the cable OD for armoured cables, |
| Twist (torsion) – length | 5 turns +/- 180 degrees |

LONG DISTANCE outside plant telephone. CATV as well as data communications.

Installations in ducts.

The elements are usually gel filled tubes containing fibre, however fillers are also used, when needed, to preserve cable geometry.

LOOSE TUBE WITH CORRUGATED STEEL TAPE ARMOUR

Suitable for external use either in duct (occasional flooding) or direct burial (with sand backfilling)

Polyethylene jacket available

Cable consists of a single gel filled tube containing 2 – 24 fibres

CST armour provides resistance against rodents

Crush proof & rodent resistant

Strength member: E-Glass yarns

A ripcord is located under the jacket to facilitate jacket removal

Single tube 2.8mm dia (2-16 fibres) 3.5mm dia (24 fibres)

Over 24 fibres the cable is constructed in a multi loose tube construction

Available in OS2, OM1, OM2, OM3, and OM4

Cables ordered with HFFR-LS jackets meet CPR Euroclass Eca standard.

TECHNICAL SPECIFICATION

| Number Of Fibres | 2 – 24 core |
| Weight | 2 - 16 fibres: 75kg/km 24 fibres: 85kg/km |
| Tensile Strength (during installation) | 1000N |
| Tensile Strength (long term) | 5000N |
| Bending Radius | R = 55mm |
| Operating Temperature Range | -40/+70 degrees |

LOOSE TUBE WITH STEEL WIRE ARMOUR

Designed to offer enhanced armoured protection against mechanical and rodent damage

Optimised crush resistance

Available in HFFR-LS and PE sheaths

Suitable for direct burial and other applications within hazardous environments

Available in OS2, OM1, OM2, OM3, and OM4

Fire resistant to CPR Euroclass Eca (HFFR-LS sheath)

Bend radius: 15 x OD (operation) / 20 x OD (installation)

Operation Temperature range: -40 / +70 degrees
### Multi Loose Tube Steel Tape Armour

**TECHNICAL SPECIFICATION**

<table>
<thead>
<tr>
<th>Number of Fibres</th>
<th>12 - 60 core</th>
<th>72 - 216 core</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outer Diameter</td>
<td>10.4mm</td>
<td>16.5mm</td>
</tr>
<tr>
<td>Weight</td>
<td>76 kg/km</td>
<td>186 kg/km</td>
</tr>
<tr>
<td>Tensile Strength (during installation)</td>
<td>1500N</td>
<td>2000N</td>
</tr>
<tr>
<td>Bending Radius</td>
<td>10 x OD (installed)</td>
<td>15 x OD (installation)</td>
</tr>
<tr>
<td>Operating Temperature Range</td>
<td>-40 / +70 degrees</td>
<td>-40 / +70 degrees</td>
</tr>
</tbody>
</table>

- Polyethylene jacket available
- CST armour provides resistance against rodents
- Crush proof
- Aramid yarn or fibre glass is wound around the tube
- Suitable for occasional flooded ducts
- Available in OS2, OM1, OM2, OM3, and OM4
- Temperature range -40 to + 70°C
- Fire resistant to CPR Euroclass Eca (HFRR-LS sheath)

### Multi Loose Tube Steel Wire Armour

**TECHNICAL SPECIFICATION**

<table>
<thead>
<tr>
<th>Number of Fibres</th>
<th>12 - 72 core</th>
<th>96 core</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outer Diameter</td>
<td>14mm</td>
<td>15.3mm</td>
</tr>
<tr>
<td>Weight</td>
<td>318-375 kg/km</td>
<td>318-375 kg/km</td>
</tr>
<tr>
<td>Tensile Strength</td>
<td>4500N (operation)</td>
<td>2000N (installation)</td>
</tr>
<tr>
<td>Operating Temperature Range</td>
<td>-40 / +70 degrees</td>
<td>-40 / +70 degrees</td>
</tr>
</tbody>
</table>

- Designed to offer enhanced armoured protection against mechanical and rodent damage
- Optimised crush resistance
- Available in LSZH and PE sheaths
- Suitable for direct burial and other applications within hazardous environments
- Available in OS2, OM1, OM2, OM3, and OM4
- Fire resistant to CPR Euroclass Eca (HFRR-LS sheath)

### Tight Buffered

**TECHNICAL SPECIFICATION**

<table>
<thead>
<tr>
<th>Number of Fibres</th>
<th>4 – 12 core</th>
<th>16 – 24 core</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outer Diameter</td>
<td>7.2mm</td>
<td>8.5mm</td>
</tr>
<tr>
<td>Weight</td>
<td>59kg / km</td>
<td>72kg / km</td>
</tr>
<tr>
<td>Tensile Strength (during installation)</td>
<td>1200N</td>
<td>1200N</td>
</tr>
<tr>
<td>Tensile Strength (long term)</td>
<td>350N</td>
<td>350N</td>
</tr>
<tr>
<td>Bending Radius</td>
<td>Approx 10 times OD</td>
<td>Approx 10 times OD</td>
</tr>
<tr>
<td>Operating Temperature Range</td>
<td>-20 / +70</td>
<td>-20 / +70</td>
</tr>
</tbody>
</table>

- Short and medium distance
- As a riser or general purpose cable
- Suitable for direct termination
- Interconnection of distribution boxes and customer equipment, between floors
- 4 - 72 fibres individually buffered to 0.9mm in a tight or semi tight construction and coded
- 4 - 24 fibre cables, the individual fibres are stranded and protected by aramid yarn and a LSZH jacket (other jackets available upon request)
- 24 - 72 fibre cables, the fibres are grouped into sub-units which are laid helically along the cable axis
- A ripcord is located under the jacket to facilitate jacket removal
- Cost effective multi fibre cable
- Compact and flexible construction especially suited for indoor installations
- Available in OS2, OM1, OM2, OM3, and OM4
- Standard colour black, other colours available upon request
- Suitable for manufacturing pre-terminated fibre cables
- Fire resistant HFRR-LS to CPR Euroclass Eca (and Euroclass B2ca up to 24 core)
## FLAT TWIN & ZIPCORD

### FLAT TWIN

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>9-FT-D28-IN-YW-NC</td>
<td>Singlemode 2.8mm flat twin cable</td>
<td>Suitable for general internal use, LSZH, yellow</td>
</tr>
<tr>
<td>6-FT-D28-IN-GY-NC</td>
<td>OM1 62.5/125um 2.8mm flat twin cable</td>
<td>Interconnect cable for patch leads and pigtails, OM2, grey</td>
</tr>
<tr>
<td>5-FT-D28-IN-OE-NC</td>
<td>OM2 50/125um 2.8mm flat twin cable</td>
<td>Consists of two fibres buffered to 900um in a tight or semi-tight construction, LSZH, orange</td>
</tr>
<tr>
<td>3-FT-D28-IN-AA-NC</td>
<td>OM3 2.8mm flat twin cable</td>
<td>FLAT TWIN &amp; ZIPCORD, OM4, 2.8mm flat twin cable, suitable for internal use, LSZH, Heather Violet</td>
</tr>
<tr>
<td>4-FT-D28-IN-HVT-NC</td>
<td>OM4 2.8mm flat twin cable</td>
<td>FLAT TWIN &amp; ZIPCORD, suitable for internal use, LSZH, Heather Violet</td>
</tr>
</tbody>
</table>

### TECHNICAL SPECIFICATION

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Max. Pulling Load</td>
<td>500 N</td>
</tr>
<tr>
<td>Max. Operating Load</td>
<td>60% of the Max. Pulling Load</td>
</tr>
<tr>
<td>Max. Compressive Load</td>
<td>1500 N</td>
</tr>
<tr>
<td>Repeated Impact</td>
<td>0.5 N.m</td>
</tr>
<tr>
<td>Minimum Short and Long Term Bending Radius</td>
<td>10 times the cable O.D.</td>
</tr>
<tr>
<td>Twist (Torsion) – Length</td>
<td>100 times the cable O.D.</td>
</tr>
<tr>
<td>Cyclic Flexing</td>
<td>500 cycles</td>
</tr>
<tr>
<td>Operating Temperature Range</td>
<td>-10°C to +60°C</td>
</tr>
<tr>
<td>Storage Temperature Range</td>
<td>-20°C to +70°C</td>
</tr>
</tbody>
</table>

### DUPLEX ZIPCORD

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>9-DX-D28-IN-YW-NC</td>
<td>Singlemode 2.8mm zipcord</td>
<td>Suitable for general internal use, LSZH, yellow</td>
</tr>
<tr>
<td>6-DX-D28-IN-GY-NC</td>
<td>OM1 62.5/125um 2.8mm zipcord suitable for internal use</td>
<td>Interconnect cable for patch leads and pigtails, OM2, grey</td>
</tr>
<tr>
<td>5-DX-D28-IN-OE-NC</td>
<td>OM2 50/125um 2.8mm zipcord suitable for internal use</td>
<td>Consists of two fibres buffered to 900um in a tight or semi-tight construction, LSZH, orange</td>
</tr>
<tr>
<td>3-DX-D28-IN-AA-NC</td>
<td>OM3 2.8mm zipcord suitable for internal use</td>
<td>FLAT TWIN &amp; ZIPCORD, OM4, 2.8mm zipcord suitable for internal use, LSZH, Heather Violet</td>
</tr>
<tr>
<td>4-DX-D28-IN-HVT-NC</td>
<td>OM4 2.8mm zipcord suitable for internal use</td>
<td>FLAT TWIN &amp; ZIPCORD, suitable for internal use, LSZH, Heather Violet</td>
</tr>
</tbody>
</table>

### TECHNICAL SPECIFICATION

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Max. Pulling Load</td>
<td>400 N</td>
</tr>
<tr>
<td>Max. Operating Load</td>
<td>60% of the Max. Pulling Load</td>
</tr>
<tr>
<td>Max. Compressive Load</td>
<td>1000 N</td>
</tr>
<tr>
<td>Repeated Impact</td>
<td>0.5 N.m</td>
</tr>
<tr>
<td>Minimum Short and Long Term Bending Radius</td>
<td>10 times the cable narrowest dimensions</td>
</tr>
<tr>
<td>Twist (Torsion) – Length</td>
<td>100 times the cable widest dimension</td>
</tr>
<tr>
<td>Cyclic Flexing</td>
<td>300 cycles</td>
</tr>
<tr>
<td>Operating Temperature Range</td>
<td>-10°C to +50°C</td>
</tr>
<tr>
<td>Storage Temperature Range</td>
<td>-20°C to +60°C</td>
</tr>
</tbody>
</table>
SPECIALIST CABLES

Our specialist cable manufacturing service

When you are looking for something non-standard, like dielectric armour, permanently submersible or fire retardant cables for example, through our manufacturing facilities we are able to manufacture to your specific requirements. We can work from a data sheet or design from scratch. With lead times from as little as three weeks and minimum manufacturing quantities from as little as 1km, access to speciality cables is a realistic proposition. Contact the sales office with your requirement for a quotation.

HOW TO CREATE OUR SPECIALIST FIBRE CABLE PART NUMBERS

Populate this field with the required number of fibre cores.
Eg: 04 = 4 core
08 = 8 core
12 = 12 core
Higher fibre counts available

Populate this field with the second part of the cable construction (if required):
AER = Aerial
MIL = Military
SWB = Steel Wire Braid
DLA = Dielectric Armoured
GRP = Glass Rod Armour

Populate this field with the required colour:
Eg: GN = Green
BK = Black
BE = Blue

EG: 9-08-BO-IX-BK = SINGLEMODE 8 CORE BREAK-OUT CABLE, LSZH, INT/EXT, BLACK

MILITARY TIGHT BUFFERED

TECHNICAL SPECIFICATION – TIGHT BUFFERED

<table>
<thead>
<tr>
<th>Fibres</th>
<th>2</th>
<th>4</th>
<th>6</th>
<th>8</th>
<th>12</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diameter (mm)</td>
<td>5</td>
<td>5</td>
<td>5.5</td>
<td>6</td>
<td>6.5</td>
</tr>
<tr>
<td>Weight (kg/km)</td>
<td>23</td>
<td>25</td>
<td>28</td>
<td>35</td>
<td>40</td>
</tr>
<tr>
<td>Tensile load (kg/km)</td>
<td>600</td>
<td>600</td>
<td>600</td>
<td>600</td>
<td>700</td>
</tr>
<tr>
<td>Bending Radius (mm)</td>
<td>50</td>
<td>50</td>
<td>55</td>
<td>60</td>
<td>65</td>
</tr>
</tbody>
</table>

MILITARY BREAK OUT

TECHNICAL SPECIFICATION – BREAK OUT

> Available in 2 versions: tight buffered and breakout construction
> Very strong and lightweight cable for use in military tactical redeployable applications
> Designed to be used in more adverse environments
> Can be used in repeated deployment and retrieval of cable in outdoor environments
> Suitable for applications such as outside broadcast and other temporary installations
> Can be used in environments where resistance to chemicals, oil and other solvents are required
> Suitable for direct connection to tactical fibre optic connectors where high cable retention force is needed
> Excellent crush resistance
> Can be buried directly into the ground
> Available in singlemode, OM1, OM2, OM3 and OM4
**TIGHT BUFFERED STEEL WIRE BRAIDED**

- Flexible metallic armoured design
- Gel free tight buffered construction
- Suitable for terminating directly
- Double jacket moisture proof sheath
- Enhanced crush resistance design
- Available in singlemode, OM1, OM2, OM3 and OM4

**BREAKOUT**

- Strong, flexible, resistant construction
- Easy to install and terminate directly
- Gel free, easy to strip
- 900μm tight buffered fibres housed in breakout sub-units with added aramid yarn for physical protection and tensile strength
- Ideal for direct connection into active equipment and fibre to the desk
- Available in singlemode, OM1, OM2, OM3 and OM4

**TIGHT BUFFERED DIELECTRIC ARMOURED FIRE RESISTANT**

- Strong resistant construction using fibre glass armouring
- Gel free tight buffered construction
- Suitable for terminating directly
- Double jacket moisture proof sheath
- Can operate up to three hours in temperatures of 750°C (IEC 60331)
- Enhanced crush resistance design
- Available in singlemode, OM1, OM2, OM3 and OM4
- PE Jacket. Moisture & UV resistant. Other jackets available on request

**LOOSE TUBE AERIAL**

- Stranded loose tube design with messenger wire
- Dielectric central strength member
- Resistant to severe environmental conditions
- Suitable for aerial installations along wooden/concrete poles or lattice towers
- Generally used in railway or telecommunication applications
- Available in singlemode, OM1, OM2, OM3 and OM4
**DIELECTRIC ARMoured TIGHT BUFFERED**

- Rugged cable construction
- Low smoke halogen free emission
- Flame retardant
- High flexibility
- Moisture protected
- Ultraviolet resistance and rodent protection
- Suitable for indoor and outdoor applications
- Available in singlemode, OM1, OM2, OM3 and OM4

**FIRE RESISTANT**

- Meets BS EN 60331-25 Fire resistance
- Uni tube design offering up to 24 fibres in a 400mm gel filled loose tube
- Layer of fire retardant tape
- Low smoke halogen free bedding
- Steel tape armoured
- Low smoke halogen free outer sheath
- Available in singlemode, OM1, OM2, OM3 and OM4

---

### NGTS CABLES

#### HOW TO CREATE OUR NGTS FIBRE CABLE PART NUMBERS

<table>
<thead>
<tr>
<th><strong>Populate this field with the type of fibre you require:</strong></th>
<th><strong>Populate this field with the number of cores:</strong></th>
<th><strong>Populate this field with the spec of NGTS:</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>3 = 50/125um OM3</td>
<td>04 = 4 core</td>
<td>3.8.32</td>
</tr>
<tr>
<td>4 = 50/125um OM4</td>
<td>08 = 8 core</td>
<td>3.8.7</td>
</tr>
<tr>
<td>5 = 50/125um OM2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 = 62.5/125um OM1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9 = 9/125um OS2</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**EG: 3-04-3.8.32 = OM3 50/125 4 CORE NGTS 3.8.32 FIBRE CABLE**

---

#### EXTERNAL MULTI LOOSE TUBE NGTS 3.8.32

- CST armoured underground cable for direct burial or lying in closed cable trenches
- Multi loose tube cable with easy mid span fibre access
- Dry water blocked core
- Suitable for external installation
- High density polyethylene sheath
- Wide operating temperature range
- Available in singlemode, OM1, OM2, OM3 and OM4

---

#### EXTERNAL MULTI LOOSE TUBE NGTS 3.8.7

- Non-metallic armoured cable for use in high voltage installations
- Multi loose tube cable with easy mid span fibre access
- Dry water blocked core
- Suitable for external installation
- High density polyethylene sheath
- Wide operating temperature range
- Available in singlemode, OM1, OM2, OM3 and OM4

---
PRE-TERMINATED CABLES

HOW TO CREATE OUR FIBRE OPTIC PRE-TERMINATED ASSEMBLY PART NUMBERS

Populate this field with the required number of fibre cores.
Eg: 04 = 4 core
     08 = 8 core
     12 = 12 core
     etc...

Populate this field with the required connections:
LC = LC
SC = SC
FC = FC
ST = ST
MJ = MTRJ
E2 = E2000
EA = E2000/APC

Populate this field with the type of fibre you require:
3 = 50/125um OM3
4 = 50/125um OM4
5 = 50/125um OM2
6 = 62.5/125um OM1
9 = 9/125um OS2

Populate this field with ‘PT’ to reflect ‘Pre-term’

Populate this field with the required length:
Eg: 5 = 5m
    9 = 9m
    12 = 12m

EG: 9-04-PT-LC-SC-90 = 09/125UM 4 CORE 90M LC-SC PRE-TERM W/PROTECTIVE SOCK

PRE-TERMINATED ASSEMBLIES

Available in the following cable constructions:
➤ Tight buffered (standard spec unless otherwise specified)
➤ Breakout cable
➤ Military cable (for re-deployable use, suitable for applications such as outside broadcast and military communications)
➤ Loose tube and multi loose tube
➤ Corrugated steel tape armour
➤ Steel wire armour

Available in fibre counts of:
4, 8, 12, 16, 24, 48, 72 and 96.

Available terminations:
➤ ST
➤ LC
➤ SC
➤ FC
➤ E2000 & E2000/APC
➤ MPO (see next page)
➤ Many other standard and angled connections also available.
➤ Additional military/specialist connector terminations are also available.

Fibre Types:
➤ Available in OS2, OM1, OM2, OM3, and OM4
MTP & MPO SOLUTIONS

MTP FAN OUT ASSEMBLIES

Assemblies are typically used to directly interconnect MPO/MTP® cassettes, panels or backbone trunk assemblies with the active equipment ports, saving costly data centre rack space and easing fibre management.

- Used to breakout MTP assemblies into standard connection types
- Rugged construction enables direct connection into active components
- Tails can be staggered to aid installation
- Available in singlemode and OM3/OM4 multimode

HOW TO CREATE OUR MTP FAN OUT ASSEMBLY PART NUMBERS

- Populate this field with the required fan out connector type:
  Eg: LC = LC
  SC = SC
- Populate both fields with the required connections:
  Eg: OM3 = OM3
  OM4 = OM4
  OS2 = OS2
- Populate this field with the required Fan out length in metres:
  Eg: 01 - 10 metres
- Populate this field with the required number of cores:
  Eg: 08 = 08 Cores
  12 = 12 Cores
- Populate this field required Polarity:
  A or B

EG: NNMTPBOSC12OS2A10 = SC 12 CORE OS2 MTP BREAK OUT CABLE WITH TYPE A POLARITY 10M
MTP TRUNK CABLES

Trunk cables use a lightweight but robust micro core fibre cable and MTP® connectors. They are lighter and smaller in diameter than traditional tight buffered or loose tube fibre and give the ability to pack more fibre into less space.

Cable assemblies are typically 12 fibre but 24 and 48 fibre options are also available. The cables can be used as backbone or horizontal cable interconnections in lengths to suit your requirements. Typical fibre types OM3, OM4 and OS2 are available.

- Factory tested
- Ideal for connecting between panels and cassettes
- Available in singlemode and OM3/OM4 multimode

HOW TO CREATE OUR MTP TRUNK ASSEMBLY PART NUMBERS

EG: NNMTPTRUNK08OM4B07 = 12 CORE OM4 MTP TRUNK CABLE WITH TYPE B POLARITY 7M
**MTP ADAPTER PLATES AND BLANKS**

MTP adapter plates are available for up to 6 or 8 adapters per plate. Ideal for connecting trunk cable to hydra assemblies. Blank plates are also available.

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>NNMTPADP6WAY</td>
<td>NENCO MTP Coupler Plate 6 Way loaded</td>
</tr>
<tr>
<td>NNMTPADP8WAY</td>
<td>NENCO MTP Coupler Plate 8 Way loaded</td>
</tr>
<tr>
<td>NNMTPCASSBLANK</td>
<td>NENCO Cassette Blank</td>
</tr>
<tr>
<td>NNMTPADP6UL</td>
<td>NENCO MTP Coupler Plate 6 Way Unloaded</td>
</tr>
<tr>
<td>NNMTPADP8UL</td>
<td>NENCO MTP Coupler Plate 8 Way Unloaded</td>
</tr>
</tbody>
</table>

**MTP CASSETTE TRAY**

Light weight 1U tray for housing up to 4 cassettes. Cassettes mount from the front and are fastened with push clips. Tray can have a rear brush strip mounted for ease of cable entry. Cable tie mounts are fixed into the panel base to aid cable management. Supports up to 96 fibre in 1U of rack space.

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>NNMTPPANEL</td>
<td>1U Empty Modular Panel accepts 4 MTP cassettes</td>
</tr>
</tbody>
</table>
Modular MPO/MTP® cassettes provide secure transition between MPO/MTP® and LC or SC discrete connectors. They are used to interconnect MPO/MTP® backbones with LC or SC patching. The modular system allows for rapid deployment of high density data centre infrastructure as well as improved troubleshooting and reconfiguration during maintenance. MPO/MTP® cassettes contain factory controlled and tested MPO/MTP® to LC fanouts to deliver optimum performance, reliability & low insertion loss.

- Modular MTP cassettes allow quick and easy installation
- Each cassette holds 12 or 24 fibres and fit into modular panels that can hold up to 4 cassettes
- LC or SC Connections available as standard
- Available in singlemode and multimode
- Factory tested
- Standard Insertion loss 0.5dB. Elite option Insertion loss 0.35dB

HOW TO CREATE OUR MTP CASSETTE PART NUMBERS

 EG: NNMTPCASSSC08OM3AELITE = SC 08 CORE OM3 MTP CASSETTE WITH TYPE A POLARITY ELITE
ATTENUATORS

➤ FIXED ATTENUATORS

Attenuators are used to control the optical power in a fibre. They are often combined with an active system component to maintain a desired optical power on a network even if the power of the input signal is changing. Fixed Optical Attenuators reduce the optical power within a given optical path without interfering or reducing the optical signal quality. They are used in applications where a pre-determined amount of light loss is specified.

**Application:**
- CATV and LAN
- Telecom Networks
- Data Networks
- Passive Optical Networks

**SPECIFICATIONS**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wavelength</td>
<td>1310nm and 1550nm</td>
</tr>
<tr>
<td>Attenuation Tolerance</td>
<td>1-10dB +/- 0.1dB (typical) standard</td>
</tr>
<tr>
<td></td>
<td>11-25dB +/- 5% (typical) premium</td>
</tr>
<tr>
<td>Return Loss</td>
<td>RL = -50dB (UPC) RL = -60dB (APC)</td>
</tr>
<tr>
<td>PDL</td>
<td>&lt;0.1dB</td>
</tr>
<tr>
<td>Operating Temperature</td>
<td>-40°C &gt; + 75°C</td>
</tr>
<tr>
<td>Storage Temperature</td>
<td>-40°C &gt; + 75°C</td>
</tr>
</tbody>
</table>

**HOW TO CREATE OUR ATTENUATOR PART NUMBERS**

Populate this field with the type of connection required:
- FC = FC
- SC = SC
- ST = ST
- LC = LC
- MJ = MTRJ
- E2 = E2000

Populate this field with the dB requirement:
- 05 = 5dB
- 07 = 7dB

Populate this field with the polishing type:
- PC = PC
- APC = APC

EG: AT-FC-02-APC = 2DB FC/APC ATTENUATOR
PATCH LEADS

All patch leads are 100% tested and individually bagged with the test certificate incorporated into the label affixed to the outside of the bag. As part of our stringent manufacturing process, our multimode patch leads have a maximum insertion loss that will not exceed 0.5dB but will typically be around 0.2dB. Singlemode patch leads have a maximum insertion loss of 0.3dB but will typically be around 0.2dB. They are also subject to tension, vibration and impact tests to ensure reliability. Our termination house is very flexible enabling us to customise everything from connector style, colour of cable, packaging and even the specified insertion loss if required.

Applications:
➤ Used to connect to the active components of a fibre optic system usually from the front of a patch panel. Applications:
- Telecommunication – CATV
- LAN and WAN – Network
- Broadband – FTTX

Features:
➤ Manufactured on a variety of cables to provide protection to the fibre:
- Duplex (2.8mm and 1.8mm)
- Flat twin
- Simplex
- Distribution

➤ Available in OS2, OM1, OM2, OM3 and OM4
➤ Standard lengths available from stock: 1, 2, 3, 5, 10, 15, 20, 25 and 30 metre
➤ Various connectors and combinations are available from stock: ST, SC, LC, FC, MTRJ etc.
➤ Standard Colours:
- Singlemode OS2 - Yellow
- 62.5/125um OM1 - Grey or Orange
- 50/125um OM2 - Orange
- 50/125um OM3 - Aqua
- 50/125um OM4 - Heather Violet
➤ Any colour or length can be supplied to suit requirements
➤ All patch leads are individually bagged with individual test certificates
➤ LSZH cable sheath as standard
➤ ESCON, E2000, FDDI, DIN, SMA and MU available upon request
➤ Angled polished connector (APC) patch leads available
➤ Can be labelled/branded and packaged to your requirements
➤ Angled boots also available

HOW TO CREATE OUR FIBRE OPTIC PATCH LEAD PART NUMBERS

EG: 6-DX-SC-ST-1-GY = 62.5/125UM 1M SC-ST DUPLEX PATCH LEAD, GREY

Populate this field with type of cable you require:
DX = Duplex
SX = Simplex
FT = Flat Twin

Populate this field with the required length:
Eg: 5 = 5m
45 = 45m

Populate both fields with the required connections:
LC = LC
SC = SC
FC = FC
ST = ST
MJ = MTRJ
E2 = E2000
EA = E2000/APC
ESC = ESCON

This field indicates the colour:
Eg:
Blue = BE
Orange = OE
Aqua = AA
Yellow = YW
Heather Violet = HVT
### ALL PATCH LEADS ARE AVAILABLE IN MOST COMBINATIONS

#### SC PATCH LEADS
- Ferrule size 2.5mm
- Cable sheath diameter 2.8mm (1.8mm on request)
- Easy push – pull installation
- Duplex clip available separately
- Available in angle polished version

#### ST PATCH LEADS
- Ferrule size 2.5mm
- Cable sheath diameter 2.8mm (1.8mm on request)
- Bayonet coupling minimises the rotation needed to mate the connector
- Singlemode and multimode versions available
- Available in angle polished version

#### FC PATCH LEADS
- Ferrule size 2.5mm
- Cable sheath diameter 2.8mm (1.8mm on request)
- Threaded metallic coupling provides durable reliable connections
- Keyed connector minimises the rotation to mate the connector
- Low insertion loss and return
- Available in angle polished version

#### LC PATCH LEADS
- Ferrule size 1.25mm
- Cable sheath diameter 2.8mm (1.8mm on request)
- High density applications
- Clip together as standard
- Standard cable size 3mm but 1.8mm also available
- Available in angled polished version
- Available in mSFP mini LC version

#### MTRJ PATCH LEADS
- Ferrule size 2.5mm
- Cable sheath diameter 2.8mm (1.8mm on request)
- Duplex connector
- Compliant with Telcordia, TIA/EIA and IEC
- Easy to install
- Low insertion loss
- Available with pins

#### MU PATCH LEADS
- Ferrule size 2.5mm
- Cable sheath diameter 2.8mm (1.8mm on request)
- Pull proof
- Very easy to connect and disconnect

#### E2000 PATCH LEADS
- Ferrule size 2.5mm
- Cable sheath diameter 2.8mm (1.8mm on request)
- Compliant with Telcordia, TIA / EIA and IEC
- Low insertion loss
- Low back reflection loss
- Available in standard PC, UPC and APC
**MODE CONDITIONING PATCH LEAD**

**Description:**
- Designed for longwave (1310nm) Gigabit Ethernet applications over multimode fibre
- Offset connection of a singlemode fibre to a multimode fibre.
- Two MM fibres on one end and one MM & one SM on the other end
- When launching into a MM fibre, the transceivers can generate multiple signals that cause Differential Mode Delay (DMD) which can limit transmission distances. A mode conditioning patch lead removes these multiple signals eliminating problems at the receiver end

**Features:**
- Stable, permanent core offset
- Low loss connections
- Removes effects from DMD
- Compliant with IEEE 802.3z (GbE)

**TECHNICAL SPECIFICATION**

<table>
<thead>
<tr>
<th>Fibre Type</th>
<th>Multimode and Singlemode</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum Insertion Loss</td>
<td>0.4dB</td>
</tr>
<tr>
<td>Operating Temperature</td>
<td>-40°C to +85°C</td>
</tr>
</tbody>
</table>

**HOW TO CREATE OUR MODE CONDITIONING PATCH LEAD PART NUMBERS**

**Launch connector A Type:**
- SC = SC
- SCA = Angle Polished SC
- FC = FC/PC
- LC = LC
- MJ = MTRJ
- ST = ST

**Connector B Type:**
- SC = SC
- SCA = Angle Polished SC
- FC = FC/PC
- LC = LC
- MJ = MTRJ
- ST = ST

**Fibre Type:**
- 3 = 50/125 OM3
- 4 = 60/125 OM4
- 5 = 60/125 OM2
- 6 = 62.5/125 OM1

**Length (m) 0-20m in 1m increments:**
- 1 = 1 Metre
- 2 = 2 Metre
- 3 = 3 Metre
- etc...

**Required Colour:**
- AA = Aqua
- OE = Orange
- HVT = Heather Violet
- YW = Yellow
- GY = Grey

**EXAMPLE:** 6-MC-LC-SC-3-GY : 3M LC-SC 62.5 / 125UM MODE CONDITIONING PATCH LEAD, GREY (LC LAUNCH END)
**PIGTAILS**

**HOW TO CREATE OUR FIBRE OPTIC PIGTAIL PART NUMBERS**

Populate this field with 'PG' to reflect 'Pigtail'

Populate this field with the required length:

- Eg: 1 = 1m (As Standard)
- 1.5 = 1.5m

Populate this field with the type of fibre you require:

- 3 = 50/125um OM3
- 4 = 50/125um OM4
- 5 = 50/125um OM2
- 6 = 62.5/125um OM1
- 9 = 9/125um OS2

Populate with the required connections:

- LC = LC
- SC = SC
- FC = FC
- ST = ST
- MJ = MTRJ
- E2 = E2000
- SCA = SC-apc

This field indicates the colour:

- White = WE (Standard Colour)
- Blue = BE
- Orange = OE
- Aqua = AA
- Yellow = YW
- Heather Violet = HVT

**Eg: 5-PG-SC-1.5-WE = OM2 50/125UM 1.5M SC PIGTAIL WHITE**

---

**SC PIGTAIL**

- Fusion or mechanically spliced on to fibre optic cable
- Terminated onto 1 metre 900um buffered fibre as standard
- Available in light jacket if additional protection is required
- Available in semi tight buffer (easy strip)
- Available in singlemode, OM1, OM2, OM3 and OM4
- All connector types are available in a minimum time frame
- Standard colour – white
- Other buffer colours available upon request
- Individually bagged with individual test certificates
- Batch coded for traceability
- Can be labelled and packaged to your requirements

---

**LC PIGTAIL**

---

**FC PIGTAIL**

---

**ST PIGTAIL**

---

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>X-PG-ST-1-WE</td>
<td>1m ST Pigtail White</td>
</tr>
<tr>
<td>X-PG-SC-1-WE</td>
<td>1m SC Pigtail White</td>
</tr>
<tr>
<td>X-PG-FC-1-WE</td>
<td>1m FC Pigtail White</td>
</tr>
<tr>
<td>X-PG-FCA-1-WE</td>
<td>1m FC/PC Pigtail White</td>
</tr>
<tr>
<td>X-PG-LC-1-WE</td>
<td>1m LC Pigtail White</td>
</tr>
<tr>
<td>X-PG-LCA-1-WE</td>
<td>1m LC/PC Pigtail White</td>
</tr>
<tr>
<td>X-PG-MJ-1-WE</td>
<td>1m MTRJ Pigtail White</td>
</tr>
<tr>
<td>X-PG-SCA-1-WE</td>
<td>1m SC/PC Pigtail White</td>
</tr>
</tbody>
</table>
## CONNECTORS

### SC, ST, FC AND LC COLD CURE-CONNECTORS

#### Features:
- Low insertion loss
- Standard connector housing
- Zirconia ceramic ferrule
- Available in multimode and singlemode
- All connectors come with a 900um and 3mm boot (LC also with a 2mm)
- All standard connectors available in angled polished version

#### Applications:
- Telecoms.
- CATV and CCTV
- Local Area Networks
- FTTH (Fibre To The Home)

### SPECIFICATION

<table>
<thead>
<tr>
<th>Mode</th>
<th>Singlemode</th>
<th>Multimode</th>
</tr>
</thead>
<tbody>
<tr>
<td>Typical Insertion loss</td>
<td>0.20dB</td>
<td>0.30dB</td>
</tr>
<tr>
<td>Humidity Cycling</td>
<td>75C, RH 95%</td>
<td>75C, RH 95%</td>
</tr>
</tbody>
</table>

### SC CONNECTOR

- Meets the TIA/EIA-568A standards
- Duplex clip available separately
- 2.5mm ceramic ferrules
- One step crimp ring with jacket retention
- One universal body suitable for 900um, 2.0mm and 3.0mm boot
- Boot colour options available
- Same termination tool as ST and FC

#### Part No: Description:

- **CO-SC-MM-I**: SC Multimode Connector with a 3mm and 900um Boot
- **CO-SC-SM-I**: SC Singlemode Connector with a 3mm and 900um Boot

### ST CONNECTOR

- Metal body with bayonet fitting
- One piece body construction simplifies field assembly.
- Same termination tool as SC and FC
- Optional boot colours available
- Corrosion resistant body
- 2.5mm ceramic ferrules

#### Part No: Description:

- **CO-ST-MM-I**: ST Multimode Connector with a 3mm and 900um Boot
- **CO-ST-SM-I**: ST Singlemode Connector with a 3mm and 900um Boot

### LC CONNECTOR

- 1.25mm ceramic ferrules
- Increases panel density to provide duplex connection in 50% less space
- Available in Ultra, Super and Angle (APC) polishing
- Latch clip to ensure proper mating

#### Part No: Description:

- **CO-LC-MM-I**: LC Multimode Connector with a 2mm, 3mm and 900um Boot
- **CO-LC-SM-I**: LC Singlemode Connector with a 2mm, 3mm and 900um Boot

---

*ALSO AVAILABLE IN PACKS OF 100*

Remove “I” from the end of the part code
FC CONNECTOR

Pre-domed zirconia ferrule for fast, easy assembly and polishing
Meets JIS C-5970 standard
Ferrule is keyed during manufacture to optimise performance
One step crimp with jacket retention
Corrosion resistant body
Boot colour options available

Part No: Description:
CO-FC-SM-I FC Singlemode Connector with a 3mm and 900um Boot

HOTMELT CONNECTORS

Hotmelt connectors are pre-loaded with adhesive, so there is no mixing of epoxy or syringe required
Easy termination, simply insert the connector into the oven, allow it to reach temperature while preparing the fibre end, remove the connector from the oven, fit the fibre and allow to cool before polishing
Available in LC, SC, ST & FC in multimode and singlemode
Compatible with other SC and ST connectors and adapters
Termination kit which contains all of the tools and consumables required to terminate the Hotmelt is available

Part No: Description:
CO-ST-HM-MM ST Multimode Hotmelt Connector
CO-SC-HM-MM SC Multimode Hotmelt Connector
CO-FC-HM-SM FC Singlemode Hotmelt Connector
CO-LC-HM-MM LC Multimode Hotmelt Connector
CO-LC-HM-SM LC Singlemode Hotmelt Connector

ADAPTORS

SC, ST, FC, LC AND MTRJ ADAPTORS

Networks Centre provides a range of fibre optic cable adaptors, from reputable brands including Leviton. Fibre optic adaptors are easy to use, environmentally stable, and are built to reduce insertion loss. Available in SC, FC, ST, LC, MTRJ, E2000, and APC variants. All fibre optic adaptors are built to provide high quality, yet low cost solutions for LAN’s, Telecoms, FTTH, CATV and CCTV systems.

For more information, or if you can’t find the fibre optic adaptor that you’re looking for, please call us on 01403 754233

Features:
- Low insertion loss
- Easy to handle
- Environmentally stable
- Compliant with IEC, TIA
- Hybrid adaptors available

Applications:
- Local Area Networks
- FTTH (Fibre To The Home)
- CATV and CCTV
- Telecoms

SPECIFICATION

<table>
<thead>
<tr>
<th>Mode</th>
<th>Singlemode</th>
<th>Multimode</th>
</tr>
</thead>
<tbody>
<tr>
<td>Typical Insertion Loss</td>
<td>0.20</td>
<td>0.30</td>
</tr>
<tr>
<td>Operating Temperature</td>
<td>-40 – +80C</td>
<td>-40 – +80C</td>
</tr>
<tr>
<td>Vibration</td>
<td>10 - 55 Hz (3 axis)</td>
<td>10 - 55 Hz (3 axis)</td>
</tr>
<tr>
<td>Durability (500 matings)</td>
<td>0.12dB Max</td>
<td>0.12dB Max</td>
</tr>
</tbody>
</table>
**LC ADAPTOR**

- Increases panel density
- Flanges for fixing to bulkheads
- Screw-in fixing or push clip for easy installation
- Duplex adaptors come as standard with SC simplex footprint
- Quad adaptors available which fit into an SC duplex footprint

**SC ADAPTOR**

- Simplex and duplex available
- Flanges for fixing into bulkheads
- Screw-in fixing or push clip for easy installation
- Standard colours: Beige – Multimode, Blue – Singlemode
- Available in several colours upon request
- Removable duplex flanges

---

**Part No:**

<table>
<thead>
<tr>
<th>Description</th>
<th>Part No:</th>
</tr>
</thead>
<tbody>
<tr>
<td>LC Duplex Multimode Adaptor</td>
<td><strong>AD-LC-DX-MM</strong></td>
</tr>
<tr>
<td>LC Duplex Multimode Adaptor (OM3)</td>
<td><strong>AD-LC-DX-MM-AA</strong></td>
</tr>
<tr>
<td>LC Duplex Singlemode Adaptor</td>
<td><strong>AD-LC-DX-SM</strong></td>
</tr>
<tr>
<td>LC/APC Duplex Singlemode Adaptor</td>
<td><strong>AD-LCA-DX-SM</strong></td>
</tr>
<tr>
<td>LC Simplex Multimode Adaptor</td>
<td><strong>AD-LC-SX-MM</strong></td>
</tr>
<tr>
<td>LC Simplex Singlemode Adaptor</td>
<td><strong>AD-LC-SX-SM</strong></td>
</tr>
<tr>
<td>LC/APC Simplex Singlemode Adaptor</td>
<td><strong>AD-LCA-SX-SM</strong></td>
</tr>
<tr>
<td>LC Quad Multimode Adaptor (SC Duplex Footprint)</td>
<td><strong>AD-LCQ-MM</strong></td>
</tr>
<tr>
<td>LC Quad Singlemode Adaptor (SC Duplex Footprint)</td>
<td><strong>AD-LCQ-SM</strong></td>
</tr>
<tr>
<td>LC Quad OM3 Adaptor (SC Duplex Footprint in Aqua)</td>
<td><strong>AD-LCQ-MM-AA</strong></td>
</tr>
<tr>
<td>LC Quad OM4 Adaptor (SC Duplex Footprint in Heather Violet)</td>
<td><strong>AD-LCQ-MM-HV</strong></td>
</tr>
</tbody>
</table>

---

<table>
<thead>
<tr>
<th>Description</th>
<th>Part No:</th>
</tr>
</thead>
<tbody>
<tr>
<td>SC Simplex Multimode Adaptor</td>
<td><strong>AD-SC-SX-MM</strong></td>
</tr>
<tr>
<td>SC Duplex Multimode Adaptor</td>
<td><strong>AD-SC-DX-MM</strong></td>
</tr>
<tr>
<td>SC Simplex Singlemode Adaptor</td>
<td><strong>AD-SC-SX-SM</strong></td>
</tr>
<tr>
<td>SC Duplex Singlemode Adaptor</td>
<td><strong>AD-SC-DX-SM</strong></td>
</tr>
<tr>
<td>SC/APC Simplex Singlemode Adaptor</td>
<td><strong>AD-SCA-SX-SM</strong></td>
</tr>
<tr>
<td>SC/APC Duplex Singlemode Adaptor</td>
<td><strong>AD-SCA-DX-SM</strong></td>
</tr>
</tbody>
</table>
**ST ADAPTOR**

- Typical insertion loss 0.2dB Singlemode, 0.3dB Multimode
- D shape as standard
- D shape threaded with nuts easily installs into patch panels
- Precision alignment sleeve

<table>
<thead>
<tr>
<th>Part No</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AD-ST-MM</td>
<td>ST Multimode Adaptor</td>
</tr>
<tr>
<td>AD-ST-SM</td>
<td>ST Singlemode Adaptor</td>
</tr>
<tr>
<td>AD-STA-SM</td>
<td>ST/APC Singlemode Adaptor</td>
</tr>
</tbody>
</table>

**FC ADAPTOR**

- Typical insertion loss 0.2dB Singlemode, 0.3dB Multimode
- D Shape compatible
- Easily installs into patch panels
- Metal body for long life and more than 1000 matings
- Multimode – phosphor bronze and singlemode – ceramic sleeves

<table>
<thead>
<tr>
<th>Part No</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AD-FC-MM</td>
<td>FC Multimode Adaptor</td>
</tr>
<tr>
<td>AD-FC-SM</td>
<td>FC Singlemode Adaptor</td>
</tr>
<tr>
<td>AD-FCA-SM</td>
<td>FC/APC Singlemode Adaptor</td>
</tr>
</tbody>
</table>
E2000 ADAPTOR

Features:
➤ High return Loss
➤ Low insertion Loss
➤ 100% optic test (Insertion Loss)

Applications:
➤ CATV, Metro, LANs and military
➤ Active device termination
➤ Telecommunication networks

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>AD-E2-SM</td>
<td>E2000 Singlemode Adaptor</td>
</tr>
<tr>
<td>AD-E2A-SM</td>
<td>E2000/APC Singlemode Adaptor</td>
</tr>
</tbody>
</table>

HYBRID ADAPTORS

FC-SC SIMPLEX HYBRID MULTIMODE ADAPTOR

LC-SC SIMPLEX HYBRID SINGLEMODE ADAPTOR

SC-ST DUPLEX HYBRID SINGLEMODE ADAPTOR

FC-SC SIMPLEX HYBRID SINGLEMODE ADAPTOR

SC-ST SIMPLEX HYBRID SINGLEMODE ADAPTOR

Other Hybrid specifications are available. Please contact our sales team.

SPECIFICATION

<table>
<thead>
<tr>
<th>Fibre Type</th>
<th>Singlemode</th>
<th>Multimode</th>
<th>APC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Insertion Loss</td>
<td>≤0.2dB</td>
<td>≤0.2dB</td>
<td>≤0.2dB</td>
</tr>
<tr>
<td>Operating Temperature</td>
<td>–40°C to +75°C</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Durability</td>
<td>≤0.1 dB typical change , 500 matings</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Other Hybrid specifications are available. Please contact our sales team.
PATCH PANELS

➤ Available in black
➤ 6 variations available from stock. FC, ST, SC simplex & duplex, LC duplex and LC quad
➤ 1U accepts up to 24 ST, 24 FC, 12 SC Duplex, 24 LC duplex and 12 LC quad adaptors (multimode and singlemode)
➤ 2U accepts up to 48 ST, 48 FC, 24 LC Quad and 24 SC Duplex adaptors (multimode and singlemode)
➤ Supplied with 4 kurly loks, panel fixing kit and 2 x PG-11 Gland, 1 x PG-16 & 3 x blanks
➤ 3 cutouts at either side of the panel at the rear for cable entry into the back of the panel
➤ Adjustable ears allowing the panel to be installed either flush or recessed
➤ Screen printed for port identification
➤ 1U dimensions: 205D x 435W x 43.5H (1U)
➤ 2U dimensions: 205D x 435W x 90H (2U)
➤ Cutout sizes: 4 x 20mm and 2 x 25mm for cable entry.
➤ 1.2mm mild steel

➤ LC DUPLAX PATCH PANELS

For singlemode adaptors... JUST PUT ‘SM’ AFTER THE NUMBER OF ADAPTORS
EG: PAT-24-LCD-S-04-SM-BK-SFE = 1U 19” LC patch panel loaded with 4 LC duplex singlemode adaptors.

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>PAT-24-LCD-S-04-BK-SFE</td>
<td>1U 19” 24 Port LC Duplex Front Sliding Patch Panel loaded with 04 LC Duplex MM Adaptors - Black</td>
</tr>
<tr>
<td>PAT-24-LCD-S-06-BK-SFE</td>
<td>1U 19” 24 Port LC Duplex Front Sliding Patch Panel loaded with 06 LC Duplex MM Adaptors - Black</td>
</tr>
<tr>
<td>PAT-24-LCD-S-08-BK-SFE</td>
<td>1U 19” 24 Port LC Duplex Front Sliding Patch Panel loaded with 08 LC Duplex MM Adaptors - Black</td>
</tr>
<tr>
<td>PAT-24-LCD-S-12-BK-SFE</td>
<td>1U 19” 24 Port LC Duplex Front Sliding Patch Panel loaded with 12 LC Duplex MM Adaptors - Black</td>
</tr>
<tr>
<td>PAT-24-LCD-S-16-BK-SFE</td>
<td>1U 19” 24 Port LC Duplex Front Sliding Patch Panel loaded with 16 LC Duplex MM Adaptors - Black</td>
</tr>
<tr>
<td>PAT-24-LCD-S-24-BK-SFE</td>
<td>1U 19” 24 Port LC Duplex Front Sliding Patch Panel loaded with 24 LC Duplex MM Adaptors - Black</td>
</tr>
</tbody>
</table>

➤ SC SIMPLEX PATCH PANELS

For singlemode adaptors... JUST PUT ‘SM’ AFTER THE NUMBER OF ADAPTORS
EG: PAT-24-SCS-04-SM-BK-SFE = 1U 19” SC simplex patch panel loaded with 4 SC simplex singlemode adaptors.

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>PAT-24-SCS-UL-BK</td>
<td>1U 19” 24 Port SC Simplex Front Sliding Patch Panel, unloaded - Black</td>
</tr>
<tr>
<td>PAT-24-SCS-04-BK-SFE</td>
<td>1U 19” 24 Port SC Simplex Front Sliding Patch Panel loaded with 04 SC Simplex MM Adaptors - Black</td>
</tr>
<tr>
<td>PAT-24-SCS-06-BK-SFE</td>
<td>1U 19” 24 Port SC Simplex Front Sliding Patch Panel loaded with 06 SC Simplex MM Adaptors - Black</td>
</tr>
<tr>
<td>PAT-24-SCS-08-BK-SFE</td>
<td>1U 19” 24 Port SC Simplex Front Sliding Patch Panel loaded with 08 SC Simplex MM Adaptors - Black</td>
</tr>
<tr>
<td>PAT-24-SCS-12-BK-SFE</td>
<td>1U 19” 24 Port SC Simplex Front Sliding Patch Panel loaded with 12 SC Simplex MM Adaptors - Black</td>
</tr>
<tr>
<td>PAT-24-SCS-16-BK-SFE</td>
<td>1U 19” 24 Port SC Simplex Front Sliding Patch Panel loaded with 16 SC Simplex MM Adaptors - Black</td>
</tr>
<tr>
<td>PAT-24-SCS-24-BK-SFE</td>
<td>1U 19” 24 Port SC Simplex Front Sliding Patch Panel loaded with 24 SC Simplex MM Adaptors - Black</td>
</tr>
</tbody>
</table>
### SC DUPLEX PATCH PANELS

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>PAT-12-SCD-UL-BK-SFE</td>
<td>1U 19” 12 Port SC Duplex Front Sliding Patch Panel, Unloaded - Black</td>
</tr>
<tr>
<td>PAT-12-SCD-02-BK-SFE</td>
<td>1U 19” 12 Port SC Duplex Front Sliding Patch Panel loaded with 02 SC Duplex MM Adaptors - Black</td>
</tr>
<tr>
<td>PAT-12-SCD-04-BK-SFE</td>
<td>1U 19” 12 Port SC Duplex Front Sliding Patch Panel loaded with 04 SC Duplex MM Adaptors - Black</td>
</tr>
<tr>
<td>PAT-12-SCD-06-BK-SFE</td>
<td>1U 19” 12 Port SC Duplex Front Sliding Patch Panel loaded with 06 SC Duplex MM Adaptors - Black</td>
</tr>
<tr>
<td>PAT-12-SCD-08-BK-SFE</td>
<td>1U 19” 12 Port SC Duplex Front Sliding Patch Panel loaded with 08 SC Duplex MM Adaptors - Black</td>
</tr>
<tr>
<td>PAT-24-SCD-UL-BK-SFE</td>
<td>2U 19” 24 Port SC Duplex Front Sliding Patch Panel, Unloaded - Black</td>
</tr>
<tr>
<td>PAT-24-SCD-16-BK-SFE</td>
<td>1U 19” 12 Port SC Duplex Front Sliding Patch Panel loaded with 16 SC Duplex MM Adaptors - Black</td>
</tr>
<tr>
<td>PAT-24-SCD-24-BK-SFE</td>
<td>1U 19” 12 Port SC Duplex Front Sliding Patch Panel loaded with 24 SC Duplex MM Adaptors - Black</td>
</tr>
<tr>
<td>PAT-12-SCD-12-BK-SFE</td>
<td>1U 19” 12 Port SC Duplex Front Sliding Patch Panel loaded with 12 SC Duplex MM Adaptors - Black</td>
</tr>
<tr>
<td>PAT-24-SCD-UL-2</td>
<td>2U 19” 24 Port SC Duplex Front Sliding Patch Panel, Unloaded - Black</td>
</tr>
</tbody>
</table>

For singlemode adaptors...

JUST PUT 'SM' AFTER THE NUMBER OF ADAPTORS

EG: PAT-24-SCD-04-SM-BK-SFE = 1U 19” 24 Port SC patch panel loaded with 4 SC duplex singlemode adaptors.

### FC SIMPLEX PATCH PANELS

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>PAT-24-FC-UL-BK-SFE</td>
<td>1U 19” 24 Port FC Simplex Front Sliding Patch Panel, Unloaded - Black</td>
</tr>
<tr>
<td>PAT-24-FC-04-SM-BK-SFE</td>
<td>1U 19” 24 Port FC Simplex Front Sliding Patch Panel loaded with 04 FC Simplex SM Adaptors - Black</td>
</tr>
<tr>
<td>PAT-24-FC-08-SM-BK-SFE</td>
<td>1U 19” 24 Port FC Simplex Front Sliding Patch Panel loaded with 08 FC Simplex SM Adaptors - Black</td>
</tr>
<tr>
<td>PAT-24-FC-12-SM-BK-SFE</td>
<td>1U 19” 24 Port FC Simplex Front Sliding Patch Panel loaded with 12 FC Simplex SM Adaptors - Black</td>
</tr>
<tr>
<td>PAT-24-FC-16-SM-BK-SFE</td>
<td>1U 19” 24 Port FC Simplex Front Sliding Patch Panel loaded with 16 FC Simplex SM Adaptors - Black</td>
</tr>
<tr>
<td>PAT-24-FC-24-SM-BK-SFE</td>
<td>1U 19” 24 Port FC Simplex Front Sliding Patch Panel loaded with 24 FC Simplex SM Adaptors - Black</td>
</tr>
<tr>
<td>PAT-48-FC-UL-2</td>
<td>2U 19” 48 Port FC Simplex Front Sliding Patch Panel, Unloaded - Black</td>
</tr>
<tr>
<td>PAT-48-FC-48-SM-BK-2U</td>
<td>2U 19” 48 Port FC Simplex Front Sliding Patch Panel loaded with 48 FC Simplex SM Adaptors - Black</td>
</tr>
</tbody>
</table>
## ST SIMPLEX PATCH PANELS

E2000 & APC ADAPTORS (SC, LC, FC & ST) CAN BE LOADED INTO ALL OF OUR PANELS AND WALL BOXES CONFIGURATIONS AVAILABLE ON REQUEST

For singlemode adaptors...JUST PUT 'SM' AFTER THE NUMBER OF ADAPTORS
EG: PAT-24-ST-04-SM-BK-SFE = 1U 19” ST patch panel loaded with 4 ST singlemode adaptors.

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>PAT-24-ST-UL-BK-SFE</td>
<td>1U 19” 24 Port ST Simplex Front Sliding Patch Panel Unloaded - Black</td>
</tr>
<tr>
<td>PAT-24-ST-04-BK-SFE</td>
<td>1U 19” 24 Port ST Simplex Front Sliding Patch Panel Loaded with 04 ST Simplex MM Adaptors - Black</td>
</tr>
<tr>
<td>PAT-24-ST-08-BK-SFE</td>
<td>1U 19” 24 Port ST Simplex Front Sliding Patch Panel Loaded with 08 ST Simplex MM Adaptors - Black</td>
</tr>
<tr>
<td>PAT-24-ST-12-BK-SFE</td>
<td>1U 19” 24 Port ST Simplex Front Sliding Patch Panel Loaded with 12 ST Simplex MM Adaptors - Black</td>
</tr>
<tr>
<td>PAT-24-ST-16-BK-SFE</td>
<td>1U 19” 24 Port ST Simplex Front Sliding Patch Panel Loaded with 16 ST Simplex MM Adaptors - Black</td>
</tr>
<tr>
<td>PAT-24-ST-24-BK-SFE</td>
<td>1U 19” 24 Port ST Simplex Front Sliding Patch Panel Loaded with 24 ST Simplex MM Adaptors - Black</td>
</tr>
<tr>
<td>PAT-48-ST-UL-2-BK</td>
<td>2U 19” 48 Port ST Simplex Fixed Patch Panel, Unloaded - Black</td>
</tr>
<tr>
<td>PAT-48-ST-48-2</td>
<td>2U 19” 48 port ST Simplex Fixed Patch Panel Loaded with 48 ST Simplex MM Adaptors - Black</td>
</tr>
</tbody>
</table>
PATCH BOXES

- Available in 2, 4, 8, & 16 way
- Has a knockout on 3 of its sides to accommodate a cable gland
- 2, 4 and 8 way SC duplex, LC Quad or 4, 8 and 16 ST or FC adaptors
- The LC quad adaptor can be accommodated in the SC duplex hole
- Can be used on a wall, desk or underfloor
- Finished in beige semi gloss
- Manufactured with 1.2mm mild steel
- Dimensions:
  - SCD 02 / ST 04 way - 110mm x 110mm x 40mm
  - SCD 04 / ST 08 way - 160mm x 160mm x 40mm
  - SCD 08 / ST 16 way - 160mm x 160mm x 80mm
- Supplied with a PG-13,5 and 4 kurly loks

ST SIMPLEX PATCH BOXES

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>WB-04-ST</td>
<td>4 Way ST Wall Mounted Patch Box Unloaded</td>
</tr>
<tr>
<td>WB-04-ST-02</td>
<td>4 Way ST Wall Mounted Patch Box loaded with 02 ST MM adaptors</td>
</tr>
<tr>
<td>WB-04-ST-04</td>
<td>4 Way ST Wall Mounted Patch Box loaded with 04 ST MM adaptors</td>
</tr>
<tr>
<td>WB-08-ST</td>
<td>8 Way ST Wall Mounted Patch Box Unloaded</td>
</tr>
<tr>
<td>WB-08-ST-04</td>
<td>8 Way ST Wall Mounted Patch Box loaded with 04 ST MM adaptors</td>
</tr>
<tr>
<td>WB-08-ST-08</td>
<td>8 Way ST Wall Mounted Patch Box loaded with 08 ST MM adaptors</td>
</tr>
<tr>
<td>WB-16-ST</td>
<td>16 Way ST Wall Mounted Patch Box Unloaded</td>
</tr>
<tr>
<td>WB-16-ST-12</td>
<td>16 Way ST Wall Mounted Patch Box loaded with 12 ST MM adaptors</td>
</tr>
<tr>
<td>WB-16-ST-16</td>
<td>16 Way ST Wall Mounted Patch Box loaded with 16 ST MM adaptors</td>
</tr>
</tbody>
</table>

SC PATCH BOXES

For singlemode adaptors... JUST PUT ‘SM’ AT THE END OF THE PART NUMBER!
EG: WB-08-ST-08-SM = ST wall mount patch box loaded with 8 ST SM adaptors.

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>WB-02-SCD</td>
<td>2 Way SC Duplex Wall Mounted Patch Box Unloaded</td>
</tr>
<tr>
<td>WB-02-SCD-02</td>
<td>2 Way SC Duplex Wall Mounted Patch Box loaded with 02 SC Duplex MM adaptors</td>
</tr>
<tr>
<td>WB-04-SCD</td>
<td>4 Way SC Duplex Wall Mounted Patch Box Unloaded</td>
</tr>
<tr>
<td>WB-04-SCD-02</td>
<td>4 Way SC Duplex Wall Mounted Patch Box loaded with 02 SC Duplex MM adaptors</td>
</tr>
<tr>
<td>WB-04-SCD-04</td>
<td>4 Way SC Duplex Wall Mounted Patch Box loaded with 04 SC Duplex MM adaptors</td>
</tr>
<tr>
<td>WB-08-SCD</td>
<td>8 Way SC Duplex Wall Mounted Patch Box Unloaded</td>
</tr>
<tr>
<td>WB-08-SCD-06</td>
<td>8 Way SC Duplex Wall Mounted Patch Box loaded with 06 SC Duplex MM adaptors</td>
</tr>
<tr>
<td>WB-08-SCD-08</td>
<td>8 Way SC Duplex Wall Mounted Patch Box loaded with 08 SC Duplex MM adaptors</td>
</tr>
</tbody>
</table>
### FC SIMPLEX SINGLEMODE PATCH BOXES

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>WB-04-FC</td>
<td>4 Way FC Wall Mounted Patch Box</td>
</tr>
<tr>
<td></td>
<td>Unloaded</td>
</tr>
<tr>
<td>WB-04-FC-02</td>
<td>4 Way FC Wall Mounted Patch Box</td>
</tr>
<tr>
<td></td>
<td>loaded with 02 FC SM adaptors</td>
</tr>
<tr>
<td>WB-04-FC-04</td>
<td>4 Way FC Wall Mounted Patch Box</td>
</tr>
<tr>
<td></td>
<td>loaded with 04 FC SM adaptors</td>
</tr>
<tr>
<td>WB-08-FC</td>
<td>8 Way FC Wall Mounted Patch Box</td>
</tr>
<tr>
<td></td>
<td>Unloaded</td>
</tr>
<tr>
<td>WB-08-FC-04</td>
<td>8 Way FC Wall Mounted Patch Box</td>
</tr>
<tr>
<td></td>
<td>loaded with 04 FC SM adaptors</td>
</tr>
<tr>
<td>WB-08-FC-08</td>
<td>8 Way FC Wall Mounted Patch Box</td>
</tr>
<tr>
<td></td>
<td>loaded with 08 FC SM adaptors</td>
</tr>
<tr>
<td>WB-16-FC</td>
<td>16 Way FC Wall Mounted Patch Box</td>
</tr>
<tr>
<td></td>
<td>Unloaded</td>
</tr>
<tr>
<td>WB-16-FC-12</td>
<td>16 Way FC Wall Mounted Patch Box</td>
</tr>
<tr>
<td></td>
<td>loaded with 12 FC SM adaptors</td>
</tr>
<tr>
<td>WB-16-FC-16</td>
<td>16 Way FC Wall Mounted Patch Box</td>
</tr>
<tr>
<td></td>
<td>loaded with 16 FC SM adaptors</td>
</tr>
</tbody>
</table>

For singlemode adaptors... JUST PUT 'SM' AT THE END OF THE PART NUMBER!
EG: WB-08-LCQ-08-SM = SC wall mount patch box loaded with 8 LCQ SM adaptors.

### LC QUAD PATCH BOXES

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>WB-02-LCQ</td>
<td>2 Way LC Quad Wall Mounted Patch Box</td>
</tr>
<tr>
<td></td>
<td>Unloaded</td>
</tr>
<tr>
<td>WB-02-LCQ-02</td>
<td>2 Way LC Quad Wall Mounted Patch Box</td>
</tr>
<tr>
<td></td>
<td>loaded with 02 LC Quad MM adaptors</td>
</tr>
<tr>
<td>WB-04-LCQ</td>
<td>4 Way LC Quad Wall Mounted Patch Box</td>
</tr>
<tr>
<td></td>
<td>Unloaded</td>
</tr>
<tr>
<td>WB-04-LCQ-02</td>
<td>4 Way LC Quad Wall Mounted Patch Box</td>
</tr>
<tr>
<td></td>
<td>loaded with 02 LC Quad MM adaptors</td>
</tr>
<tr>
<td>WB-04-LCQ-04</td>
<td>4 Way LC Quad Wall Mounted Patch Box</td>
</tr>
<tr>
<td></td>
<td>loaded with 04 LC Quad MM adaptors</td>
</tr>
<tr>
<td>WB-08-LCQ</td>
<td>8 Way LC Quad Wall Mounted Patch Box</td>
</tr>
<tr>
<td></td>
<td>Unloaded</td>
</tr>
<tr>
<td>WB-08-LCQ-06</td>
<td>8 Way LC Quad Wall Mounted Patch Box</td>
</tr>
<tr>
<td></td>
<td>loaded with 06 LC Quad MM adaptors</td>
</tr>
<tr>
<td>WB-08-LCQ-08</td>
<td>8 Way LC Quad Wall Mounted Patch Box</td>
</tr>
<tr>
<td></td>
<td>loaded with 08 LC Quad MM adaptors</td>
</tr>
</tbody>
</table>
**Double Locking Wall Boxes**

- Available in up to 48 way SC, 48 way ST and 96 LC
- Lockable to prevent tampering
- Different locks for each door
- Manufactured with 1.2mm mild steel
- Dimensions: 380mm x 325mm x 70mm
- Finished in beige semi gloss
- Enclosure is supplied with a PG-11 gland and 4 kurly loks
- Ports numbered for identification

---

### LC Quad Double Locking Wall Box

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>WB-DL-12-LCQ-02</td>
<td>12 Way LCQ Double Locking Wall Boxes Loaded with 02 LCQ MM Adaptors</td>
</tr>
<tr>
<td>WB-DL-12-LCQ-04</td>
<td>12 Way LCQ Double Locking Wall Boxes Loaded with 04 LCQ MM Adaptors</td>
</tr>
<tr>
<td>WB-DL-12-LCQ-06</td>
<td>12 Way LCQ Double Locking Wall Boxes Loaded with 06 LCQ MM Adaptors</td>
</tr>
<tr>
<td>WB-DL-12-LCQ-08</td>
<td>12 Way LCQ Double Locking Wall Boxes Loaded with 08 LCQ MM Adaptors</td>
</tr>
<tr>
<td>WB-DL-12-LCQ-12</td>
<td>12 Way LCQ Double Locking Wall Boxes Loaded with 12 LCQ MM Adaptors</td>
</tr>
<tr>
<td>WB-DL-24-LCQ-24</td>
<td>24 Way LCQ Double Locking Wall Boxes Loaded with 24 MM Adaptors</td>
</tr>
</tbody>
</table>

### SC Duplex Double Locking Wall Box

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>WB-DL-12-SCD</td>
<td>12 Way SCD Double Locking Enclosure Unloaded</td>
</tr>
<tr>
<td>WB-DL-12-SCD-02</td>
<td>12 Way SCD Double Locking Enclosure Loaded with 02 SCD MM Adaptors</td>
</tr>
<tr>
<td>WB-DL-12-SCD-04</td>
<td>12 Way SCD Double Locking Enclosure Loaded with 04 SCD MM Adaptors</td>
</tr>
<tr>
<td>WB-DL-12-SCD-06</td>
<td>12 Way SCD Double Locking Enclosure Loaded with 06 SCD MM Adaptors</td>
</tr>
<tr>
<td>WB-DL-12-SCD-08</td>
<td>12 Way SCD Double Locking Enclosure Loaded with 08 SCD MM Adaptors</td>
</tr>
<tr>
<td>WB-DL-12-SCD-12</td>
<td>12 Way SCD Double Locking Enclosure Loaded with 12 SCD MM Adaptors</td>
</tr>
<tr>
<td>WB-DL-24-SCD-24</td>
<td>24 Way SCD Double Locking Enclosure Loaded with 24 SCD MM Adaptors</td>
</tr>
</tbody>
</table>

### FC Simplex Double Locking Wall Box

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>WB-DL-24-FC</td>
<td>24 Way FC Simplex Double Locking Enclosure Unloaded</td>
</tr>
<tr>
<td>WB-DL-24-FC-02-SM</td>
<td>24 Way FC Simplex Double Locking Enclosure Loaded with 02 FC Simplex SM Adaptors</td>
</tr>
<tr>
<td>WB-DL-24-FC-04-SM</td>
<td>24 Way FC Simplex Double Locking Enclosure Loaded with 04 FC Simplex SM Adaptors</td>
</tr>
<tr>
<td>WB-DL-24-FC-06-SM</td>
<td>24 Way FC Simplex Double Locking Enclosure Loaded with 06 FC Simplex SM Adaptors</td>
</tr>
<tr>
<td>WB-DL-24-FC-08-SM</td>
<td>24 Way FC Simplex Double Locking Enclosure Loaded with 08 FC Simplex SM Adaptors</td>
</tr>
<tr>
<td>WB-DL-24-FC-12-SM</td>
<td>24 Way FC Simplex Double Locking Enclosure Loaded with 12 FC Simplex SM Adaptors</td>
</tr>
<tr>
<td>WB-DL-24-FC-16-SM</td>
<td>24 Way FC Simplex Double Locking Enclosure Loaded with 16 FC Simplex SM Adaptors</td>
</tr>
<tr>
<td>WB-DL-24-FC-24-SM</td>
<td>24 Way FC Simplex Double Locking Enclosure Loaded with 24 FC Simplex SM Adaptors</td>
</tr>
<tr>
<td>WB-DL-48-FC-48-SM</td>
<td>48 Way FC Simplex Double Locking Enclosure Loaded with 48 SM Adaptors</td>
</tr>
</tbody>
</table>

**For singlemode adaptors…**

JUST PUT 'SM' AT THE END OF THE PART NUMBER!

EG: WB-DL-24-ST-02-SM = 24 way ST wall mounted double locking enclosure loaded with 2 ST SM adaptors.

---

**ST Simplex Double Locking Wall Box**

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>WB-DL-24-ST</td>
<td>24 Way ST Simplex Double Locking Enclosure Unloaded</td>
</tr>
<tr>
<td>WB-DL-24-ST-02</td>
<td>24 Way ST Simplex Double Locking Enclosure Loaded with 02 ST Simplex MM Adaptors</td>
</tr>
<tr>
<td>WB-DL-24-ST-04</td>
<td>24 Way ST Simplex Double Locking Enclosure Loaded with 04 ST Simplex MM Adaptors</td>
</tr>
<tr>
<td>WB-DL-24-ST-06</td>
<td>24 Way ST Simplex Double Locking Enclosure Loaded with 06 ST Simplex MM Adaptors</td>
</tr>
<tr>
<td>WB-DL-24-ST-08</td>
<td>24 Way ST Simplex Double Locking Enclosure Loaded with 08 ST Simplex MM Adaptors</td>
</tr>
<tr>
<td>WB-DL-24-ST-12</td>
<td>24 Way ST Simplex Double Locking Enclosure Loaded with 12 ST Simplex MM Adaptors</td>
</tr>
<tr>
<td>WB-DL-24-ST-16</td>
<td>24 Way ST Simplex Double Locking Enclosure Loaded with 16 ST Simplex MM Adaptors</td>
</tr>
<tr>
<td>WB-DL-24-ST-24</td>
<td>24 Way ST Simplex Double Locking Enclosure Loaded with 24 ST Simplex MM Adaptors</td>
</tr>
<tr>
<td>WB-DL-48-ST-48</td>
<td>48 Way ST Simplex Double Locking Enclosure Loaded with 48 ST Simplex MM Adaptors</td>
</tr>
</tbody>
</table>
FIBRE OPTIC

➤ WALL BOXES & ENCLOSURES

➤ SPLICE BOX

- Wide range of moulded enclosures supplied
- Can supply with glands fitted at either end
- IK9 impact resistance
- Integral mounting grids and integral sealing gasket
- Back mounting plate available
- Compliant with IEC670
- RAL7035 grey
- Available in 8 different sizes

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>SP-BX-10-PG11-PG7</td>
<td>Plastic Splice Box Supplied with x1 pg11 Gland x1 pg7 Gland, Splice Bridge and Kurly Loks 100 x 100 x 60mm</td>
</tr>
<tr>
<td>SP-BX-24-PG11</td>
<td>Plastic Splice Box Supplied with x2 pg11 Glands, Splice Bridge and Kurly Loks 240 x 190 x 90mm</td>
</tr>
<tr>
<td>SP-BX-48-PG11</td>
<td>Large Plastic Splice Box Supplied with x4 pg11 Glands, 2 x Splice Bridge and kurly loks 300 x 220 x 120mm</td>
</tr>
</tbody>
</table>

➤ PLASTIC EXTERNAL ENCLOSURE

Made from high quality glass fibre reinforced polyester. RAL 7032 colour. UL50 approved. Enclosure includes galvanised steel chassis plate and built-in door hood. Reversible door as standard. Enclosure is corrosion resistant and self extinguishing. Temp range -50°C to 150°C.

Features:
- RAL 7032 Grey
- Reversible Door
- IP66
- IK10
- Complies with the RoHS Directive
- Compliant to EN 60439-1/ IEC 4391

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>NC-SAR-P-310X436X250</td>
<td>310x436x250 Plastic External IP Rated Enclosure</td>
</tr>
<tr>
<td>NC-SAR-P-430X330X200</td>
<td>430x330x200 Plastic External IP Rated Enclosure</td>
</tr>
<tr>
<td>NC-SAR-P-530X430X200</td>
<td>530x430x200 Plastic External IP Rated Enclosure</td>
</tr>
<tr>
<td>NC-SAR-P-647X436X250</td>
<td>647x436x250 Plastic External IP Rated Enclosure</td>
</tr>
<tr>
<td>NC-SAR-P-757X536X300</td>
<td>757x536x300 Plastic External IP Rated Enclosure</td>
</tr>
<tr>
<td>NC-SAR-P-847X636X300</td>
<td>847x636x300 Plastic External IP Rated Enclosure</td>
</tr>
</tbody>
</table>
**SHEET STEEL EXTERNAL ENCLOSURE**

Manufactured from a continuous length of 1.2mm sheet steel, 60 microns thick. Polyurethane gasket and rain gutter. Perforated door reinforcement allows for the fixing of extra equipment. Reversible door. Double bar door lock. Includes galvanised steel chassis plate. Earth continuity studs. IP66 rating.

**Features:**
- RAL 7035 Grey
- IP66
- Reversible Door
- Double Bar Door Lock
- Complies with the RoHS Directive

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>NC-SAR-S-300X250X150</td>
<td>300x250x150 Steel External IP Rated Enclosure</td>
</tr>
<tr>
<td>NC-SAR-S-400X400X200</td>
<td>400x400x200 Steel External IP Rated Enclosure</td>
</tr>
<tr>
<td>NC-SAR-S-500X600X250</td>
<td>500x600x250 Steel External IP Rated Enclosure</td>
</tr>
<tr>
<td>NC-SAR-S-500X500X250</td>
<td>500x500x250 Steel External IP Rated Enclosure</td>
</tr>
<tr>
<td>NC-SAR-S-600X600X250</td>
<td>600x600x250 Steel External IP Rated Enclosure</td>
</tr>
<tr>
<td>NC-SAR-S-800X600X300</td>
<td>800x600x300 Steel External IP Rated Enclosure</td>
</tr>
</tbody>
</table>

**IN-LINE ENCLOSURES - 96 WAY**

NENCO Fibre Optic Inline Enclosures offer the ability to terminate up to 96 fibres. The enclosures provides the perfect solution for protecting fibre splices from the permeation of water. The unit is designed for underground, aerial, building entrances, pedestal and direct burial applications. It can cover most applications in fibre distribution networks such as FTTH and FTTC.

- Resistant to vibration, UV and temperature fluctuations
- Water tight protection
- Easily re-enter with minimum tools required
- Reusable
- Supplied with 1 x 24 way splice tray
- Includes sheath retention and central strength member termination system

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>NNFOSC106</td>
<td>4 cable entries max 22mm</td>
</tr>
<tr>
<td></td>
<td>Accepts up to 4 x 24 fibre splice trays</td>
</tr>
<tr>
<td></td>
<td>Slim design 432mm x 186mm x 100mm</td>
</tr>
<tr>
<td>NNFOSC106-TRAY</td>
<td>24 Way Splice Tray to Suit NNFOSC106</td>
</tr>
</tbody>
</table>
FIBRE OPTIC ➤ Fibre Optic Splice Enclosures

**IN-LINE ENCLOSURES - 48WAY**

- Resistance to vibration, UV and temperature fluctuation
- Rugged construction for long term reliability
- Provide water tight protection
- Easily re-enter with a minimum of tools, saves time and cost
- Reusable
- Straight or branch joint
- Compact and lightweight
- Suitable for limited space applications (handholes)
- One size for all, up to 48 cores
- Supplied with 2 x 12 way splice tray
- Suitable for non pressurized networks

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>NNFOSC101</td>
<td>2 cable entries max 14mm accepts up to 4 x 12 fibre splice trays</td>
</tr>
<tr>
<td></td>
<td>Compact design 280mm x 200mm x 90mm</td>
</tr>
<tr>
<td>NNFOSC101-TRAY</td>
<td>12 Way Spice Tray to Suit NNFOSC101</td>
</tr>
</tbody>
</table>

**DOME ENCLOSURES**

NENCO external dome splice closures are ideal for branch connections for up to 144 fibre terminations. They can be mounted on walls, direct buried or on poles with resistance to UV, vibration and a water tight seal. They have an excellent temperature range of -40 degrees to +60 degrees for long term reliability. Heat shrink seals are provided for cable entries and no specialist tools are required for entry into the joint. The cable base has a loop through cable entry allowing easy management of spare fibres required for future use.

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>NNFOSC204A</td>
<td>4 round cable entries max 17.5mm, 1 oval cable entry max 24mm,</td>
</tr>
<tr>
<td></td>
<td>Accepts up to 6 x 24 fibre splice trays, Compact design 450mm x 230mm x 230mm</td>
</tr>
<tr>
<td>NNFOSC204A-TRAY</td>
<td>24 Way Spice Tray to Suit NNFOSC204A</td>
</tr>
<tr>
<td>NNFOSC209A</td>
<td>3 round cable entries max, 1 oval cable entry max 21mm,</td>
</tr>
<tr>
<td></td>
<td>Accepts up to 4 x 12 fibre splice trays, Compact design 288mm x 278mm x 278mm</td>
</tr>
<tr>
<td>NNFOSC209A-TRAY</td>
<td>12 Way Spice Tray to Suit NNFOSC209A</td>
</tr>
</tbody>
</table>
EXTERNAL FIBRE OPTIC TERMINATION BOXES

Three compact external fibre termination enclosures for up to 24, 32, or 108 fibres.

Nenco’s compact external fibre termination enclosures are made from moulded plastic and are weather proof and UV resistant. They provide protection from dust and water ingress and have an IP65 rating. They can be used externally mounted on walls or poles as required.

The enclosures can be used as breakout or splice joint boxes. They have a built in patching area that accepts up to 12, 16 or 54 SC simplex or LC duplex adapters with built in splice trays which allow input cables to be managed efficiently during termination. There is a write on label supplied fixed to the inside of the lid which allows for clear fibre identification.

For the two smaller boxes, there are two input ports suitable for up to 12mm cable. Both have built in cable retention for extra security and 12 or 16 outlet ports, ideal for duplex or simplex drop cables.

The larger box has 15 input / output ports with a cable loop facility for branch cable. Where used as a breakout box, 12 ports can be used, each holding up to 4 simplex or duplex drop cables.

Part No: Description:

<table>
<thead>
<tr>
<th>Part No</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>NNFTBX30B</td>
<td>24 fibre box dimensions: 247mm x 204mm x 70mm Unloaded</td>
</tr>
<tr>
<td>NNFTBX20</td>
<td>32 fibre box dimensions: 260mm x 320mm x 90mm Unloaded</td>
</tr>
<tr>
<td>NNFTB48</td>
<td>108 fibre box dimensions: 398mm x 327mm x 118mm Unloaded</td>
</tr>
</tbody>
</table>

HOW TO CREATE OUR EXTERNAL FTB BOXES PART NUMBERS

EG: NNFTB16LC4 = 32 FIBRE EXTERNAL BOX LOADED WITH 4 LC MULTIMODE ADAPTORs
BICSI RCDD Accreditation

Become the Best at Building Design

Gain advanced understanding of telecommunication systems. Learn about horizontal and back-bone distribution, RFQ and select media installations.

+ Globally Recognised
+ Professional Designation

Versiv Test Professional

Become a Fibre & Copper Test Expert

Versiv Test Professional Increases your knowledge of copper and fibre certification using the Fluke Networks DSX-8000. Learn about: test standards, understanding results and fault diagnostics.

+ Hands-on Demonstrations
+ Real Test Scenarios

BICSI Data Centre Design Consultant Course (DCDC)

The BICSI DCDC course serves as a career path for those seeking advanced knowledge in this area. The 5 day course is built around the ANSI/BICSI 002-2014 standard, which is considered to be the foundation standard for data centres around the world.

City & Guilds Course

City & Guilds is a skills development organisation, providing training services to businesses around the world. Our courses are designed to integrate with your career and boost results. The vocational accreditation is valued worldwide.
ACCESSORIES

➤ BLANKING PLUGS

➤ Used to fill unused ports in patch panels or wall boxes
➤ Available in SC duplex, ST, LC and SC simplex
➤ Colour – black

Part No: Description:
BP-SCD SC Duplex Black Blanking Plug
BP-LCD LC Duplex Black Blanking Plug
BP-SCS SC/LC (SC Simplex Footprint) Simplex Black Blanking Plug
BP-ST ST Simplex Black Blanking Plug

➤ CABLE GLANDS

➤ Polyamide material
➤ Colour – black or grey
➤ Operating range -30°C to +80°C
➤ Available with a spiral gland to control bend radius of the cable

Part No: Description:
PG-7 2.5mm-6.5mm Cable Gland PG-7 Grey
PG-11 4.0mm-10mm Cable Gland PG-11 Grey
PG-11-BK 4.0mm-10mm Cable Gland PG-11 Black
PG-11-GY-SR 4.0mm-10mm Cable Gland PG-11 Grey with strain relief
PG-13.5-BK 6.0mm-12mm Cable Gland PG13.5 Black
PG-13.5-GY 6.0mm-12mm Cable Gland PG13.5 Grey
PG-16 9mm-14mm Cable Gland PG16 In Grey

➤ SELF ADHESIVE CABLE CLIPS

➤ Used to secure cable or fibre in patch panels or wall mounted enclosures
➤ Fibre retained and removed easily in clips by twisting the ears
➤ Natural colour
➤ For bundles up to 9mm
➤ Adhesive base

Part No: Description:
KLB-350-01-AR-T Kurly Loks (Height 35mm)

➤ CABLE CLIP BASES

➤ Twist lock easily inserted and removed
➤ Base supports a large variety of cable clips
➤ For bundles up to 15.2mm
➤ Natural colour

Part No: Description:
OFSB-4-85-01-A 4 Way Adhesive Cable Clip Base
OFSB-4-85-01 4 Way Screw in Cable Clip Base
STL-J-250-4M-01 Twist Lock Clip for 5.1mm – 7.6mm Bundle
STL-J-350-4M-01 Twist Lock Clip for 7.6mm – 10.2mm Bundle
STL-J-450-4M-01 Twist Lock Clip for 10.2mm – 12.7 mm Bundle
STL-J-600-4M-01 Twist Lock Clip for 12.7mm – 15.2mm Bundle
FIBRE OPTIC

Accessories

➤ 4 WAY SPLICE BRIDGE

➤ Holds up to 4 splice protectors
➤ Comes with adhesive tab or can be screw fixed
➤ For use in a fibre optic patch panel or a wall mounted patch box

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>SB-4</td>
<td>4 Way Splice Bridge 45 x 30 x 12mm</td>
</tr>
</tbody>
</table>

➤ 24 WAY SPLICE BRIDGE

➤ Stores up to 24 fusion splice protectors
➤ Grey splice bridge supplied with lid
➤ Both types come with self adhesive base for fixing. (Grey splice bridge can also be screw fixed.)
➤ For use in patch panels and wall mounted enclosures

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>SB-24-B</td>
<td>24 Way Splice Bridge Blue with Adhesive Base 95 x 37 x 7mm</td>
</tr>
<tr>
<td>SB-24-L</td>
<td>12-24 Way Splice Bridge with Lid 100 x 65 x 11mm</td>
</tr>
</tbody>
</table>

➤ SPLICE CASSETTES

➤ For up to 12 fusion splice protectors
➤ Stackable
➤ Manages and stores excess fibres
➤ For use in patch panels or wall mounted enclosures
➤ Self adhesive or screw mountable

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPC-PX2SP-PL-KIT</td>
<td>12 Fibre Plastic Splice Cassette inc x2 Splice Holders for 6 Splice Protectors with Plastic Lid 155 x 92 x 6mm</td>
</tr>
</tbody>
</table>

➤ SPLICE PROTECTORS

➤ Designed to restore complete environmental and mechanical integrity of coating or buffer of optical fibre after splicing
➤ Hot melt adhesive tube bonds both to the fibre and heat shrinkable tube to effectively encapsulate fusion splice
➤ Resistant to heat shocks
➤ Sleeves are pre-shrunk which ensures integrity of assembly during transportation
➤ Clear colour
➤ Other colours available upon request
➤ Available in 60mm or 45mm

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>SP-45-CR-100</td>
<td>45mm Splice Protectors (Clear) Pack of 100</td>
</tr>
<tr>
<td>SP-60-CR-100</td>
<td>60mm Splice Protectors (Clear) Pack of 100</td>
</tr>
</tbody>
</table>
CLEANING & CONSUMABLES

➤ LAPPING FILM

- Used to polish fibre optic connectors
- Aluminium oxide sheets available from stock in 9 different grades
- Diamond sheets available upon request
- Available in disc or sheet form
- Available with adhesive back

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>9 X 13 – X – A</td>
<td>9 x 13” Aluminium Oxide Lapping Film</td>
</tr>
<tr>
<td>6 X 9 – X – D</td>
<td>6 x 9” Diamond Coated Lapping Film</td>
</tr>
</tbody>
</table>

- X - Insert Micron Between (0.3 to 30 micron)
- E.g. 9X13-0.3-A = 9 x 13” 0.3 Micron Aluminium Oxide Lapping Film

➤ COLD CURE EPOXY

- High strength anaerobic retaining adhesive
- 50ml bottle can terminate up to 500 connectors
- Fast curing with no need for power
- Activator available in spray form or fluid

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>LOC-7649-500</td>
<td>500ml Activator for use with LOC638 (Liquid)</td>
</tr>
<tr>
<td>LOC7649-150</td>
<td>150ml Activator for use with LOC638 (Spray)</td>
</tr>
<tr>
<td>LOC638-50</td>
<td>50ml Cold Cure Anaerobic Adhesive</td>
</tr>
</tbody>
</table>

➤ NEEDLE & SYRINGE

- Used to load connectors with epoxy
- Needle and syringe screw together securely
- Epoxy is delivered to the rear of the ferrule without trapping air bubbles
- Suitable for directly loading from epoxy bi-packs
- 0.9mm needle
- 3cc syringe body

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>NS3CC</td>
<td>Needle and Syringe</td>
</tr>
</tbody>
</table>

➤ SWABS

- Used for cleaning connector ferrule end faces, adaptors and difficult areas
- Available in 1.25mm and 2.5mm
- Supplied in packs of 50

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>SWAB-1.25</td>
<td>1.25mm Cleaning Swabs (Pack of 50)</td>
</tr>
<tr>
<td>SWAB-2.5</td>
<td>2.5mm Cleaning Swabs (Pack of 50)</td>
</tr>
</tbody>
</table>
### HAND HELD CLEANING CASSETTE

- Offers lint-free, clean room grade cleaning media which effectively removes dirt, dust, oil, grease and debris from connector end faces.
- Resilient rubber pad beneath the cleaning surface prevents scratching.
- Sliding cover protects the cleaning surface from contamination when not in use.
- Reel refills available.

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CC-POUCH</td>
<td>Pouch for Fibre Optic Cleaning Cassette</td>
</tr>
<tr>
<td>CC-CASS</td>
<td>Clean Core Fibre Optic Cleaning Cassette and Tape</td>
</tr>
</tbody>
</table>

### SHARPS BIN

- For the disposal of unwanted fibre shards and used needles.
- Water resistant.
- Captive closure top for ease of use.
- Construction of the bin makes incineration less hazardous than burning of plastic containers.

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SHA-BIN-Q</td>
<td>Sharps Bin (1/4 litre)</td>
</tr>
</tbody>
</table>

### FLUKE NETWORKS CLEANING KIT

- Prevent the #1 cause of fibre link failure: end-face contamination. Everything needed for precision cleaning of end-faces on both patch leads and inside adaptors.
- Specially formulated solvent dissolves contaminants, neutralises static charge and encapsulates particles for removal.
- A range of wipers and swabs enable cleaning of all styles of fibre optic connections.
- By fitting in your pocket, fibre optic cleaning cards are perfect for troubleshooting.

**Kit includes:**
- Cleaning cube with wipes.
- Ten cards with sealed cleaning zones.
- Solvent pen.
- 2.5mm port cleaning swabs and 1.25mm port cleaning swabs.
- Rugged carrying case.

**CLEANING KIT REPLACEMENT PARTS**

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>NFC-KIT-CASE</td>
<td>Fibre Cleaning Kit with Cube, Fluid Pen 1.25+2.5mm Swabs 10 Cards and Case.</td>
</tr>
<tr>
<td>NFC-KIT-BOX</td>
<td>Fibre Cleaning Supplies Box with Cube, Fluid Pen, 2.5mm 10 Cards and Case.</td>
</tr>
<tr>
<td>NFC-CARDS-5PK</td>
<td>Fibre Optic Cleaning Cards for Connector End faces 5 pack</td>
</tr>
<tr>
<td>NFC-SOLVENTPEN</td>
<td>Fibre Optic Cleaning Solvent Pen 12ml</td>
</tr>
<tr>
<td>NFC-CUBE</td>
<td>Fibre Optic Cleaning Cube 800 Use</td>
</tr>
<tr>
<td>NFC-SWABS-1.25MM</td>
<td>Fibre Optic Cleaning Swabs for 1.25mm adaptors</td>
</tr>
<tr>
<td>NFC-SWABS-2.5MM</td>
<td>Fibre Optic Cleaning Swabs for 2.5mm adaptors</td>
</tr>
<tr>
<td>NFC-CASE</td>
<td>Fibre Optic Cleaning Kit Case Only</td>
</tr>
<tr>
<td>NFC-IBC-1.25MM</td>
<td>One Click Cleaner for 1.25mm Connector and Patch Lead 5 pack</td>
</tr>
<tr>
<td>NFC-IBC-2.5MM</td>
<td>One Click Cleaner for 2.5mm Connector and Patch Lead 5 pack</td>
</tr>
<tr>
<td>NFC-IBC-MPO</td>
<td>One Click Cleaner for MPO Connector and Patch Lead 5 pack</td>
</tr>
</tbody>
</table>
**INSTALLATION & MAINTANANCE**

In the I&M Fiber Optic Cleaning Kits, Chemtronics has included only the cleaning supplies necessary for making a successful 2.5mm fibre optic connection.

- **Kit Includes:**
  1. QbE® Cleaning Platform (200 sheets)
  2. Electro-Wash® PX Precision Fiber Optic Cleaner (ES810)
  3. 2.5mm Foam Fiber Optic Swabs (50 swabs, 48042F)
  4. Lint-Free Precision Wipes (100 4"x4" wipes, 6704F)
  5. Electro-Wash® MX Premoistened Wipes (1 wipe per pack, CP421)
  6. Instructions
  7. Rugged Bag with carabiner attachment

**FUSION SPLICER PREPARATION**

- **Kit Includes:**
  1. Fusion Splice Prep Cleaner with the unique vertical aerosol for single hand operation (FSP850)
  2. FsW Apertured Wipe for highly effective cleaning, 100 wipes (FSP100DRY)
  3. V-Groove and Ferrule Cleaning swabs, 100 swabs per tube (38542F)
  4. Fusion Splice Mirror and Lens Cleaning swabs, 50 swabs per tube (51125F)
  5. X'Tenders (XTN)
  6. Electro-Wash MX Universal Cleaner wipes (CP421)
  7. Bag of 100 Lint Free Wipes (6704F)
  8. Graphic Instructions
  9. Rugged Bag with heavy-duty carabiner attachment

**FIBER-WASH™ PEN**

- Non-flammable and non-hazardous formulation; provides safe travel convenience and transportability
- Effectively and efficiently removes handling soils, dust, oils, greases and contamination found in the fiber optic environment; especially the FTTx environment
- Specifically designed to clean with SqR™, QbE® and p-QbE® Cleaning Systems using the Combination Cleaning process (CCp™)
- Pinpoint controlled dispensing of cleaning solution
- Dissipates static charge

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CM-CFK1000E</td>
<td>Fibre Optic Cleaning Kit for Installation &amp; Maintenance</td>
</tr>
<tr>
<td>CM-CFK1202E</td>
<td>FTTX ALL-CONNECTION CLEANING KIT</td>
</tr>
<tr>
<td>CM-FW2190</td>
<td>FIBER-WASH™ PEN</td>
</tr>
</tbody>
</table>
**ELECTROWASH PX CLEANER / DEGREASER**

Electro-Wash® MX Cleaner Degreaser is a high flash point cleaner that quickly removes soils, adhesives and residues from insulation jackets and conductors on telecom, fibre optic and coaxial cables, while still being the ideal cleaner for removing oils, greases and dirt from hand tools and metal cleaning operations. Available in both a high-pressure aerosol formulation to spray areas clean and presaturated wipes to quickly wipe soils away. Excellent wetting action lifts and removes soils from the tightest areas. Electro-Wash® MX Cleaner Degreaser is also ideal for removing carbonisation, oxidised oils and greases from metal surfaces.

- Aerosol utilises All-Way Spray valve; sprays in any direction
- Safe on plastics
- Flammable
- Extra cleaning strength
- Moderate evaporation rate increases cleaning power
- Leaves no residue
- Removes organic and ionic soils
- Liquid may be used in cold dip and rinsing applications

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**FIBRE OPTIC SWABS**

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CM-48042F</td>
<td>EFB-10 2.5 MM FIBER OPTIC SWAB</td>
</tr>
<tr>
<td>CM-CC505F</td>
<td>EFB-17 MTP 2.3 MM CONNECTOR CHAMOIS 18 6.8900 124.02 SWAB</td>
</tr>
<tr>
<td>CM-38542F</td>
<td>EFB-11 V-GROOVE AND FERRULE CLEANING 18 3.7000 66.60 SWAB</td>
</tr>
<tr>
<td>CM-51125F</td>
<td>EFB-12 FUSION SPLICE MIRROR CLEANING</td>
</tr>
</tbody>
</table>

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**FTTX ALL-CONNECTION CLEANING KIT**

- Kit Includes:
  1 - pQbE® Universal Cleaning Platform
  2 - (100)2.5mm Precision Foam Fiber Optic Swab Tool (48042F)
  1 - (50) 1.25mm Precision Swab Tool (26122F)
  1 - CC505F (25) “MT” Type Swab Tool
  5 - Electro-Wash® MX Universal Cleaner wipes (CP421)
  1 - Bag of 100 Lint Free Wipes (6704F) graphic instructions
  1 - Rugged Bag with heavy-duty carabiner attachment.

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CM-CFK1202E</td>
<td>FTTX ALL-CONNECTION CLEANING KIT</td>
</tr>
</tbody>
</table>
PQBE CLEANING PLATFORM

The PQBE Cleaning Platform is designed for portability to clean all FTTx connector geometries, including SC/LC, MT-Type, OptiFit®, and E2000. It is the ultimate in performance and convenience, and provides first time cleaning, all the time.

- Conveniently fits into pockets and pouches for easy transport
- Developed for use with all connector types, SC, ST, FC, MT-type, APC and recessed connectors
- Raised, ridged Fibersafe™ cleaning platen mounted atop the flat cleaning platen conforms to recessed connector end faces, and provides simultaneous cleaning to the ferrule and chamfer of non-recessed connectors
- Ridge causes wipe to deform slightly during use so previous cleaning path is visible and not retraced
- Use with Electro-Wash® PX, Electro-Wash® MX, or Fiber-Wash cleaning solvents to perform the Combination Cleaning process (CCp™)
- Clear plastic packaging resists rain and provides view of remaining wipe quantity
- Rugged Bag with heavy-duty carabiner attachment

| Part Number: CM-PQBE | Description: PQBE™ Pocket QBE Fibre Optic End Face Cleaning Platforms and Groove |

FOCCUS CCT CLEAR CONNECTION TOOL

CCT™ Clear Connection Tool used with the FOCCUS™ MX Precision Cleaning Pen provides a fast, simple method of fibre optic cleaning. End faces in bulkheads or on cable assemblies are both effortlessly cleaned the first time, every time. CCT has an easy to use mechanism that moves fabric over a cleaning tip with just a short push and click of the tool. Using the CCT with the FOCCUS MX Precision Cleaning Pen provides for fast, easy and repeatable Combination Cleaning™.

CCT Cleaning tools are used with an MX Precision Cleaning Pen (see page 50). Wet the CCT fabric tip with the MX pen, insert the CCT tip into the connector, and push in the tool 1 click to move the fabric from wet-to-dry, perfectly cleaning the end-face. Combination Cleaning™ eliminates all debris and contamination the first time, avoiding expensive rework from bad connections. Combination Cleaning™ is industry proven, exceeding IEC 61300-3-35, IEC TR62627-01, and meeting Telcordia GR-2923-CORE and SAE Aerospace ARP5031.

- Cleans panel mounted connectors and on jumpers
- Uses Combination Cleaning™ process for first time cleaning, every time
- Effective for the widest range of contaminants
- Easy to use for quick and reliable cleaning
- Rugged and durable, great for all work sites
- Cleans UPC and APC connectors
- Up to 800 cleanings per kit - 33% more than other tools

<table>
<thead>
<tr>
<th>Part Number:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>CCT-250</td>
<td>Cleaning Tool for 2.5mm FC, SC and ST Connectors</td>
</tr>
<tr>
<td>CCT-MPO</td>
<td>Cleaning Tool for MPO Connectors</td>
</tr>
<tr>
<td>CCT-125</td>
<td>Cleaning Tool for 1.25mm MU and LC Connectors</td>
</tr>
</tbody>
</table>
Fusion Splice Presaturated

- Supplied dry for safe travel and easy transportation
- Wipes can be used dry and wetted individually, or the tub and perforated roll of wipes can be saturated on-site with the preferred cleaning solvent
- Unique, apertured surface cleans gel, colour layer, cladding residues
- Wipes are non-scratching, non-linting, soft and absorbent
- Wipes feature aperture pockets to collect gritty, scratch-inducing particles
- Clean perforations do not generate long, loose strings and fibrous tails when torn from the tub opening
- Compact size ideal for tool kits, cleaning kits, congested work benches and tight work spaces

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CM-FSW</td>
<td>Fusion Splice Wipes 100 Wipes In Mini Tub</td>
</tr>
</tbody>
</table>

Coventry Econowipes

Coventry Econowipes™ are made from a hydro-entangled, 45/55 cellulose/polyester blend, for optimum purity in a nonwoven wipe. These wipes have excellent absorbency, and contamination entrapment, as well as high strength. Econowipes™ are ideal as an economical utility wipe for any clean area.

- Excellent solvent and dilute acid resistance
- Economical
- Excellent durability
- Excellent particle entrapment
- High absorbency capacity and rate
- Low linting compared to cotton

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CM-6704F</td>
<td>Coventry Econowipes (10cmx10cm)</td>
</tr>
</tbody>
</table>

Electro-Wash MX Presaturated Wipe

Electro-Wash® MX Cleaner Degreaser is a high flash point cleaner that quickly removes soils, adhesives, and residues from insulation jackets and conductors on telecom, fibre optic and coaxial cables. Engineered with very low surface tension, this formulation penetrates and removes soils quickly with excellent wetting action, lifting and removing soils from the dirtiest areas. Electro-Wash® MX Cleaner Degreaser is also ideal for removing carbonisation, oxidised oils and greases from metal surfaces.

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CM-CP421</td>
<td>Electro-wash® Mx Cleaner/degreaser</td>
</tr>
</tbody>
</table>
CHEMPAD™ PRESATURATED WIPES

Chempad® Presaturated Wipes are general purpose, super saturated, lint-free cleaning felt wipes. They are excellent for general purpose cleaning of computers, office and laboratory equipment. These highly effective cleaning wipes are ideal for cleaning sensitive surfaces, fibre optic connectors, electronics components, touch keypads, keyboards, instrument housings, and magnetic tape heads. Chempad® quickly and safely removes handling soils, dirt and oxides from PCB’s, mechanical / electrical assemblies and other electronic equipment. Chempad® is especially effective in removing ink and permanent marker.

- Saturated with 91% IPA / 9% deionized water
- Heavy-duty, highly absorbent felt wipe
- Solvent evaporates completely, leaving no residue
- Nonabrasive, safe on plastics
- Ideal cleaning wipe for field service of computers, office equipment and electronics
- Cleans dirt, oxides, and oil from optical and magnetic tape heads

<table>
<thead>
<tr>
<th>Part Number:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>CM-CP400</td>
<td>Box Of 50 Individually Packaged 3&quot; X 4&quot; (7.6 Cm X 10.2 Cm) Presaturated Pad</td>
</tr>
</tbody>
</table>

QBE™ CLEANING PLATFORM

QbE™ Cleaning Platform is the patented Precision Wipe System for cleaning fibre optic end-faces. It is a self-contained cleaning tool that can be used dry or wet. The QbE™ is convenient and economical for use in field or OEM applications.

- Complete Fibre Optic Cleaning System – No refills to buy or investment in expensive mechanisms to maintain
- Effective “Wet” or “Dry” Connector Cleaning – The only cleaning system that gives both options: For “Wet” cleaning use Electro-Wash™ PX Fiber Optics Cleaner or blot connector on Electro-Wash™ MX Presaturated wipe first

<table>
<thead>
<tr>
<th>Part Number:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>CM-QBE</td>
<td>QBE™ Fibre Optic End Face Cleaning Platform</td>
</tr>
</tbody>
</table>
QBE®-2 CLEANING PLATFORM

The QBE®-2 Cleaning Platform is designed for ultimate in performance and convenience. The cleaning platform includes the FiberSafe™ platen to assure no end face damage during cleaning processes. Using the QBE®-2 platform makes UPC and APC (angled) end face cleaning easy and provides for first time cleaning.

- The QBE®-2 Cleaning Platform is the latest evolution of QbE® cleaning tools for the Fibre optic end face QBE®-2 is compact with up to 400 cleaning operations per tool
- Utilizes FiberSafe™ platen to assure proper cleaning without damaging the end face
- Convenient lanyard attachment
- Complete instructions on each container with a QR code for VideoLab™ training

<table>
<thead>
<tr>
<th>Part Number:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>CM-QBE2</td>
<td>QBE®-2 Compact Fibre Optic End Face Cleaning Platform</td>
</tr>
</tbody>
</table>

ULTRAJET® ALL-WAY DUSTER

Ultrajet® compressed gas duster is a high pressure duster that cleans electronics without scratching delicate surfaces. This duster/ cleaner is nonflammable, residue-free and won’t scratch delicate surfaces.

- Safe on plastic
- Completely nonflammable
- XXtra cleaning strength
- 100% ultra-pure HFC-134a
- Filtered to 0.2 microns
- Leaves no residue

<table>
<thead>
<tr>
<th>Part Number:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>CM-ES1620E</td>
<td>Ultrajet All-way Duster</td>
</tr>
</tbody>
</table>

ELECTRO-WASH MX PEN

Electro-Wash® MX Precision Fibre Optic Cleaning Pen is engineered for cleaning fibre optic connectors, splices and ribbons. This precision cleaner quickly and safely cleans the end face of fibre optic connectors, while eliminating electrostatic charges that promote particles adhering to the end face surface. The cleaning formulation is plastic safe and residue free. This non-pressurised container can be easily transported.

- Specifically formulated for cleaning all fibre optic connectors
- Removes handling soils, dust, oils and airborne contamination
- Cleans alone, with the QbE® Cleaning System, or with the Combination Cleaning process (CCp™)
- Cleans and eliminates electrostatic deposits of airborne contaminants
- Completely portable; controlled dispensing of cleaning solution

<table>
<thead>
<tr>
<th>Part Number:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>CM-FW2150</td>
<td>Electrowash Px Cleaner Pen</td>
</tr>
</tbody>
</table>
COPPER CABLING & VOICE

➤ Cat5e Cable
➤ Cat5e Jacks & Modules
➤ Cat5e Patch Panels
➤ Cat5e Patch Leads
➤ Plastics
➤ Cat6 Cable
➤ Cat6 Jacks & Modules
➤ Cat6 Patch Panels
➤ Cat6 Patch Leads
➤ Industrial
➤ Telecom & Voice Products
➤ Connection Strips, Boxes & Panels
➤ Enclosures
Nenco Cat5e LSZH copper cable is a component of the Nenco Copper Cabling System. Nenco Cat5e cable has been tested in the field by experienced engineers and consistently provides extended headroom against industry standards. During installation, the cable pulls effortlessly from the packing box and has a low memory/kink reflex. The sheath is easy to strip and the pairs are simple to separate.

**Technical Data Internal:**
- Rated temperature: 75°C
- Reference standard: TIA 568-C.2
- Solid bare copper conductor
- Colour-coded PE insulation
- LSZH jacket
- Colour: RAL4005
- EN50575: 2014 Euroclass Eca

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>NN5ECBLVTLSOH</td>
<td>Internal Cat5e U/UTP 24AWG solid copper conductors with HDPE insulation, 4 pair twisted data cable with a LSZH jacket supplied in 305m Reelex box. Colour Violet.</td>
</tr>
</tbody>
</table>

Nenco External Cat5e copper cable is a component of the Nenco Copper Cabling System. Nenco Cat5e cable has been tested in the field by experienced engineers and consistently provides extended headroom against industry standards. During installation, the cable pulls effortlessly from the packing box and has a low memory/kink reflex. The sheath is easy to strip and the pairs simple to separate.

**Technical Data External:**
- Rated temperature: -20°C to +75°C
- Reference standard: UL444, TIA 568-C.2 & ISO 11801, UL1581
- Solid bare copper conductor
- Colour-coded PE insulation
- PE (UV Resistant) jacket
- Rated cold bend no crack at – 20°C x 4hrs

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>NN5ECBLEXT305</td>
<td>External Cat5e U/UTP 24AWG solid copper conductors with HDPE insulation, 4 pair twisted data cable with a PE (UV resistant) jacket supplied in 305m Reelex box. Colour Black.</td>
</tr>
</tbody>
</table>
**COPPER CABLE & VOICE**

**COPPER CABLING & VOICE**

**COPPER CABLING & VOICE**

**COPPER CABLING & VOICE**

**COPPER CABLING & VOICE**

**COPPER CABLING & VOICE**

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**COPPER CABLING & VOICE**

**JACKS & MODULES**

**NENCO CAT5E UTP JACK**

**Materials:**
- Housing: polycarbonate resin high-impact ul94v-0 thermoplastic
- Spring wire: phosphor bronze c5210-eh, t=0.35Mm, 50u” gold over 60u” nickel undercoat on contact area
- IDC plastic: polycarbonate resin high-impact ul94v-0 thermoplastic
- IDC contact: phosphor bronze c5191r-h, t=0.4Mm, 150u” tin over 70u” nickel undercoat

Keystone style snap-in jack with T568B colour code and numbered IDC block to aid identification. Used in conjunction with the Nenco Easy-Tool, it enables all 8 cores to be terminated simply in one motion ensuring an accurate connection and neat finish every time. Can also be used with either 110 or Krone style punch down tools. The keystone construction allows it to snap easily into 25mm x 50mm shuttered modules.

**Physical Characteristics:**
- Suitable impact tool: 110/Krone style punch down tool
- Insertion life: 750 mating cycles with FCC compliant 8p plug
- Contact force: 100 grams with FCC compliant 8p plug
- Plug retention force: 11 lbf min
- Durability: 200 termination cycles
- Contact compatibility: accommodates 22 to 24 AWG solid
- Operating temperature range: -10˚C to 60˚C
- Storage temperature range: -40˚C to 68˚C
- Humidity: 10%~90%rh
- Nenco Easy-Tool for quick and simple installation.

**Part No:** NN5EJACKUTPWH
**Description:** NENCO Cat5e UTP Jack with IDC Cap White

---

**NENCO CAT5E UTP LOW PROFILE SHUTTERED MODULE**

Combined jack and module ideal for applications where back box space is limited. Provides a maximum depth of only 19mm with standard 25mm x 50mm module. Rear IDC is suitable for use with a Krone style punch down tool and is supplied with T568B colour coding. Handy flip down window for labelling options.

**Materials:**
- Module housing: ABS UL 94V-0
- Spring wire: Phosphor bronze Goldplated 50v over nickel
- IDC plastic: PC UL94V-0
- IDC contact: Phosphor Bronze with “Ag over 100u”
- Nickel undercoat
- IDC block: 200 termination cycles
- Modular jack: 750 mating cycles suitable impact tool: krone style punch down tool

**Part No:** NN5EMODUTPWH
**Description:** NENCO Cat5e UTP Low Profile Shuttered Module 25x50mm White
Nenco Cat5e patch panels are supplied fully compliant with industry standards. There are 24 UTP ports all numbered (and with an individual write on space to aid port identification). The rear IDC uses a universal style punch down tool with colour code in accordance with T568B wiring. Mounts for cable ties are evenly spaced around the IDC’s to aid cable management.

Physical Specification:
- Insertion life: 750 Mating Cycles with FCC Compliant RJ45 plug
- Contact force: 100 Grams with FCC Compliant RJ45 Plug
- Plug retention force: 100 lbf min
- Contact compatibility: accommodates 22 to 26 AWG solid/24 AWG Stranded
- Operating temperature: -10°C to 60°C
- Storage temperature: -40°C to 68°C
- Humidity: 10%-90% RH
- Durability: 200 termination cycles

### Part No: Description:
- **NN5EPP24** Nenko Cat5e UTP patch panel 24 port with / without Cable Management

### CAT5E PATCH LEADS

Our copper patch leads are manufactured to exceed the performance characteristics as detailed in ISO-11801 and EIA/TIA-568B. They are manufactured using stranded cables and high quality plugs and can be supplied with LSZH sheath as standard. All leads come with moulded, snag free boots to ease installation. Available in a variety of colours and lengths to suit. Leads are supplied fully tested and in individual bags.

### Features:
- ROHS compliant
- ISO-11801 and EIA/TIA-568B
- Available in any colour and length

### HOW TO CREATE OUR CAT5E PATCH LEADS PART NUMBERS

**Populate this field with the required length:**
- Eg: 1 = 1 metre, 2 = 2 metre, 15 = 15 metre etc...

**Populate this field with the required colour:**
- GY = Grey  RD = Red  YW = Yellow  GN = Green  BE = Blue

**Example:**
- **NN5EPL1GY** = Nenko 1M RJ45 CAT5E UTP PATCH LEAD LSZH GREY
PLASTICS

➤ NENCO UNLOADED ANGLED EURO MODULE

Angled shuttered modules are designed for use with standard UK style faceplates with 50mm cut outs. They accept jacks that have a Keystone style footprint. The mounting of the jack means it angles into the back box reducing the overall depth required for termination. The module has an identification space with a flip down window and a coloured marker for PC or Phone identification.

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>NNANS25X50WH</td>
<td>NENCO Unloaded Angled Euro Module 25 x 50mm in White</td>
</tr>
</tbody>
</table>

➤ NENCO UNLOADED ANGLED SHUTTERED MODULE LJ6C

Angled shuttered floor box modules are designed for use with standard 38 x 25mm cut outs. They accept jacks that have a Keystone style footprint. The mounting of the jack means it angles into the back box reducing the overall depth required for termination. The module has an identification space for easy location of a printed label.

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>NNANSLJ6CWH</td>
<td>NENCO Keystone Unloaded Angled Shuttered Module LJ6C White</td>
</tr>
</tbody>
</table>

➤ NENCO UNLOADED FLAT SHUTTERED MODULE

Flat shuttered modules are designed for use with standard 25 x 50mm cut outs and easily snap into UK style faceplates. They accept jacks that have a Keystone style footprint. The module has an identification space for easy location of a printed label.

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>NNFS25X50WH</td>
<td>NENCO Unloaded Flat Shuttered Module 25 x 50mm White</td>
</tr>
</tbody>
</table>
NENCO QUARTER BLANK

Material:
- ABS high-impact UL94V-0 (Thermoplastic)

Technical Data:
- Operating temperature range: -10°C to 60°C
- Storage temperature range: -40°C to 68°C
- Humidity: 10% - 90% RH

Part No: Description:
NNQBWH  NENCO Quarter Blank

NENCO HALF BLANK

Material:
- ABS high-impact UL94V-0 (Thermoplastic)

Technical Data:
- Operating temperature range: -10°C to 60°C
- Storage temperature range: -40°C to 68°C
- Humidity: 10% - 90% RH

Part No: Description:
NNHBWH  NENCO Half Blank

NENCO SINGLE GANG FACEPLATE

Material:
- ABS high-impact UL94V-0 (Thermoplastic)

Screw:
- Slotted oval head (Countersunk) M3.5 X 30MM nickel plated

Technical Data:
- Operating temperature range: -10°C to 60°C
- Storage temperature range: -40°C to 68°C
- Humidity: 10% - 90% RH

Part No: Description:
NNSGFPWH  NENCO Single Gang Faceplate

NENCO DOUBLE GANG FACEPLATE

Material:
- ABS high-impact UL94V-0 (Thermoplastic)

Screw:
- Slotted oval head (Countersunk) M3.5 X 30MM Nickel Plated

Technical Data:
- Operating temperature range: -10°C to 60°C
- Storage temperature range: -40°C to 68°C
- Humidity: 10% - 90% RH

Part No: Description:
NNDGFPWH  NENCO Double Gang Faceplate
**CAT 6**

**Nenco CAT6 LSZH UTP Copper Cable**

Nenco Cat6 LSZH Copper Cable is a component of the Nenco Copper Cabling System. Nenco Cat6 cable has been tested in the field by experienced engineers and consistently provides extended headroom against industry standards. During installation, the cable pulls effortlessly from the packing box and has a low memory/kink reflex. The sheath is easy to strip and the pairs simple to separate.

**Technical Data:**
- Rated temperature: 75°C
- Reference standard: TIA 568-C.2
- Solid bare copper conductor
- Colour-coded PE insulation
- LSZH jacket
- EN50575: 2014 Euroclass Eca

**Part No:**
- **NN6CBLVTL5OH** Internal Cat6 U/UTP 23AWG solid copper conductors with HDPE insulation, 4 pair twisted data cable with a LSZH jacket supplied in 305m Reelex box. Colour Violet.

**Nenco Cat6 LSZH Copper Cable External**

Nenco Cat6 LSZH Copper Cable is a component of the Nenco Copper Cabling System. Nenco Cat6 cable has been tested in the field by experienced engineers and consistently provides extended headroom against industry standards. During installation, the cable pulls effortlessly from the packing box and has a low memory/kink reflex. The sheath is easy to strip and the pairs simple to separate.

**Technical Data:**
- Rated temperature: -20°C to +75°C
- Reference standard: UL444, TIA 568-C.2 & ISO 11801, UL1581
- Solid bare copper conductor
- Colour-coded PE insulation
- PE (UV Resistant) jacket
- Rated cold bend no crack at – 20°C x 4hrs

**Part No:**
- **NN6CBL305** External Cat6 U/UTP 23AWG solid copper conductors with HDPE insulation, 4 pair twisted data cable with an integrated pair divider in a PE (UV resistant) jacket supplied in 305m Reelex box. Colour Black.
JACKS & MODULES

➤ NENCO CAT6 UTP KEYSTONE JACK

Keystone style snap-in jack with T568B colour code and numbered IDC block to aid identification. Used in conjunction with the Nenko Easy-Tool, it enables all 8 cores to be terminated simply in one motion ensuring an accurate connection and neat finish every time. Can also be used with either 110 or Krone style punch down tools. The keystone construction allows it to snap easily into 25mm x 50mm shuttered modules.

Physical characteristics:
➤ Suitable impact tool: 110/Krone style punch down tool
➤ Insertion life: 750 mating cycles with FCC compliant 8p plug
➤ Durability: 200 termination cycles
➤ Contact compatibility: accommodates 22 to 24 AWG solid
➤ Operating temperature range: -10°C to 60°C
➤ Humidity: 10%~90%rh

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>NN6JACKUTPWH</td>
<td>Nenko Cat6 UTP Keystone Jack with IDC Cap White</td>
</tr>
</tbody>
</table>

➤ NENCO CAT6 UTP LOW PROFILE SHUTTERED MODULE

Combined jack and module for applications where the back box space is limited. Provides a maximum depth of only 19mm with standard 25mm x 50mm module. Rear IDC is suitable for use with a Krone style punchdown tool and is supplied with T568B colour coding. Handy flip down window for labelling options

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>NN6MODUTPWH</td>
<td>Nenko Cat6 UTP low profile shuttered module 25X50mm White. Krone style IDC Punch Down</td>
</tr>
</tbody>
</table>

➤ NENCO CAT6 PLUGS

➤ RJ45 crimp-on connectors for use with with stranded or solid-core Cat6 twisted pair cable.
➤ 30μ” gold plated for reliability.
➤ Made from high quality polycarbonate.
➤ Sold individually

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>NC-C6-PLUG-UTP-SOL</td>
<td>Nenko Cat6 UTP Solid Crimp Plug</td>
</tr>
<tr>
<td>NC-C6-PLUG-UTP-STR</td>
<td>Nenko Cat6 UTP Stranded Crimp plug</td>
</tr>
</tbody>
</table>
**PATCH PANELS**

➤ **NENCO CAT6 UTP PATCH PANEL**

Nenko Cat6 patch panels are supplied fully compliant with industry standards. There are 24 UTP ports all numbered and with an individual write on space to aid port identification. The rear IDC uses a universal style punch down tool with colour code in accordance with T568B wiring. The panel is supplied with a convenient cable management bar which can be fitted easily on to the rear of the panel if required.

**Physical Specification:**
- Insertion life: 750 Mating Cycles with FCC Compliant RJ45 plug
- Contact force: 100 Grams with FCC Compliant RJ45 Plug
- Plug retention force: 100 lbf min
- Contact compatibility: accommodates 22 to 26 AWG solid/24 AWG Stranded
- Operating temperature: -10°C to 60°C
- Storage temperature: -40°C to 68°C
- Humidity: 10%-90%RH
- Durability: 200 termination cycles

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>NN6PP24M</td>
<td>NENCO Cat6 UTP Patch Panel 24 Port with Cable Management</td>
</tr>
</tbody>
</table>

**PATCH LEADS**

➤ **CAT6 PATCHLEADS**

Our copper patch leads are manufactured to exceed the performance characteristics as detailed in ISO-11801 and EIA/TIA-568B. They are manufactured using stranded cables and high quality plugs and can be supplied with LSZH sheath as standard. All leads come with moulded, snag free boots to ease installation. Available in a variety of colours and lengths to suit. Leads are supplied fully tested and in individual bags.

**Features:**
- ROHS compliant
- ISO-11801 and EIA/TIA-568B
- Available in any colour and length

**HOW TO CREATE OUR CAT6 PATCH LEADS PART NUMBERS**

Populate this field with the required length:
- Eg: 1 = 1 metre, 2 = 2 metre, 15 = 15 metre etc...

Populate this field with the required colour:
- GY = Grey
- RD = Red
- YW = Yellow
- GN = Green
- BE = Blue

**EG:** NN6GPL1GY = NENCO 1M RJ45 CAT6 UTP PATCH LEAD LSZH GREY
INDUSTRIAL

➤ NENCO CAT5E AND CAT6 INDUSTRIAL PATCH LEADS

Our industrial patch leads are fitted with industrial boots and are ideal for any installation where extra protection is required.

The ruggedised shell also has a cap fitted, which can be taken off during installation and replaced once the connector has been taken out of the socket. Ideal for leads which are going to be used over and over.

➤ Robust strain relief holds cable securely
➤ Cables can be pulled into place without getting snagged
➤ RJ45 connector protected by ruggedized shell
➤ IP67 compliant

HOW TO CREATE OUR INDUSTRIAL PATCH CORD PART NUMBERS

Insert the required Category: 5E or 6

Populate both fields with the required Length:
Eg: 01 = 1 Metre
02 = 2 Metre
03 = 3 Metre
05 = 5 Metre
10 = 10 Metre

NN
X
X
X
X

INDPL for industrial patch cord

BK for Black

EG: NN5EINDPL05BK = 5 Metre, CAT5E INDUSTRIAL PATCH CORD in Black
CAT6A FIELD TERMINABLE PLUG

- Applications include Premise & Data Centre 10GBase-T / Industrial Ethernet / CCTV / UHD TV
- Assembled in 60secs without special tools
- Zinc die cast housing with 360° shielding and full metal shielding between wire pairs
- Secure data transmission in high noise (EMI/RFI) environments
- Strain relief settings (cable diameter 5.0mm to 9.0mm)
- Wiring scheme T568B
- -40°C to 85°C (-40°F to 185°F)
- Meets IEEE 802.3af and IEEE 802.3at for PoE & PoE+ applications
- Meets the channel requirements of ANSI/TIA-568-C.2 Cat6A and ISO 11801 2nd Edition Class EA in a 4-connector configuration up to 100 meters
- Insulation diameter 1.0mm – 1.6mm
- Conductor size solid AWG 24/1 – AWG 22/1. Stranded conductor AWG 27/7 – 22/7
- IP20 rating with pre-assembled protection cap.

NN6AINDPGSTP
Cat6A Field Terminable Plug

NENCO IP67 RATED INDUSTRIAL RANGE

A range of IP67 compliant feed through couplers, patch leads and bulkhead mounted Cat5e and Cat6 keystone jacks.

- Ideally suited for industrial & harsh environments subject to dust or liquids including temporary immersion (30mins in 1m depth water)
- Ideal for use with NENCO External Cat5e and Cat6 cable.
- Dust caps maintain environmental rating when plug/jack disconnected.

Part No: Description:
NN5EINDSTP    Cat5e STP Industrial Keystone Jack
NN5EINDSTPC   Cat5e STP Industrial Keystone Jack with dust cap
NN6INDSTP     Cat6 STP Industrial Keystone Jack
NN6INDSTPC    Cat6 STP Industrial Keystone Jack with dust cap

Part No: Description:
NN5EINDCSTP   Cat5e STP Industrial Bulkhead Adaptor
NN5EINDCSTPC  Cat5e STP Industrial Bulkhead Adaptor with dust cap
NN6INDCSTP    Cat6 STP Industrial Bulkhead Adaptor
NN6INDCSTPC   Cat6 STP Industrial Bulkhead Adaptor with dust cap

Part No: Description:
NNINDS        Waterproof kit for outdoor cable
TELECOMS & VOICE PRODUCTS

➤ GEL FILLED EXTERNAL VOICE CABLE

Multi-pair external grade telephone cables are compliant with CW1128 and for steel wire armoured version CW1128-1198. The cables are grease filled for moisture protection and suitable for direct burial.

Features:
➤ UV and moisture resistant
➤ Suitable for direct burial
➤ 0.5mm conductor size
➤ Cut to Length service

Part No: Description:
NC-CW1128 CW1128 Voice Cable Gel Filled External
NC-CW1128-1198 CW1128-98 Armoured Voice Cable Gel Filled External

➤ INTERNAL/EXTERNAL VOICE CABLE

The following range of multi-pair telephone cables are constructed in a similar way to standard BT type CW1308, but are suitable for internal and external use due to a UV resistant jacket. The cable’s specification is further enhanced by the use of Low Smoke Zero Halogen (LSZH) Outer Sheath. Available in high core counts.

Features:
➤ Internal/External grade
➤ Integral 1/1.38mm earth conductor
➤ Save installation time and cost
➤ 0.5mm conductor size
➤ Black LSZH outer sheath
➤ Cut to Length service

Part No: Description:
NC-CW1308B CW1308B Voice Cable Internal/External Cable with/without Earth
NC-CW1128-1198 CW1128-98 Armoured Voice Cable Gel Filled External

Specifications:
Conductor
➤ Diameter: 0.50 mm nominal
➤ Elongation: Min. 15%

Insulation
➤ Each conductor insulated with foam skin HDPE material
➤ Insulation diameter: 0.90 mm Nom

Cable Core Wrapping:
The cable core is wrapped with the longitudinal application of non-hygrosopic and non-wicking polyester tape of suitable thickness and wrapped with nylon binder

Filling: The interstices of cable core completely filled with cable filling compound

HOW TO CREATE OUR VOICE CABELING PART NUMBERS

Populate this field with the number of pairs required:
Eg: 10; 50; 100 etc...

If you require the cable to be armoured please insert (1198) if not leave blank.

NC X X X X

Populate this field with the type of cable required:
CW1128; CW1308B; CW1308

If you require an earth populate this field with the letter (E) if not leave blank.

EG: NC-CW1128-50 = NET-C 50 PAIR CW1128 VOICE CABLE GEL FILLED EXTERNAL CABLE
INTERNAL VOICE CABLE

The following range of multi-pair internal telephone cables are manufactured in accordance with BT type CW1308 for internal use. Used for wiring telephone line outlet sockets, it is also useful for other low voltage, low current applications. The cable uses solid tinned annealed copper conductors, each 0.5mm diameter. With an overall LSZH sheath and available with earth conductor. Available in high core counts.

Features:
- Internal grade
- Integral 1/1.38mm earth conductor
- Save installation time and cost
- 0.5mm conductor size
- LSZH outer sheath

Specification:
- Conductor:
  - Diameter: 0.50 mm nominal
  - Elongation: 18% to 24%

- Insulation:
  - Each conductor is insulated with PVC as per BS 6746 the insulated conductor spark test at 4.5 kVDC
  - Ring marking consist of ink bands on base colour. Markings identifiable in every 16 mm length. Markings occupy between 20% and 30% of the total area of insulation
  - Diameter Over Dielectric: Avg. 0.85 +/- 0.005 mm

- Earth Conductor:
  - Conductor diameter: 1.38 mm Nominal
  - Insulation diameter: 2.70 +/- 0.05 mm
  - Colour of insulation: cream

Cable Core Wrapping:
The cable core and PVC insulated earth conductor wrapped with the longitudinal application of non-hygroscopic and non-wicking polyester tape of thickness 0.036 mm minimum and wrapped with nylon binder.

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>NC-CW1308</td>
<td>CW1308 Voice Cable Internal with / without Earth</td>
</tr>
</tbody>
</table>

TELEPHONE VOICE PANEL

Voice Panels are a cost effective method for terminating multi-pair telephone cables. All Voice Panels are 19" for rack mounting and 1U high. Each panel is available in a 25 port with all the RJ45 presentations in one line and a high density 50 port version also available. The panels have built in rear cable management as standard and each port is individually numbered for identification. Voice Panels are supplied as 6 wire (1/2, 3/6, 4/5) with LSA Krone style IDC blocks.

- Up to 50 x RJ45 ports in 1U Rack space
- Supplied with cable ties and cage nuts
- Built-in rear cable management
- Material – High carbon steel
- Colour – Black powder coating
- Termination – LSA style IDC
- Dimensions: Width – 484mm; Height – 44mm; Depth – 132mm/163mm

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>NC-PAT-25-VP-6</td>
<td>25 Port UTP Telephone Voice Panel Krone IDC 6 Wire</td>
</tr>
<tr>
<td>NC-PAT-50-VP-6</td>
<td>50 Port UTP Telephone Voice Panel Krone IDC 6 Wire</td>
</tr>
</tbody>
</table>
CONNECTION STRIPS, BOXES & PANELS

➤ KRONE STYLE 10 PAIR IDC CONNECTION BLOCK

➤ Comes as standard in cream
➤ Can be disconnected for testing

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>NC-237A</td>
<td>10 Pair Disconnection Strip</td>
</tr>
</tbody>
</table>

➤ LABEL HOLDER FOR IDENTIFICATION OF 237 STYLE CONNECTION BLOCKS

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>NC-51A</td>
<td>51A Designation Strip</td>
</tr>
</tbody>
</table>

➤ TAILED VOICE ADAPTOR

➤ Plugs into an RJ45 socket converting it into a voice outlet for attachment of a telephone or fax
➤ Comes with a 10cm fly lead (other lengths available)
➤ Available in PSTN master, PABX master, or secondary versions

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>NC-VA-MASTER</td>
<td>Full Master Tailed Voice Adaptor</td>
</tr>
<tr>
<td>NC-VA-SECONDARY</td>
<td>Secondary Tailed Voice Adaptor</td>
</tr>
<tr>
<td>NC-VA-PABX</td>
<td>PABX Master Tailed Voice Adaptor</td>
</tr>
</tbody>
</table>

➤ LINE JACK UNIT

Material:
➤ ABS high-impact UL94V-0 (thermoplastic)

Technical Data:
➤ Operating temperature range: -10°C to 60°C
➤ Storage temperature range: -40°C to 68°C
➤ Humidity: 10% - 90% RH

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>NC-LJU-2/1A</td>
<td>PSTN Surface Mount Line Jack Unit (Includes Back Box)</td>
</tr>
<tr>
<td>NC-LJU-2/2A</td>
<td>PABX Surface Mount Line Jack Unit (Includes Back Box)</td>
</tr>
<tr>
<td>NC-LJU-2/3A</td>
<td>Secondary Surface Mount Line Jack Unit (Includes Back Box)</td>
</tr>
<tr>
<td>NC-LJU-3/1A</td>
<td>PSTN Single Flush Mount Line Jack Unit</td>
</tr>
<tr>
<td>NC-LJU-3/2A</td>
<td>PABX Single Flush Mount Line Jack Unit</td>
</tr>
<tr>
<td>NC-LJU-3/3A</td>
<td>Secondary Single Flush Mount Line Jack Unit</td>
</tr>
<tr>
<td>NC-LJU-4/1A</td>
<td>PSTN Double Flush Mount Line Jack Unit</td>
</tr>
<tr>
<td>NC-LJU-4/2A</td>
<td>PABX Double Flush Mount Line Jack Unit</td>
</tr>
</tbody>
</table>
➤ 20 PAIR VOICE CABLE CONNECTION BOX

- Accepts two 237a style connection blocks
- Available in internal and external

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>NC-CB-201A</td>
<td>20 Pair Internal Connection Box</td>
</tr>
<tr>
<td>NC-CB-201D</td>
<td>20 Pair Internal Connection Box loaded with two 237a Connection Blocks</td>
</tr>
</tbody>
</table>

➤ 50 PAIR VOICE CABLE CONNECTION BOX

- Accepts up to five 237a style connection blocks
- Available in internal and external

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>NC-CB-251A</td>
<td>50 Pair Internal Connection Box</td>
</tr>
<tr>
<td>NC-CB-251A-EX</td>
<td>50 Pair External Connection Box</td>
</tr>
<tr>
<td>NC-CB-251D</td>
<td>50 Pair Internal Connection Box loaded with Five 237a Connection Blocks</td>
</tr>
<tr>
<td>NC-CB-251D-EX</td>
<td>50 Pair External Connection Box loaded with Five 237a Connection Blocks</td>
</tr>
</tbody>
</table>

➤ 100 PAIR VOICE CABLE CONNECTION BOX

- Accepts up to ten 237a style connection blocks
- Available in internal and external

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>NC-CB-301A</td>
<td>100 Pair Internal Connection Box</td>
</tr>
<tr>
<td>NC-CB-301A-EX</td>
<td>100 Pair External Connection Box</td>
</tr>
<tr>
<td>NC-CB-301D</td>
<td>100 Pair Internal Connection Box loaded with Ten 237a Connection Blocks</td>
</tr>
<tr>
<td>NC-CB-301D-EX</td>
<td>100 Pair External Connection Box loaded with Ten 237a Connection Blocks</td>
</tr>
</tbody>
</table>
COPPER ENCLOSURES

➤ POD BOXES

Pod boxes are made of premium quality 1.5mm steel. Pod boxes are for use beneath floors or can be attached to desks. All pod boxes are finished with a black powder coating and come complete with cable tie fixing points and keyhole slots.

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>NC-POD2</td>
<td>2 Way Pod Box with 20mm Entry</td>
</tr>
<tr>
<td>NC-POD4</td>
<td>4 Way Pod Box with 25mm Entry</td>
</tr>
<tr>
<td>NC-POD6</td>
<td>6 Way Pod Box with 32mm Entry</td>
</tr>
<tr>
<td>NC-POD8</td>
<td>8 Way Pod Box with 2 x 25mm Entry</td>
</tr>
<tr>
<td>NC-POD4-SE</td>
<td>4 Way Side Entry Pod Box with 25mm Entry</td>
</tr>
<tr>
<td>NC-POD6-SE</td>
<td>6 Way Side Entry Pod Box with 25mm Entry</td>
</tr>
</tbody>
</table>

Pod boxes are made of premium quality 1.5mm steel. Pod boxes are for use beneath floors or can be attached to desks. All pod boxes are finished with a black powder coating and come complete with cable tie fixing points and keyhole slots.

➤ POD BOX KITS

Pod Box kits are made up of the following:
- 1 x Pod box
- 1 x Flex assembly with glands and nuts fitted each end
- 1 x Fixing bracket
- 1 x Conduit Pre-cut to required length

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>NC-POD02-KIT</td>
<td>2 Way Pod Box Kit with 20mm Entry</td>
</tr>
<tr>
<td>NC-POD04-KIT</td>
<td>4 Way Pod Box Kit with 25mm Entry</td>
</tr>
<tr>
<td>NC-POD06-KIT</td>
<td>6 Way Pod Box Kit with 32mm Entry</td>
</tr>
<tr>
<td>NC-POD02-ASSY</td>
<td>2 Way Pod Box Assembly 20mm Entry</td>
</tr>
<tr>
<td>NC-POD04-ASSY</td>
<td>4 Way Pod Box Assembly 25mm Entry</td>
</tr>
<tr>
<td>NC-POD06-ASSY</td>
<td>6 Way Pod Box Assembly 32mm Entry</td>
</tr>
</tbody>
</table>
SECURITY

➤ Dome Cameras  274
➤ Bullet Cameras  276
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➤ Recorders  277

LILIN
DOME CAMERAS

Lilin are one of the world’s leading providers of IP Video Solutions. They were the first company to introduce ONVIF Cameras and other conformant products. With the security market having migrated from analogue to IP, it’s important to partner with a brand that offers support from project conception to completion. LILIN has over 35 years’ experience and is dedicated to manufacturing IP solutions that are easy to install and operate. Networks Centre has a specialist IP team ready to assist and provide you with competent technical support either over the phone or onsite and supply a complete end-to-end package.

➤ L SERIES 1080P HD DOME IP CAMERAS

L Series LI-LD2122E4 & LI-LD2122E6

- Full HD 2 megapixel CMOS image sensor
- True H.264 AVC/MPEG-4 part 10
- H.264 and Motion JPEG triple video streaming
- 3D noise reduction (MCTF)
- 2D WDR function
- Digital zoom supported
- Motion detection alarm function
- 3-Axis camera construction
- Screw-on design dome cover for easy and secure installation
- Day & Night (IR cut removable)
- EEE 802.3af PoE
- ONVIF supported

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>LI-LD2122E4</td>
<td>MERIT LILIN 1080P Internal IP L Series Camera 4mm Fixed Lens</td>
</tr>
<tr>
<td>LI-LD2122E6</td>
<td>MERIT LILIN 1080P Internal IP L Series Camera 6mm Fixed Lens</td>
</tr>
</tbody>
</table>

➤ Z SERIES DAY & NIGHT 1080P HD AUTOFOCUS DOME IR IP CAMERA

Z Series LI-ZR2322X

- Full HD 2 megapixel CMOS image sensor
- True H.264 AVC/MPEG-4 part 10 real-time video compression
- H.264 and Motion JPEG multi-profile video streaming
- Auto focus with zoom / focus motorized lens
- 3D noise reduction (MCTF)
- 2D WDR function
- Digital PTZ supported
- Face / Tampering / Audio / Motion detection alarm function
- Ceiling mount and Embedded mount for Internal installation
- EEE 802.3af PoE
- High efficiency IR LED, radiant distance up to 25m
- Day & Night (IR cut removable)
- 2-way audio supported
- Digital I/O: 1 in, 1 out
- ONVIF supported

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>LI-ZR6122X</td>
<td>MERIT LILIN HD Autofocus Day &amp; Night IR (25m) IP Camera. Digital PTZ support, Motion detection, 2 way audio support, Internal Ceiling/ Embedded mount, PoE, 2.8mm/12mm Lens/ Focal length, 1/2.8” CMOS Sensor</td>
</tr>
</tbody>
</table>

MULTIPLE VARIATIONS & SPECIFICATIONS AVAILABLE - PLEASE CALL FOR MORE INFORMATION.
### L SERIES DAY & NIGHT 1080P HD VANDAL RESISTANT DOME IR IP CAMERA

**L Series LI-LR6022EX3.6**
- Full HD 2 megapixel CMOS image sensor
- True H.264 AVC/MPEG-4 part 10
- H.264 and Motion JPEG triple video streaming
- 3D noise reduction (MCTF)
- 2D WDR function
- Digital zoom supported
- Motion detection alarm function
- High efficiency IR LED, radiant distance up to 25m
- Innovatory external adjustment with waterproof for zoom and focus of Vari-Focal lens
- Day & Night (IR cut removable)
- EEE 802.3af PoE
- ONVIF supported
- Vandal Resistant & IP67 rated

<table>
<thead>
<tr>
<th>Part No: LI-LR6022EX3.6</th>
<th>Description: MERIT LILIN Day &amp; Night 1080P HD Vandal Resistant Dome IR IP Camera - 3.3-12MM Adjustable lens</th>
</tr>
</thead>
</table>

**MULTIPLE VARIATIONS & SPECIFICATIONS AVAILABLE - PLEASE CALL FOR MORE INFORMATION.**

### Z SERIES DAY/NIGHT FULL HD AUTOFOCUS VANDAL RESISTANT DOME IR IP CAMERA

**Z Series LI-ZD6122EX3**
- Full HD 2 megapixel CMOS image sensor
- True H.264 AVC/MPEG-4 part 10 real-time video compression
- H.264 and Motion JPEG multi-profile video streaming
- Auto focus with zoom / focus motorized lens
- 3D noise reduction (MCTF)
- 2D WDR function
- Digital PTZ supported
- Face / Tampering / Audio / Motion detection alarm function
- Day & Night (IR cut removable)
- 2-way audio supported
- Digital I/O: 1 in, 1 out
- ONVIF supported
- Vandal Resistant & IP67 rated

<table>
<thead>
<tr>
<th>Part No: LI-ZD6122EX3</th>
<th>Description: MERIT LILIN 1080P HD Autofocus Day &amp; Night IR (25m) IP Camera. Digital PTZ support, Motion detection, 2 way audio support, External IP67 Vandal Resistant, PoE, 2.8mm/12mm Lens/Focal length, 1/2.8” CMOS Sensor</th>
</tr>
</thead>
</table>

**MULTIPLE VARIATIONS & SPECIFICATIONS AVAILABLE - PLEASE CALL FOR MORE INFORMATION.**
L SERIES DAY & NIGHT 1080P HD VARIFOCALE IR IP BULLET CAMERA

L Series LI-LR7224EX3.6

- Full HD 2 megapixel CMOS image sensor
- True H.264 AVC/MPEG-4 part 10
- H.264 and Motion JPEG triple video streaming
- 3D noise reduction (MCTF)
- 2D WDR function
- Digital zoom supported
- Audio / Motion detection alarm function
- Cable managed housing and bracket
- High efficiency IR LED, radiant distance up to 55m
- Day & Night (IR cut removable)
- 2-way audio supported
- Digital I/O: 1 in, 1 out
- ONVIF supported

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>LI-LR7224EX3.6</td>
<td>MERIT LILIN Day &amp; Night 1080P HD Var-Focal IR IP Bullet Camera</td>
</tr>
</tbody>
</table>

MULTIPLE VARIATIONS & SPECIFICATIONS AVAILABLE - PLEASE CALL FOR MORE INFORMATION.

Z SERIES DAY & NIGHT 1080P HD 10X OR 20X AUTOFOCUS IR IP BULLET CAMERA

Z Series LI-ZR8022EX20

- Full HD 2 megapixel CMOS image sensor
- True H.264 AVC/MPEG-4 part 10 real-time Video compression
- H.264 and Motion JPEG multi-profile Video streaming
- 3D Noise Reduction (MCTF)
- 2D WDR function
- Digital PTZ supported
- Intelligent Video Surveillance
- Cable managed housing and bracket
- High efficiency IR LED, Radiant distance up to 60m
- Beam spread of IR LED: Automatically adjusted, depending on the zoom ratio
- Day & Night (IR cut removable)
- 2-way audio supported
- IEEE 802.3af PoE
- Digital I/O: 1 in, 1 out
- ONVIF profile supported
- Waterproof IP66

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>LI-ZR8022EX20</td>
<td>MERIT LILIN 1080P HD Autofocus Day &amp; Night IR (60m) IP Camera. Digital PTZ support, Motion detection, 2 way audio support, External IP66, PoE, 4.7mm/94mm Lens/Focal length, 1/2.8&quot; CMOS Sensor</td>
</tr>
</tbody>
</table>

MULTIPLE VARIATIONS & SPECIFICATIONS AVAILABLE - PLEASE CALL FOR MORE INFORMATION.
Z SERIES 2MP 60FPS AUTOFOCUS IR IP BULLET CAMERA

Z Series  Li-ZSR8122X
➤ 60fps @ 1080p resolution
➤ Micro SD/SDHC/SDXC card recording supported
➤ HDR function up to 120dB
➤ IP66 rain and dust resistant
➤ 35-meter infrared night vision

Part No: Description:
Li-ZSR8122X  MERIT LILIN 2MP 60fps@1080p, Autofocus, IR (35m) IP Camera, PoE, 2.8mm/12mm Lens/Focal length, 1/2.8" CMOS Sensor

MULTIPLE VARIATIONS & SPECIFICATIONS AVAILABLE - PLEASE CALL FOR MORE INFORMATION.

VIDEO ENCODERS

SINGLE CHANNEL VIDEO ENCODER

For existing analogue style cameras LILIN have their encoder and decoder which enable connection of existing analogue cameras to a network NVR. Existing analogue cameras can be viewed and controlled on PC’s using this simple plug and play equipment.

MULTIPLE VARIATIONS & SPECIFICATIONS AVAILABLE - PLEASE CALL FOR MORE INFORMATION.

RECORDERS

CMX NETWORK VIDEO RECORDER TOWERS

Features:
➤ Central management system.
➤ Manage remote IP cameras and DVR devices.
➤ Record and manage 36 channels.
➤ Full HD recording for LILIN H.264 IP cameras.
➤ Scheduled recording.
➤ E-Map alarm or motion notification.
➤ Remote device status monitoring.
➤ Remote device manager.
➤ Device grouping and recall.
➤ PTZ controls for IP Fast Domes.
➤ Easy to use calendar for video playback.
➤ Complete operational event logs.
➤ Configurable user access levels.
➤ Reduces installation and maintenance costs.

Part No: Description:
Li-CMX-4  4 Channel IP camera recording system with Emap and DVR monitoring in PC Shuttle 1TB Storage
Li-CMX-16 16 Channel IP camera recording System with Emap and DVR monitoring in PC Tower Case
Li-CMX-36 36 Channel IP camera recording System with Emap and DVR monitoring in PC Tower Case
**1080P REAL-TIME MULTI-TOUCH 16 CHANNEL STANDALONE NVR**

**NVR Touch Series**

LILIN’s touch series offers a touch-screen interface which allows you to take advantage of highly intuitive smartphone-style features like “pinch-n-zoom”, multi-touch and scrolling, and icon based menus, deliberately avoiding traditional PC-style screens. The touch-screen increases operator speed and minimises the time taken to learn the system. The NVR’s are equipped with an automated installation wizard (WS Discovery) which locates all the cameras on the network and imports a preview picture of each channel to help with identification. This greatly speeds up commissioning. They support USB network back up and HDMI outputs. Hard drive capability up to 48TB’s with RAID available on specific models. Web based remote viewing is available, along with smart phone viewing with Android, iPhone and Blackberry compatibility. Several options are available, NVR104, 109 and 116, along with NVR1400 and 2400 for full 60fps network camera support.

**Part No:** LI-NVR-116D-18TB  
**Description:** MERIT LILIN 1080P Real-Time Multi-Touch 16 Channel Standalone NVR with 18TB Hard Drive

**Part No:** LI-NVR-116D-16TB  
**Description:** MERIT LILIN 1080P Real-Time Multi-Touch 9 Channel Standalone NVR with a 16TB Hard Drive

**GVD NETWORK VIDEO RECORDER RACK MOUNT**

LILIN Nav recorder series supports up to 108 channels including all LILIN IP cameras, PTZ Domes and DVR/NVR’s. Features include network streaming, recording, and display, with built-in dual port Gigabit Ethernet, and dual monitors support. They also support multi-channel playback for remote or local viewing. With hot swappable HDD’s and RAID storage available a wide variety of recording settings are available.

**Part No:** LI-NAV1108  
**Description:** MERIT LILIN HD 108 Channel IP NVR, 4U Server Case with 24 Bays, Raid Support, JBOD SOS Support

**1080P REAL-TIME MULTI-TOUCH 4 CHANNEL STANDALONE NVR**

**NVR L Series**

LILIN L Series standalone NVR is a plug and play cost effective surveillance system. Ideal for SOHO and SMB users to record and navigate their IP based cameras. The NVRs are able to support up to 16 cameras at high definition resolution in real time as well as other configurations. The user interface is intuitive with all the features that end users need for daily video surveillance operations – video recording, playback / live view of recorded video. Full LILIN NAV software support, Web based remote viewing, iOS, and Android support. With LILIN’s unique IPScan technology, you can locate all the cameras on the network and import a preview picture of each channel to help with identification, which greatly speeds up commissioning. Configurable hard drive capacity up to 24TB’s.

**Part No:** LI-NVR-400L-2TB  
**Description:** MERIT LILIN 1080P Real-Time Multi-Touch 4 Channel Standalone NVR with 2TB Hard Drive

**Part No:** LI-NVR-400L-16TB  
**Description:** MERIT LILIN 1080P Real-Time Multi-Touch 9 Channel Standalone NVR with a 16TB Hard Drive
ACTIVE EQUIPMENT

➤ Media Converter & Chassis
➤ D-Link Switches
➤ D-Link Wireless
➤ KBC Industrial Ethernet Switches
➤ KBC Media Converters
➤ KBC Transmitters & Receivers

D-Link

KBC

data delivered
MEDIA CONVERTERS

➤ MEDIA CONVERTERS

Extend 10Base-T, 100Base-TX and 1000Base-T Ethernet LAN signals from S/UTP Cat3/5/5e/6 structured wiring over multimode or singlemode optical fibres using the 1000Base-FX Ethernet standard
➤ Simple and easy to install
➤ Meets all the relevant industry standards for 1000Mbit/s Ethernet
➤ Available in SC, ST, FC and LC configuration
➤ Standalone converters can be 19” rack mounted in an AC powered enclosure
➤ Available in multimode and singlemode fibre formats and singlemode WDM single fibre
➤ LED indicators for monitoring and diagnostics

Part No: Description:
MC-SC-10/100-MM 10-100 Multimode Media Converter with SC adaptor
MC-SC-10/100-SM 10-100 Singlemode Media Converter with SC adaptor
MC-SC-10/100/1000-MM 10-100-100 Multimode Media Converter with SC adaptor
MC-SC-10/100/1000-SM 10-100-1000 Singlemode Media Converter with SC adaptor
MC-ST-10/100-MM 10-100 Multimode Media Converter with ST adaptor
MC-ST-10/100-SM 10-100 Singlemode Media Converter with ST adaptor

➤ STAND ALONE 19” RACK MOUNT CHASSIS

Extend 10Base-T and 100Base-TX Ethernet LAN signals from S/UTP Cat3/5/5e structured wiring over multimode and singlemode optical fibres using the 100Base-FX Ethernet standard
➤ Simple and easy to install
➤ 2U 19” rack mounted supports up to 16 slots for card type (10/100Mbit/s and Gigabit Ethernet) media converters
➤ 2U 19” stand alone unit supports up to 14 slots for card type (10/100Mbit/s and Gigabit Ethernet) media converters
➤ Suited to enterprise environments
➤ Dual Power supply available providing hot-swappable capability & redundancy
➤ Hot swappable converters
➤ Available in AC110V/220V or DC48V versions
➤ Dimensions: 490mm x 230mm x 90mm (rack mounting)
➤ Power: 95W - Output DC5V 16A

Part No: Description:
MC-OP-EF14-D48 14slot, 2U 19”, Dual Power Supply, DC48V
MC-OP-EF14-S110/S220 14slot, 2U 19”, Dual Power Supply, AC110V/220V
MC-OP-EF14-S48 14slot, 2U 19”, Single Power Supply, DC48V
MC-OP-EF16-D48 16slot, 2U 19”, Dual Power Supply, DC48V+AC220V
MC-OP-EF16-S48 16slot, 2U 19”, Single Power Supply, DC48V

Can’t find what you’re looking for? Then contact us...
D-LINK SWITCHES

D-Link offers a comprehensive suite of business class switches that provide the foundation for a full range of high-value network solutions. D-Link Business switches fall into one of three categories. Unmanaged switch, smart switch & fully managed switch

**Unmanaged Switches**

Just plug it in and turn it on. With an unmanaged switch, there is no configuration necessary. Unmanaged Switches are cost effective and ideal for smaller networking needs. When all you need is a simple device that reliably forwards Ethernet frames, choose a D-Link Unmanaged Switch.

**Smart Switches**

Typically managed using a browser-based Graphical User Interface (GUI), Smart Switches are attractively priced and support an essential set of Layer 2/2+ switching functions including VLAN, Link Aggregation, QoS, Bandwidth Limiting, Access Control Lists, and more. D-Link offers six families of Smart Switches to meet the networking needs of businesses of all sizes. Choose a D-Link Smart Switch when you want to control who’s on the network and make sure they’re getting the best performance possible.

**Fully Managed Switches**

Typically managed either using either a Command Line Interface (CLI) or Graphical User Interface (GUI), Fully Managed Switches support a complex suite of Layer 2, Layer 2+ and Layer 3 switching functions. D-Link Managed Switches are easy to set up, configure and monitor. They can be managed individually, or in the case of D-Link Stackable Managed switches, as part of a stack. Choose a D-Link Fully Managed Switch when network performance and security are critical, and compromise is not an option.

➤ FAST ETHERNET SMART SWITCHES WITH FIBRE UPLINKS

<table>
<thead>
<tr>
<th>Part No</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>DES-1210-28</td>
<td>24 Port 10/100 24 Port + 4 Gigabit Combo/SFP</td>
</tr>
<tr>
<td>DES-1210-52</td>
<td>48 Port 10/100 Smart Switch + 2 Combo 1000 Base T/SFP + Combo/SFP</td>
</tr>
<tr>
<td>DES-1210-28P</td>
<td>24 Port 10/100 24 port + 4 Gigabit Combo/SFP, PoE</td>
</tr>
<tr>
<td>DES-1210-08P</td>
<td>8 Port 10/100 Smart PoE Switch</td>
</tr>
</tbody>
</table>

The DES-1210 Series is the latest generation of Smart Switches. Equipped with 8, 24 or 48 Fast Ethernet ports with Gigabit/combo port options, this series offers all the features needed in a small and medium business, without the complexity or cost involved. The built-in web interface and PC based SmartConsole Utility make these switches easy to deploy, configure and troubleshoot.

These switches are ideal for converged networks, where IP telephony/VoIP, IP surveillance systems and traditional data traffic are integrated in the data flow.

Equipped with a complete line-up of features, these switches include quality of service, port trunking, spanning tree and IGMP snooping. Network monitoring and maintenance features include port mirroring, loopback detection and the innovative cable diagnostics. With cable diagnostics, the switch will flag a faulty Ethernet cable connected to any of its ports, detailing the type of error detected.

The PoE option is available on the 8 and 24 port members of the family.
**GIGABIT SMART SWITCHES WITH FIBRE UPLINKS**

The DGS-1210-10/10P/20/28 features a fanless design that allows for quieter operation and helps to extend the device's lifetime. While the DGS-1210-28P/52/52P feature a smart fan design that powers on after the switch reaches a certain temperature, saving energy and cutting costs without sacrificing performance. The DGS-1210 Series includes a range of high power budget PoE-enabled switches for businesses looking to power VoIP phones, wireless access points or network cameras. Incorporating D-Link Green technology, the DGS-1210 Series switches are capable of power-saving without sacrificing operational performance or functionality. Taking the approach to green IT one step further this series incorporates a special chipset with advanced silicon technology for efficient use of energy.

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>DGS-1210-08P</td>
<td>8 Port 10/100/1000 Switch Including 2 Combo 1000 Base T/SFP</td>
</tr>
<tr>
<td>DGS-1210-10P</td>
<td>10 Port 10/100/1000 PoE Switch Including 2 Combo 1000 Base T/SFP</td>
</tr>
<tr>
<td>DGS-1210-24</td>
<td>24 Port 10/100/1000 Switch Including 4 Combo 1000 Base T/SFP</td>
</tr>
<tr>
<td>DGS-1210-24P</td>
<td>24 Port 10/100/1000 Base-T PoE Switch Including 4 Combo 1000 Base T/SFP</td>
</tr>
<tr>
<td>DGS-1210-28</td>
<td>28 Port 10/100/1000 Base-T Switch Including 4 Combo 1000 Base T/SFP</td>
</tr>
<tr>
<td>DGS-1210-28P</td>
<td>28 Port 10/100/1000 Base-T PoE Switch Including 4 Combo 1000 Base T/SFP</td>
</tr>
<tr>
<td>DGS-1210-48</td>
<td>48 Port 10/100/1000 Base-T Switch Including 4 Combo 1000 Base T/SFP</td>
</tr>
<tr>
<td>DGS-1210-48P</td>
<td>48 Port 10/100/1000 Base-T PoE Switch Including 4 Combo 1000 Base T/SFP</td>
</tr>
<tr>
<td>DGS-1210-52</td>
<td>52 Port 10/100/1000 Base-T Switch Including 4 Combo 1000 Base T/SFP</td>
</tr>
<tr>
<td>DGS-1210-52P</td>
<td>52 Port 10/100/1000 Base-T PoE Switch Including 4 Combo 1000 Base T/SFP</td>
</tr>
</tbody>
</table>

**SM & MM LC GIGABIT SFP TRANSCIEVERS**

D-Link’s new line of Gigabit Interface Convertors (GBICs) and Small Form-Factor Pluggable (SFPs) transceivers represent an industry leading combination of performance and affordability. D-Link’s new Gigabit transceivers are available in two form-factors: standard (GBIC) or (SFP)/mini-GBIC.

The DEM-311GT is a high performance 850nm multimode SFP/mini-GBIC transceiver. Supporting full duplex, Gigabit speeds on multimode fibre for distances of up to 220m/550m on 62.5μm/50μm fibre respectively. The unit features a metal housing to reduce EMI and to increase durability. The DEM-311GT is hot pluggable and is backed by a standard 3-year product warranty and free technical support.

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description:</th>
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</thead>
<tbody>
<tr>
<td>DEM-311GT</td>
<td>1000 Base-SX SFP up to 550 Metres</td>
</tr>
</tbody>
</table>

The DEM-310GT is a high performance 1310nm multimode/singlemode SFP (mini-GBIC) transceiver. Supporting full duplex, Gigabit speeds on multimode/singlemode fibre for distances of up to 550m/550m/10km on 62.5μm/50μm/9μm respectively. The unit features a metal housing to reduce EMI and to increase durability. The DEM-310GT is hot pluggable and is backed by a standard 3-year product warranty and free technical support.

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>DEM-310GT</td>
<td>1000 Base-LX SFP up to 10 Km</td>
</tr>
</tbody>
</table>
Our range of Business and Campus Wireless Access Points include simultaneous dual band wireless AC and N standard, Backwards compatible with all Wi-Fi technologies, being able to be deployed in any location; wall, ceiling or desktop, indoors or outside. With Stand Alone or Centrally Managed options, all Access Points (APs) have advanced security features to keep your business protected and safe from intrusion. Call Networks Centre to discuss your system requirements.

**INDOOR WIRELESS ACCESS POINTS**

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>DWL-6610AP</td>
<td>11AC Unified Concurrent Dual Band; 866Mbps (ac) / 300Mbps (n); Ceiling, Wall or Desk mounting; Plenum rated; Standalone or Controller managed; Plastic construction</td>
</tr>
<tr>
<td>DWL-6600AP</td>
<td>11N Unified Concurrent Dual Band; 300Mbps per radio; Ceiling, Wall or Desk mounting; Standalone or Controller managed; Plastic construction</td>
</tr>
<tr>
<td>DAP-2695</td>
<td>11AC AirPremier Concurrent Dual Band; 1750Mbps; Wall or Desk mounting; Plenum rated; Standalone or Controller managed (CWM-100 Compatible); Metal construction</td>
</tr>
<tr>
<td>DWL-8610AP</td>
<td>11AC Unified Concurrent Dual Band; 1300Mbps(ac)/450Mbps (n); Ceiling, Wall or Desk mounting; Plenum rated; Standalone or Controller-managed; Half Metal / Half Plastic construction</td>
</tr>
</tbody>
</table>
## OUTDOOR WIRELESS ACCESS POINTS

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>DWL-8710AP</td>
<td>11AC Unified Concurrent Dual Band; 867Mbps (ac) / 300Mbps (n); Standalone operation or Controller-managed; Wall or Pole mounting; IP67 rated; Metal/Plastic construction</td>
</tr>
<tr>
<td>DAP-3662</td>
<td>11AC Concurrent Dual Band; 300Mbps (ac)/ 867Mbps (n); Stand Alone, CWM-100 Compatible, Pole or wall mounting; IP67 rated; Plastic construction</td>
</tr>
<tr>
<td>DWL-6700AP</td>
<td>11N Unified Concurrent Dual Band; 300Mbps; Standalone or Controller-managed operation; Pole or wall mounting; IP55 rated; Plastic construction</td>
</tr>
</tbody>
</table>
INDUSTRIAL ETHERNET SWITCHES

INDUSTRIAL ETHERNET SWITCHES

Particularly suited to harsh environments the KBC range of managed and unmanaged switches are available for up to 1 Gigabit applications. Suitable for copper, multimode and singlemode fibre they are also available with POE capability. All products feature plug and play design and come with various mounting options including DIN rail. Typical temperature range of -40°C to +75°C with a meantime between failure of >100,000 hours.

- Unmanaged switches with dual redundant power inputs and redundant ring capability
- Managed switches up to 24 ports, 720w POE budgets and 4 fibre SFP ports

<table>
<thead>
<tr>
<th>Part Number:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>K-ESULS4-EL1-P1</td>
<td>Unmanaged Industrial Ethernet Switch with 6 ports: 4 PoE+ ports, 1 RJ45 &amp; 1 optical uplink ports</td>
</tr>
<tr>
<td>K-ESUGS4-EG2-P2</td>
<td>Unmanaged Industrial Ethernet Switch with 8 ports: 4 PoE ports, 2 RJ45 &amp; 2 optical (SFP) uplink ports</td>
</tr>
<tr>
<td>K-ESMGH4-P4</td>
<td>Managed Industrial Ethernet Switch with 8 ports: 4 PoE+ ports &amp; 4 optical (SFP) uplink ports</td>
</tr>
<tr>
<td>K-ESULS8-EG1-P1</td>
<td>Unmanaged Industrial Ethernet Switch with 10 ports: 8 PoE+ ports, 1 RJ45 &amp; 1 optical (SFP) uplink ports</td>
</tr>
<tr>
<td>K-ESMGH8-P4</td>
<td>Managed Industrial Ethernet Switch with 12 ports: 8 PoE+ ports &amp; 4 optical (SFP) uplink ports</td>
</tr>
<tr>
<td>K-ESMG16-P2</td>
<td>Managed Industrial Ethernet Switch with 18 ports: 16 PoE+ &amp; 2 optical (SFP) uplink ports</td>
</tr>
<tr>
<td>K-ESMG24-P4</td>
<td>Managed Industrial Ethernet Switch with 28 ports: 24 PoE+ &amp; 4 optical (SFP) uplink ports</td>
</tr>
</tbody>
</table>

MEDIA CONVERTERS

INDUSTRIAL MEDIA CONVERTORS

The KBC MCG1 series is a fully ruggedized 10/100/1000 Ethernet media converter. It supports transmission of an Ethernet channel over either one or two, multimode or singlemode optical fibres. Full duplex operation enables distances in excess of 30km on singlemode fibre. The plug-and-play design ensures ease of installation with no electrical or optical adjustment needed. LED indicators are provided to show the operational status of the unit clearly. The series is available in Compact, DIN rail or 3U chassis card configurations.

- IEEE802.3ab compliant
- 10/100/1000 auto-sensing
- MDI/MDIX
- Single and dual fibre up to 30km on singlemode fibre (50km extended), 2km on multimode (4km extended).
- Wide operational temperature range -40°C to +75°C

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>K-FTL1</td>
<td>10/100 Ethernet Media Converter</td>
</tr>
<tr>
<td>K-FTLS1</td>
<td>10/100 Ethernet Media Converter with PoE</td>
</tr>
<tr>
<td>K-MCG1</td>
<td>10/100/1000 Ethernet Media Converter</td>
</tr>
<tr>
<td>K-MCG1-P</td>
<td>10/100/1000 Ethernet Media Converter with SFP Port</td>
</tr>
<tr>
<td>K-MCGS1</td>
<td>10/100/1000 Ethernet Media Converter with PoE+</td>
</tr>
<tr>
<td>K-MCCG1</td>
<td>10/100/1000 Commercial Ethernet Media Converter</td>
</tr>
<tr>
<td>K-MCL2-P1B</td>
<td>Industrial Ethernet Media Converter with 2 Ethernet Ports and 1 SFP Port</td>
</tr>
</tbody>
</table>
INDUSTRIAL GIGABIT SFP MODULES

The SFP module range provides true flexibility to the KBC range of SFP-based industrial Ethernet switches. Modules are available for twisted pair and both multimode and singlemode optical fibre.

- **Standards:**
  - IEEE Standard 1000BASE-T, 1000BASE-SX, 1000BASE-LX, 1000BASE-XD, 1000BASE-ZX, 100BASE-FX

- **Environmental:**
  - Operating Temperature: -40°C to +74°C / -40°F to +165°F
  - Storage Temperature: -40°C to +85°C / -40°F to +185°F
  - Operating Humidity: 0 to 95% non-condensing

- **Connectors**
  - 10/100/1000 Electrical
  - 100 Optical
  - 1000 Optical

---

**HOW TO CREATE OUR KBC SFP MODULE PART NUMBERS**

EG: **K-SFP-GM1A-AD** = 1000Mbps, MULTIMODE SINGLE FIBRE ‘A’ END POLARITY, 20KM DISTANCE WITH DDM

**K** - Connector
- G = 1000 Mbps Fibre
- M = 100 Mbps Fibre
- T = Twisted Pair

**X** - Fibre Mode
- Blank = Twisted Pair
- M = Multimode
- S = Singlemode

**X** - Duplex/ Simplex
- Blank = Twisted Pair
- 1 = Single Fibre
- 2 = Dual Fibre

**X** - Polarity
- Blank = 2 fibre or copper
- A = 1 Fibre A End
- B = 1 Fibre B End

**D** - Singlemode Optics only
- A = 20km
- B = 40km
- C = 80km

**D** - DDM
- Blank = without DDM
- D = With DDM
The KBC Extended Ethernet 200 Series is a 10/100 Ethernet line driver with IEEE802.3af/at compliant PoE. The unit provides excellent repeatable performance for today’s CCTV systems. The EE2CL line driver provides connectivity for one 10/100Mbps Ethernet channel over a 75ohm coaxial or a 2-wire cable interface allowing new IP technology to pass over existing, legacy cable.

The 200 Series is available as individual units and accessories or as a range of kits for 1:1, 1:2, 1:3 and 1:4 connections over coax, twisted pair or 2-wire cable. The kits include EE2CL line drivers, adapters (where necessary), splitters and power supplies. The series is available in a compact wall-mount format that fits inside most camera housings or a 19” rack unit.

- IEEE802.3af/at compliant
- Transmission distances up to 1.5km
- High data rates - up to 4 megapixel cameras
- High density rack system
- LED indicators
- Available as a series of transmission kits for 1, 2, 3 & 4 connections

### KBC Extended Ethernet 200 Series Kit Part Numbers:

<table>
<thead>
<tr>
<th>No. of Cameras</th>
<th>Co-ax Kit</th>
<th>Twisted Pair Kit</th>
<th>Kit Contents</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>K-EE2CL-1KT</td>
<td>K-EE2CL-1KT-TW</td>
<td>2 x EE2CL Units, BNC to 2-wire adapters if necessary &amp; 1 x 48Vdc, 1.25A power supply</td>
</tr>
<tr>
<td>2</td>
<td>K-EE2CL-2KT</td>
<td>K-EE2CL-2KT-TW</td>
<td>3 x EE2CL Units, BNC to 2-wire adapters if necessary, 1 x BNC T Splitter &amp; 1 x 48Vdc, 1.25A power supply</td>
</tr>
<tr>
<td>3</td>
<td>K-EE2CL-3KT</td>
<td>K-EE2CL-3KT-TW</td>
<td>4 x EE2CL Units, BNC to 2-wire adapters if necessary, 1 x 1:4 BNC Splitter &amp; 1 x 48Vdc, 1.25A power supply</td>
</tr>
<tr>
<td>4</td>
<td>K-EE2CL-4KT</td>
<td>K-EE2CL-4KT-TW</td>
<td>5 x EE2CL Units, BNC to 2-wire adapters if necessary, 1 x 1:4 BNC Splitter &amp; 1 x 48Vdc, 1.25A power supply</td>
</tr>
</tbody>
</table>

### Individual Part Numbers:

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>K-EE2CL-1</td>
<td>Extended Ethernet, Ethernet over coax line driver with PoE</td>
</tr>
<tr>
<td>K-EE2CL-1-TW</td>
<td>Extended Ethernet, Ethernet over UTP line driver with PoE</td>
</tr>
<tr>
<td>K-GS60A-48-P1J</td>
<td>48V, 1.25A PoE power supply</td>
</tr>
<tr>
<td>K-EE-BNC2</td>
<td>1:2 BNC T splitter</td>
</tr>
<tr>
<td>K-EE-BNC4</td>
<td>1:4 BNC splitter</td>
</tr>
<tr>
<td>K-EE-TW</td>
<td>BNC to 2-wire adaptor</td>
</tr>
<tr>
<td>K-EE-2CL-RK</td>
<td>19” High density rack</td>
</tr>
<tr>
<td>K-MCL2-P1B</td>
<td>Industrial Ethernet Media Converter with 2 Ethernet ports and 1 SFP port</td>
</tr>
</tbody>
</table>
5GHZ WES3 SERIES WIRELESS

Point-to-point & point-to-multipoint wireless

The WES3 Wireless Ethernet System is a wireless transmission system that operates in the license-free, 5GHz band, providing a cableless transmission path for an Ethernet channel. The WES3 firmware is configurable for product type, enabling one common unit to be configured as a client, a single-point host or a multipoint host. The system is IEEE802.11a/n compliant and will support up to 99Mbps (650Mbps HTG version) throughput due to MIMO technology (Multiple In Multiple Out). WES3 provides connectivity for a wide range of Ethernet devices such as megapixel/HD cameras, DVRs, encoders/decoders and web servers and uses a secure encryption method to prevent unauthorized access to the system. WES3 is available as a IEEE802.3af compliant unit or non-PoE version with a power injection module for applications where PoE is not available. All WES3 units ship with a universal wall/pole mount.

- Configurable for client / singlepoint host / multipoint host
- IEEE802.11a/n compliant (K-WES3)
- IEEE802.11ac compliant (K-WES3HTG)
- Transmission Power Control
- Up to 23dBm (30dBm) output power
- Secure transmission: WPA2 – AES or TKIP encryption
- Antenna alignment & site signal survey tools
- Distance adjustment for long range transmission

HOW TO CREATE OUR KBC WIRELESS P2P PART NUMBERS

EG: K-WES3HTG-AX-AB = 650Mbps 5DBI OMNI-DIRECTIONAL UK POWER POINT TO POINT WIRELESS ETHERNET SYSTEM WITH MIDSPAN POE SUPPORT.

K WES3

Data Throughput
HTG = Up to 650Mbps
Blank = Up to 99Mbps

Gain
A = 5dBi Omni-directional
B = 9dBi Directional
C = 17dBi Directional

Power Connection
B = UK Power Connection & EMEA Firmware
C = Euro Power Connection & EMEA Firmware
G = PoE version & EMEA Firmware *

* K-WES3-AX-** only
Thrulink Standard & High Capacity

- Encrypted communication up to 256bit via tunneling
- Throughput: Standard: 15Mbps, Standard Plus: 30Mbps
  High Capacity: 100Mbps, High Capacity Plus: 200Mbps
- Optimised for video
- Configurable for 3G/4G networks (Standard/Standard+ only)
- Supports mesh applications - no central server requirement
- Multiple failover
- No need to make network changes
- Diagnostic tools: network traffic monitoring,

Active Equipment

Thrulink Transmitters & Receivers

Thrulink Standard & High Capacity

- Basic traceroute and ping function
- IPv4 and IPv6 support
- DDNS, DHCP, SNMPv2/3
- PoE supported on WAN port (PD device)
- Secure encrypted certificate based connection (RSA)
- Limited DHCP service on LAN port (optional)
- Built to perform in non-conditioned environments

Encrypted, Hardware VPN Transmission System

The KBC ThruLink is a hardware VPN device that allows secure communications to be established over any standard, public or private TCP/IP network. ThruLink performs behind firewalls, NAT devices and through almost any other type of network configuration and offers encrypted communication for all IP protocols regardless of the type of traffic. When deployed, ThruLink provides a secure and encrypted tunnel for network communications that will not affect TTL, UPnP, VLAN information, broadcast, multicast, or any other traffic. A built-in modem provides 3G/4G connectivity and supports all primary network providers. (Standard & Standard+ Only) In addition to star-based applications, ThruLink supports mesh-based networks allowing direct connection without the need for central server authentication

How to Create Our High Capacity Thrulink Part Numbers

*Includes High Capacity Plus Models

K-THLK

Populate this field with the required capacity & Bandwidth:
H3 = 100Mbps
H4 = 200Mbps

Power Supply:
B = UK Power Supply
N = No Power Supply
0 = PoE
C = Euro Power Supply
S = Specified

X
X
R
X

EG: K-THLK-H4-RB = THRULINK HIGH CAPACITY PLUS 200Mbps RACK MOUNTED ENCRYPTED HARDWARE VPN TRANSMISSION SYSTEM WITH UK POWER SUPPLY
**KBC FR3 Chassis**

The KBC FR3 series chassis is a high quality 3U, 19" rack mounted card cage. It can accommodate up to 14 single slot 3U cards, or a number of various width cards, depending on the number of slots required by each individual product. Any 3U card product can be located in the FR3 chassis, in any location and next to any other model. All modules located within the rack are hot swappable, removing the need to power down the chassis when carrying out maintenance or making additions to the installation. All electrical and optical connections are to the rear, with all LED status indicators to the front.

The dual redundant power supply option uses 2 slots of the chassis for the 2nd power supply leaving 12 slots for card units.

- Accommodates up to 14 single slot 3U cards
- Any KBC 3U card can be located in any slot & next to any other model
- All modules hot-swappable
- All electrical & optical connections to the rear
- LED status indicators to the front
- All PSUs are modular
- Redundant PSU option

### Part No: Description:

<table>
<thead>
<tr>
<th>Part No:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>K-FR3-BA</td>
<td>19&quot; 14 Slot chassis with single modular PSU and Blanking Panels</td>
</tr>
<tr>
<td>K-FR3-BA-RP</td>
<td>19&quot; 14 Slot chassis with dual modular PSU and Blanking Panels</td>
</tr>
</tbody>
</table>

**How to Create Our Thrulink Standard Capacity Part Numbers**

*Includes Standard Capacity Plus Models

1st Module
- A = 3G Modem
- B = 4GLTE (Mobile)
- 0 = None

2nd Module
- A = 3G Modem
- B = 4GLTE (Mobile)
- 0 = None

Capacity & Bandwidth:
- SC = 15Mbps
- SP = 30Mbps
- HP = 100Mbps
- HP = 200Mbps

Population this field if you require mounting type:
- W = Wall Mount
- R = Rack

Population this field if you require additional Features:
- G = GPS
- N = Normal

Power Supply:
- B = UK Power Supply
- N = No Power Supply
- 0 = PoE
- C = Euro Power Supply
- S = Specified

The KBC FCHA1 series uses the most advanced digital technologies to provide excellent repeatable performance for today’s CCTV systems. It supports transmission of one video channel, one ‘Up the Coax’ data channel and two duplex contact closure channels over one multimode or singlemode optical fibre. PAL, NTSC and SECAM video standards are fully supported. The plug-and-play design ensures ease of installation with no electrical or optical adjustment needed. LED indicators are provided to clearly display the operational status of the unit. The series is available in wall-mount and 3U chassis card.

- Supports RS232, RS422 and RS485 (2W & 4W)
- Multimode and singlemode solutions
- Switchable 120 Ω termination and biasing
- LED indicators provide quick diagnosis of all important system parameters
- Up to 14 units in a 3U chassis
- Compact and 3U chassis card configuration

**HOW TO CREATE OUR KBC VIDEO & "UTC" DATA PART NUMBERS**

**K-FCHA**

- Populate this field with what you require:
  - 1 = Single Module Card
  - 2 = Dual Module Card

**X**

- Populate this field with what you require:
  - 1 = Single Module Card
  - 2 = Dual Module Card

**X**

- Populate this field with what you require:
  - M = Multimode
  - S = Singlemode

**X**

- Populate this field with what you require:
  - R = Receiver
  - T = Transmitter

**X**

- Populate this field with what you require:
  - C = SC Connector
  - F = FC/PC Connector
  - S = ST Connector

**X**

- Populate this field with what you require:
  - W = Wall Mount
  - B = 3U Chassis Card

**B**

**EG: K-FCHA1-M1T-WSB = VIDEO & "UP THE COAX" TELEMETRY, WALL MOUNT TX UNIT, 1 NO. MM FIBRE, ST INCLUDING PSU**
The KBC FDVA series uses the most advanced digital technologies to provide excellent repeatable performance for today’s CCTV systems. It supports transmission of one analog composite video channel over one multimode or singlemode optical fibre. Products with one, two or four individual modules within a single unit are available, offering substantial savings in racking and power requirements on site. PAL, NTSC and SECAM video standards are fully supported. The series is available in compact wall-mount or 3U chassis card.

- 8 or 10 bit digitally-encoded, non-compressed video transmission
- Multimode and singlemode solutions
- Unique 4 channel wall-mount and 3U card module
- Up to 56 receivers in one 3U chassis

**HOW TO CREATE OUR KBC VIDEO P2P PART NUMBERS**

 EG: K-FDVA4-M4R-WSB = 4 CHANNEL 8 BIT VIDEO ONLY RECEIVER, 4 MM FIBRE ST, WALL MOUNT BOX
ACTIVE EQUIPMENT

KBC Transmitters & Receivers

➤ VIDEO & BI-DIRECTIONAL DATA SINGLE & FOUR CHANNEL MULTIPLEX TRANSMISSION

The KBC FDVA1-DB1 & FDVA4-DB1 series uses the most advanced digital technologies to provide excellent repeatable performance for today’s CCTV systems. It supports transmission of one or four analog composite video channels and one bi-directional data channel over one multimode or singlemode optical fibre. PAL, NTSC and SECAM video standards are fully supported and the data channel supports all standard PTZ (Pan-Tilt-Zoom) control signals. The plug-and-play design ensures ease of installation with no electrical or optical adjustment needed. LED indicators are provided to show the operational status of the unit clearly. The series is available in compact wall mount or 3U chassis card.

➤ 8 or 10 bit digitally-encoded, non-compressed video transmission
➤ Multimode and singlemode solutions
➤ Card module requires just 1 slot of 3U chassis
➤ Switchable 120 ohm termination and biasing
➤ LED indicators provide quick diagnosis of all important system parameters
➤ Wall-mount and 3U chassis card configurations
➤ Wide optical dynamic range. No adjustment required

HOW TO CREATE OUR KBC DATA P2P PART NUMBERS

Populate this field with your requirements:
K = FD
A = 8 or 10 bit digitally-encoded, non-compressed video transmission
X = Multimode and singlemode solutions
DB = Card module requires just 1 slot of 3U chassis
X = Switchable 120 ohm termination and biasing
X = LED indicators provide quick diagnosis of all important system parameters
X = Wall-mount and 3U chassis card configurations
X = Wide optical dynamic range. No adjustment required

Populate this field with required resolution:
V = 8 Bit resolution
H = 10 Bit resolution

Populate this field with your requirements:
M = Multimode
S = Singlemode
R = Receiver
T = Transmitter

Populate this field with your requirements:
W = Wall Mount
M = Compact
B = 3U Chassis Card (One channel unit)
C = 3U Chassis Card (4 channel Unit)

Populate this field with your required connector type:
C = SC Connector
F = FC/PC Connector
S = ST Connector

Populate this field with the required number of modules with configurations available:
1,1,1 = 1 Channel: Compact or 3U Card
2,2,2 = 2 Channel: Wallmount or 3U card
4,1,1 = 4 Channel: Wallmount or 3U card

EG: K-FDVA4-DB1-M1T-CS = 4 CHANNEL VIDEO MUX, 8 BIT RESOLUTION TRANSMITTER, BI-DIRECTIONAL DATA, 1 MM FIBRE ST 3U CARD
CONNECTING BUSINESS

NetworksCentre.

Your Approved Cisco Select Partner

Why work with a Cisco Select Partner?

Cisco is the worldwide leader in networking that transforms how people connect, communicate and collaborate.

Cisco Registered Partners have access to world-class Cisco products and service packages, technical support, productivity tools, online training, marketing resources and sales promotions.
TRAINING

➤ BICSI Design Courses
➤ BICSI Installation Courses
➤ City and Guilds
➤ Manufacturer Courses
➤ Bespoke Training Courses
**BICSI DESIGN COURSES**

As a global professional association, BICSI is the pre-eminent source of information, education and knowledge for IT Professionals. BICSI serves to educate the information communications technology community. Individuals who provide the fundamental infrastructure for telecoms, audio/video, life safety and automation systems.

Features:
- Internationally recognised accreditation
- BICSI approved trainers
- Real world case studies and floorplans used?

<table>
<thead>
<tr>
<th>Course:</th>
<th>Duration:</th>
<th>CEC’s:</th>
</tr>
</thead>
<tbody>
<tr>
<td>BICSI RCDD</td>
<td>5 Days</td>
<td>37</td>
</tr>
<tr>
<td>BICSI DCDC</td>
<td>5 Days</td>
<td>33</td>
</tr>
</tbody>
</table>

**BICSI CABLE INSTALLATION PROGRAM**

The goal of BICSI's Cabling Installation Program is to produce highly competent cabling installers. This program provides a career path consisting of four progressive courses and credentialing exams, allowing students to begin with basic fundamentals and build upon that knowledge. Upon completion of training, program participants should be able to conduct site surveys and install, terminate, and test copper and optical fibre cable to the highest level of specification.

<table>
<thead>
<tr>
<th>Course:</th>
<th>Duration:</th>
<th>CEC’s:</th>
</tr>
</thead>
<tbody>
<tr>
<td>BICSI Installer 1 Training</td>
<td>5 Days</td>
<td>35</td>
</tr>
<tr>
<td>BICSI Copper Cabling Installer 2</td>
<td>5 Days</td>
<td>35</td>
</tr>
<tr>
<td>BICSI Fibre Cabling Installer 2</td>
<td>5 Days</td>
<td>35</td>
</tr>
<tr>
<td>BICSI Technician</td>
<td>5 Days</td>
<td>35</td>
</tr>
</tbody>
</table>

**CITY & GUILDS COURSES**

City & Guilds is a skills development organisation, providing training services to businesses around the world. Our courses are designed to integrate with your career and boost results. The vocational accreditation is valued worldwide.

Highlights:
- Information on current standards
- Working safely in a data comms environment
- Termination practices
- Interpreting test results and fault finding
- Basic Principles of Communication Cabling

Introducing delegates to bandwidth, performance, transmission distances and installation practices. The course precedes City & Guilds 3667 102/103 & 104.

- 102/103: Fibre Optic Cabling in an Internal & External Environment
  Providing delegates with information on fibre termination, loss budget calculations and fault finding.
- 104: Copper Cabling in an Internal Environment
  Offering delegates the framework to deploy copper safely, types of performance categories, termination methods, fault finding and interpreting test results.

<table>
<thead>
<tr>
<th>Course:</th>
<th>Duration:</th>
<th>CEC’s:</th>
</tr>
</thead>
<tbody>
<tr>
<td>City &amp; Guilds 101: Basic Principles of Communication Cabling</td>
<td>1 Days</td>
<td>7</td>
</tr>
<tr>
<td>City &amp; Guilds 102/103: Fibre Optic Cabling</td>
<td>5 Days</td>
<td>35</td>
</tr>
<tr>
<td>City &amp; Guilds 104: Copper Cabling</td>
<td>3 Days</td>
<td>-</td>
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</tbody>
</table>
MANUFACTURER LED COURSES

Networks Centre Training Academy offers a pathway where delegates are introduced to brand related training. Networks Centre Training Academy offers the latest manufacturer-led courses:

➤ Versiv Test Professional
The VersivTM Test Professional Course is a 1 day course designed for network installers who desire to expand their knowledge of certifying copper and fibre infrastructure. This course enables students to gain a wider understanding of test standards and fault finding. Students will take part in hands-on demonstrations of the Fluke Networks DSX-5000 and CertFiber® Pro. Individuals will participate in basic certification through to advance fault finding.

➤ Air Magnet Wi-Fi Analyzer and Spectrum XT
The AirMagnet Wi-Fi Analyzer and Spectrum XT Training Course utilises NETSCOUT’s AirMagnet Wi-Fi Analyzer to demonstrate fault finding in wireless infrastructure. The one day course is designed for network engineers and technicians, who are responsible for identifying performance and interference issues.

➤ AirMagnet Survey Pro
Designed for network engineers and technicians who are responsible for the design and performance of wireless networks. The course would also appeal to technicians tasked with surveying wireless performance and required to understand the demands on wireless networks.

➤ Siemon RI Training
Become a registered Installer with Siemon. Add value for your customers by warranting systems. Focus on CAT6 & 6A product with practical termination included. On completion, attendees will be able to offer a 15 year Siemon product warranty.

<table>
<thead>
<tr>
<th>Course:</th>
<th>Duration:</th>
<th>CEC’s:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Versiv Test Professional - Copper</td>
<td>1 Day</td>
<td>-</td>
</tr>
<tr>
<td>Versiv Test Professional - Fibre</td>
<td>1 Day</td>
<td>-</td>
</tr>
<tr>
<td>Versiv Test Professional - Combined</td>
<td>1 Day</td>
<td>7</td>
</tr>
<tr>
<td>AirMagnet Wi-Fi Analyzer &amp; Spectrum XT</td>
<td>1 Day</td>
<td>-</td>
</tr>
<tr>
<td>AirMagnet Survey Pro</td>
<td>1 Day</td>
<td>7</td>
</tr>
<tr>
<td>Siemon RI Training</td>
<td>1 Day</td>
<td>-</td>
</tr>
</tbody>
</table>

BESPOKE TRAINING COURSES

Our bespoke courses are designed to provide targeted instruction for specific subject areas. Whether you require your team to be taught fibre splicing or need something more bespoke, we can tailor any request into a workable format. Our dedicated Technical Services department are capable of creating workshops to meet your needs.

➤ Do you require training on-site or at our academy?
➤ Do you need training which is flexible around you?
➤ Does your team require specific training?
NetworksCentre.