



Data Centre

ADVANCING A CONNECTED WORLD



FIBRE CONNECTIVITY

WWW.PREMIERCABLES.COM



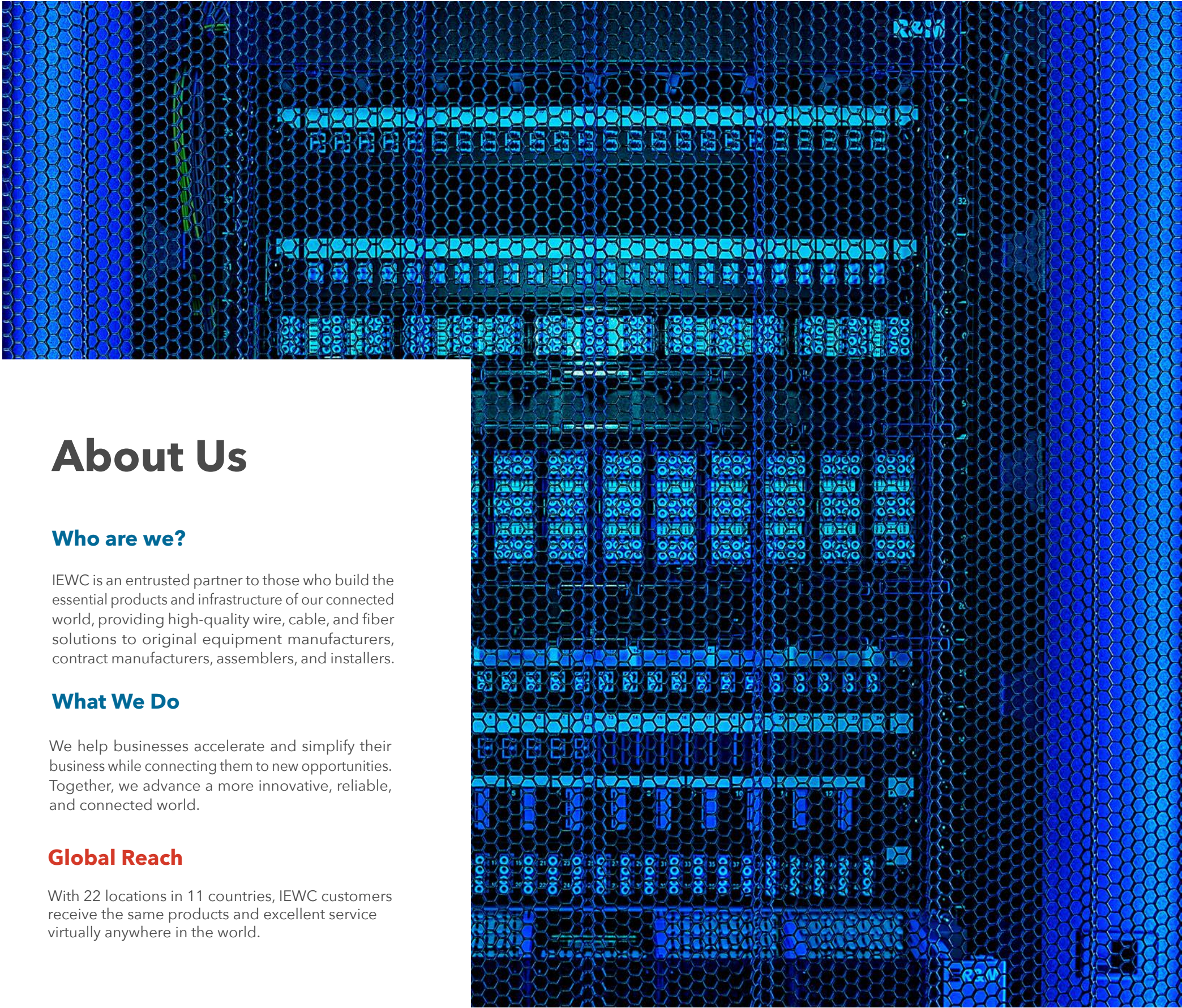


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About Us

Who are we?

IEWC is an entrusted partner to those who build the essential products and infrastructure of our connected world, providing high-quality wire, cable, and fiber solutions to original equipment manufacturers, contract manufacturers, assemblers, and installers.

What We Do

We help businesses accelerate and simplify their business while connecting them to new opportunities. Together, we advance a more innovative, reliable, and connected world.

Global Reach

With 22 locations in 11 countries, IEWC customers receive the same products and excellent service virtually anywhere in the world.



CUT-TO-LENGTH FIBRE C A B L E

All stock items are available on
a next day delivery service

Reliable and unrivalled fibre networks are driving the future of communication.

We are developing technology to deliver information at optimal speeds, opening new opportunities for industries and linking communities.

However, speed is only one aspect. To enhance connectivity globally, we are also establishing new benchmarks for low latency, reliability, and the management of increasing data volumes. Our diverse range of single-mode, multimode, and specialty fibres are tailored for every application.

Ascent fibre cable is available for internal or external applications, offering a choice of tight buffered or loose tube configurations and CST and SWA armoured versions to ensure protection in harsh environments.

Multimode & Singlemode options available with fibre counts up to 288

OS2 | **OM3** | **OM4** | **OM5**
9/125 50/125 50/125 50/125

Tight Buffered Fibre Optic Cable

Loose Tube Fibre Optic Cable

Steel Tape Armoured Fibre Optic Cable

Steel Wire Armoured Fibre Optic Cable

‘Cut to length’ Optical Fibre

Whether you need full drums for larger projects or cut-to-length service, we continue to invest in the products and people to provide a comprehensive solution for your business. A wide range of cables available ex-stock, combined with fast manufacturing lead-times, ensure logistical and commercial competitiveness at all times

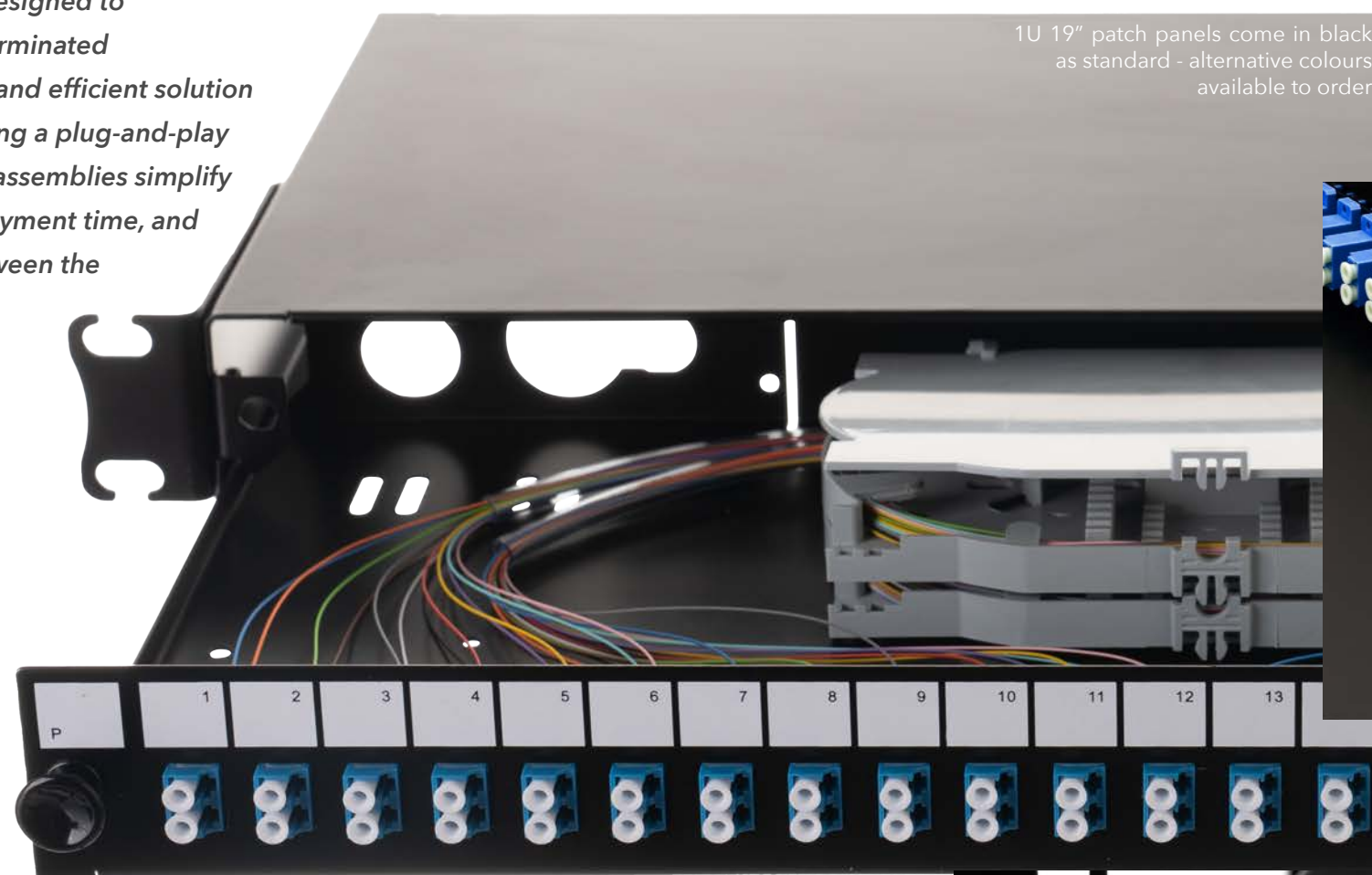
We hold extensive ranges of fibre optic cables in the UK. Cable types include: Loose Tube, Tight Buffered, Steel Tape Armoured and Steel Wire Armoured fibre optic cables in OM3, OM4 and OS2 (all core counts)

All stock items are available on a next day delivery service.



1U Sliding Patch Panels

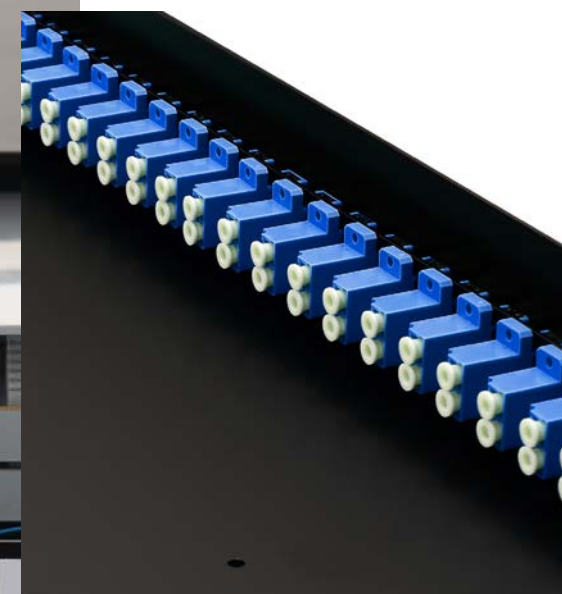
Our optical fibre patch panels are designed to seamlessly integrate with our pre-terminated assemblies, providing a hassle-free and efficient solution for fibre optic installations. By offering a plug-and-play approach, our pre-terminated fibre assemblies simplify installation processes, reduce deployment time, and guarantee reliable connectivity between the patch panel and the network infrastructure.



1U 19" patch panels come in black as standard - alternative colours available to order

45° Locking Angle

This provides the perfect working platform for simple installation or easy maintenance and access even after the panel is installed in the rack.



Features & Benefits

- LC, SC, ST, FC or E2000 adaptors.
- Robust, lightweight construction, made from 1.2mm cold rolled steel.
- Screen powder coated for superior finish and durability.
- Recessed adaptors and mounting ears to maximise space for patching.
- Large port identification write-on fields.
- Interchangeable front plate for maximum flexibility.
- Easy style mounting ears, with fixing points for universal front management.
- M20 cable entry more commonly used, moved to exterior to improve routing into panel.
- Easy slot feature allows direct attachment of FastFibre breakout manifold.
- Strength member tie point mounting positions or bend radius management.
- Centre post or DIN style splice tray mounting positions.
- Inner recessed plate designed to hold adaptors tighter (no screws).
- Pull, push mechanism to lock and release sliding panel.
- Supplied with fibre management kit, also available separately.

Up to 96 Fibres

Ascent sliding patch panels are designed with an emphasis on ease-of-use and access. They allow for up to 96 connections per 1U (LC Quad). The panels are available empty, preloaded or configured with blanks and cable management to suit customer requirements. Their shallow depth allows for installation in all standard 19" racks and wall mount enclosures.



Available **Pre-loaded** fully populated with adaptors and pigtails

The "preloaded" concept saves the installer valuable installation time and reduces on-site packaging. Further enhancements include the supply of a factory terminated and tested assemblies that can be preloaded into the panel and packaged for shipment to site, again saving valuable on-site install time.

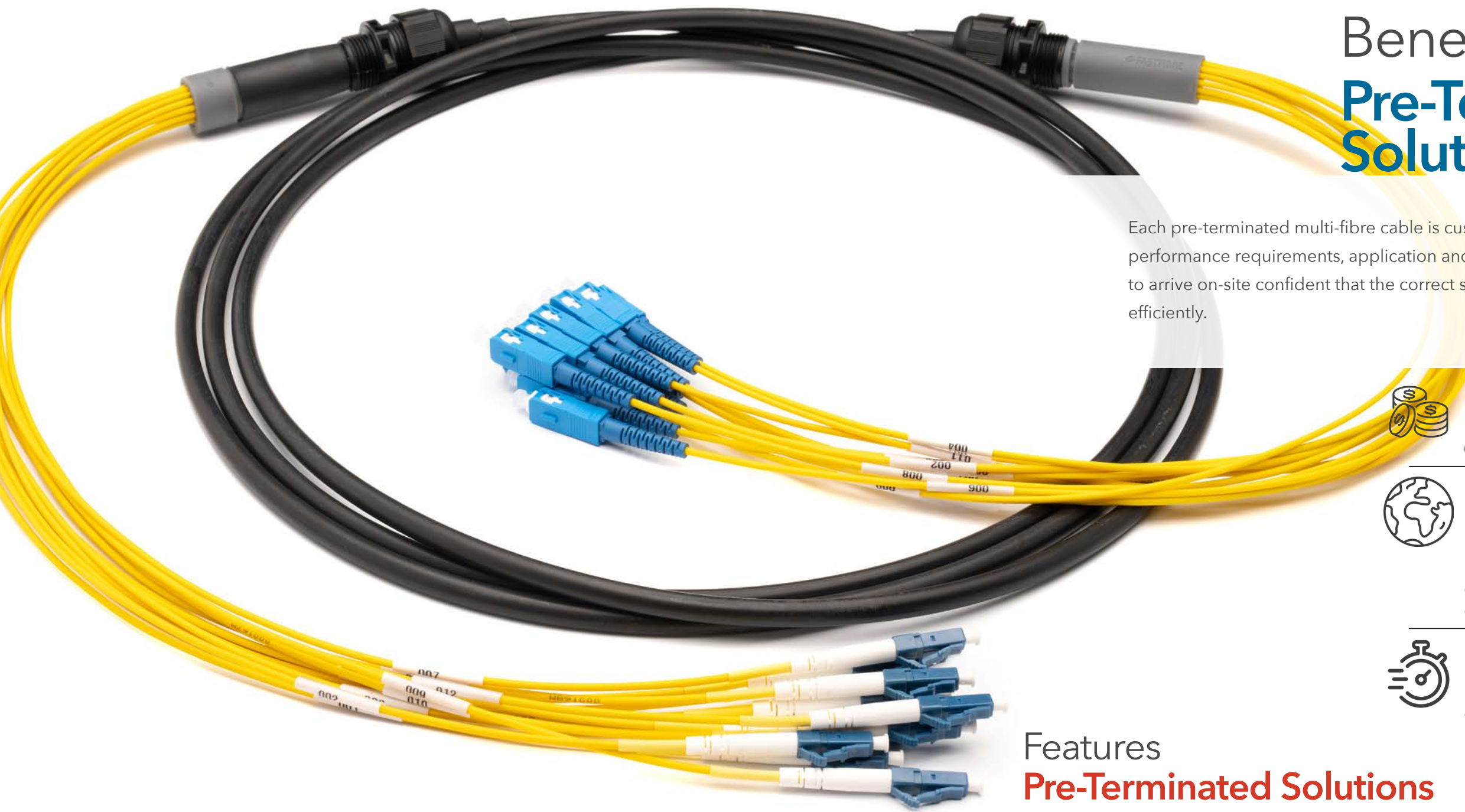


Complete Tray Release

When moved to the side the rear will pass the latch point to allow the tray to be removed with the gland or manifold in place. With existing products, the gland can only be fitted with the entire panel removed from the rack and then the tray removed.

Our fibre manifold makes efficient use of space and allows for quick installation. These, coupled with our most recent design of patch panel, create an unrivalled solution to fibre management. Our manifold's compatibility with our panel eliminates the need for glands, by simply slotting into the back and clicking securely into place.





Benefits of Pre-Terminated Solutions

Each pre-terminated multi-fibre cable is custom built to your specific design and performance requirements, application and installation environment, allowing you to arrive on-site confident that the correct solution can be deployed quickly and efficiently.



Cost Effective

Improved project return on investment (ROI).



Reduced Environmental Impact

Made to order assemblies means no excess materials or waste produced from on-site splicing and termination.



Fast Installation

No specialist tools, training or consumables, splicing or terminating required on-site.

Features Pre-Terminated Solutions



High Performance Connectors

Ensures optimum optical performance.



Made to Measure

Made to measure assemblies means no excess materials or waste produced.



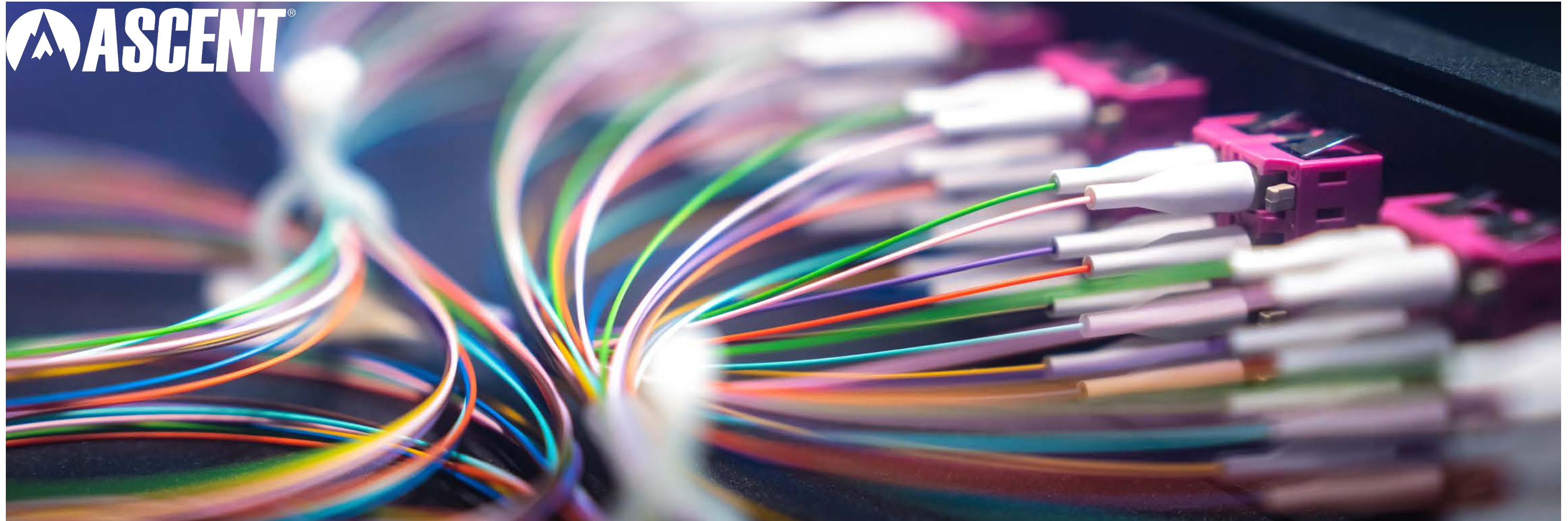
Individual Test Results

Additional Fluke, visual inspection and interferometer results available.

Save & Improve



*Save time, reduce material costs, less waste, shorter downtime, no specialised on-site equipment or training.
Increase performance, deliver larger projects.*



Fibre optic pigtails, suitable for common splicing applications are available in 1 metre lengths on 900µm tight buffered fibre cable. Longer lengths, easy-strip and reduced diameter fibre variants are available on request. All assemblies are fully tested prior to delivery and supplied with test results. Most common connector types and fibre modes are available in stock. OS2 singlemode pigtails are supplied with a yellow jacket, OM4 and OM3 multimode pigtails are supplied with an aqua jacket, Non stocked configurations (length, connector, colour and fibre type), multiple packs and coloured pigtail sets can be manufactured to meet specific requirements.

Applications

- Telecom, CATV and LAN applications
- On-site termination
- Patch panels, wall boxes, ODF's and splice cassettes, dome and inline splicing enclosures

Features

- SC, LC, ST, FC and E2000 connectors as standard, other connectors available
- LSZH - Low smoke zero halogen, 900µm tight buffered fibre
- UPC and APC polished connector end faces as standard
- Available in other colours, manufactured coloured pigtail sets
- Fibre conforms to or exceeds all relevant ISO/IEC, TIA/EIA and ITU standards
- Bend insensitive variants available

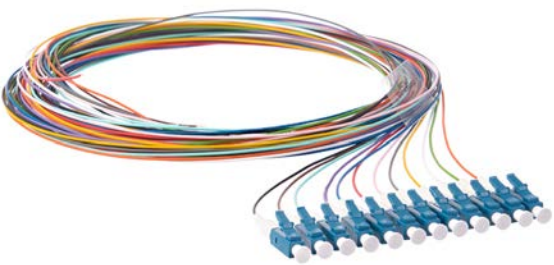


Singlemode & Multimode Options

UPC and APC polished connector end faces as standard.

Blister Packs Available

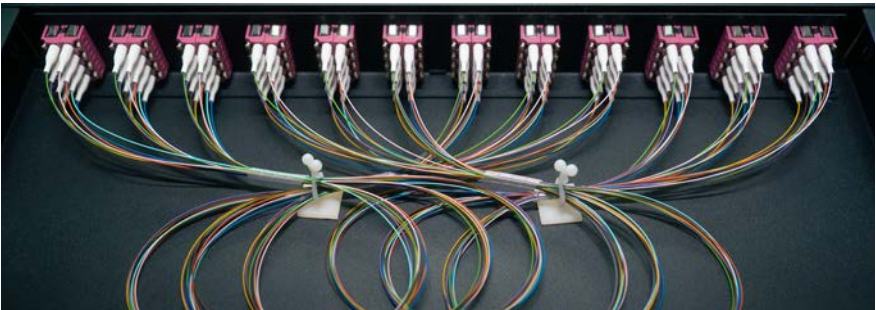
12 coloured pigtails, a variety of connectors to choose from, Easy Strip or Tight Buffered.



Individual Test Results

Pre Assembly Panel Build

We have large in-house UK production facility, providing us with the flexibility to cater for projects of any scale. Our dedicated team of vastly skilled and experienced fibre optic technicians guarantee high quality, pre-assembled patch panels.





Singlemode & Multimode Options Individual Test Results

OS2 9/125 Simplex/Duplex Fibre Optic Patch Cords

OM3 50/125 Simplex/Duplex Fibre Optic Patch Cords

OM4 50/125 Simplex/Duplex Fibre Optic Patch Cords

OM5 50/125 Simplex/Duplex Fibre Optic Patch Cords

Any Colour, Length and Connector Type

Non-stocked configurations - length, colour, connector & cable types can be manufactured to meet your specific requirements.

- SC, LC, ST, FC, MU and E2000 as standard. Other connectors available
- LSZH - Low smoke zero halogen
- Simplex and Duplex assemblies
- 900µm tight buffer, 3mm simplex and duplex cable (2mm & 1.6mm cable on request)
- Available in other colours
- Armoured, round duplex and flat twin patch cords also available
- Uniboot and short boot patch cords also available
- All patch cords come with UPC or APC polished connector end face as standard
- Singlemode & Multimode fibre conforms to or exceeds all relevant ISO/IEC, TIA/EIA and ITU standards

Two Polish Types for Various Signal Sensitivity Demands

The fibre endface of APC is polished at an 8° angle and UPC is polished with no angle.



Three Diameters to Meet Different Wiring Needs

3.0mm, 2.0mm and 1.6mm cable diameters mainly used for indoor installation and cabling.

3.0mm Diameter

3mm for additional ruggedising

2.0mm Diameter

Reducing the pressure of the wiring conduit and saving space.

1.6mm Diameter

Typically used in where space is a premium

LC Connector is Ready for High Density LC Pull Uniboot Connectors - 1.6mm



The LC Pull Uniboot Connector's design incorporates a reinforced boot for a quick push-pull insertion and removal of the connector (no tabs needed). This new design helps conserve precious space in high-density panels and the colour options assist with organization. Three cable sizes are available: 1.6mm, 2.0mm and 3.0mm.

Features:

"Just Grab It By the Boot" - a reinforced boot for fast insertion & removal
Polarity change within boot, no tools or tabs required
Designed specifically for HD packaging

Fibre Optic Cables

We offer a best-in-class and a comprehensive range of cables, including MTP / MPO cables, regular fibre patch cables, tested with a range of optical tests such as IL and RL tests, 3D interferometer tests, providing the ideal cabling solution for the most demanding networks.

More Options

Standard & Armoured Patch Cords

Round Duplex Patch Cords

Flat Twin Optical Patch Cords

Standard Uniboot Patch Cords

Flat Twin Armoured Patch Cords

Reverse Polarity Uniboot Patch Cords



Diverse Custom Options

Choose suitable options based on your applications.



Strict Quality Control

Ensure high quality products with state of testing facility.



Technical Support

Get support from our professional team.



ASCENT® TEN²¹ fibre management solution will revolutionise your optical infrastructure.

288 Fibres in 2U

The ASCENT® TEN²¹ chassis, mountable in 19-in racks (other mounts available) provides user-friendly and flexible connectivity when combined with cassettes, harnesses, trunks and patch cords. The simple design allows either 5 cassettes (120 fibres in 1U) or 12 cassettes (288 fibres in 2U) to be loaded from either the front or rear with easy, fast and secure latching.

Cassette Based System

The ASCENT® TEN²¹ cassettes are designed for all data centre and enterprise network applications, easy to handle and fast to install. With tool-less installation and one click latching technology, the cassettes can be inserted and removed from both the front and the rear.



MTP®/MPO Based Fibre System

The ASCENT® TEN²¹ range of MTP®/MPO cassettes, modules and panels are designed for the demands of today's data centres.

When combined with our range of MTP®/MPO fibre cable the ASCENT® TEN²¹ series enables quick and easy fibre networking to support duplex Base-12, Base-8 and Base-16 requirements.



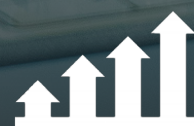
High Performance



One Click Latching Technology



Flexible Configurations



Scalable Solutions



MTP®/MPO

With the rise of cloud computing in the era of big data, there is a growing demand for higher transmission speeds and greater capacity. As a result, 40/100G and even 200/400G networks are becoming increasingly common in data centres.

- Designed for high density fibre solutions
- Space saving solution, simplifying cable management
- Competitively priced
- Built to customer requirements
- Factory terminated and tested
- Reduced environmental impact
- Standards compliance - ANSI/TIA-568.3-E, ISO/IEC 11801, IEC-61754-7, EIA/TIA-604-5

Singlemode & Multimode Options Individual Test Results



KEY FEATURES

Compatible with other MTP®/MPO systems, CPR rated - all cables UK/EU fire compliant, High performance MTP® connectors, Space saving, easier cable management.



APPLICATIONS

Data Centres, Storage Area Networks (SAN), Communication Rooms, High Density Solutions.



OPTIONS

Pro & Elite MTP® Connectors, Custom Lengths Available, Polarity A, B or C, Singlemode & Multimode, Male & Female MTP®/MPO Connectors.

Our team of highly skilled technicians operate in our UK production facility. The team use proven techniques and a controlled process to ensure high quality and fast turnaround times.

MTP®/MPO Patch Cords

MTP®/MPO patch cables designed for 40G or 100G SR4 (multimode) or PSM4 (singlemode) offer a direct link between transceivers and can also serve in conjunction with MTP®/ MPO trunk cables and MTP®/MPO adapters to establish extended connections.

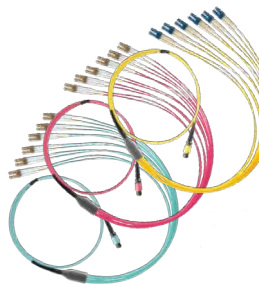


MTP®/MPO Trunk Cables

MTP®/MPO trunk cables use a lightweight yet robust micro core fibre cable along with MTP Elite® connectors. These cables are approximately 65% lighter, and possess a 60% smaller diameter compared to conventional tight-buffered or loose-tube fibre cables, enabling the installation of a greater amount of fibre in a smaller space.

MTP®/MPO Breakout Cables

MTP®/MPO optical fibre breakout cables are a cost effective alternative to time-consuming field termination. They are designed for high density fibre patching in data centres which need space saving and simplified cable management.



MTP®/MPO QSFP Assemblies

QSFP assemblies take a 40G (QSFP+) port which is provided on an MTP®/MPO multi-fibre interface and split the cables out to 4 X 10G (SFP+) ports in the form of standard LC duplex cables.



MTP® Elite

As standard we use US Conec's MTP®Elite connectors on all of our UK manufactured MTP®/MPO assemblies. Enhanced precision and proven reliability ensure that MTP® brand connectors far exceed the performance of the standard MPO format.

MTP® Elite

Elliptical guide pin tip to minimise ferrule debris, Exceeds TIA & EIC dimensional requirements for optimal performance, Floating ferrule design ensures fibre contact integrity, Removable housing for interferometry & rework.



MTP® Pro

Simplicity & reliability focussed design, Field friendly pin configurability, one step polarity change, DirectConec™ push-pull system, Geometry & material optimised to minimise debris generation.



Optical Fibre Cleaning

Proper cleaning of optical fibre cables is of utmost importance to ensure optimal performance and reliability in fibre optic systems. Over time, contaminants such as dust, dirt, oils, and moisture can accumulate on the fibre connectors and end faces, leading to signal loss, increased reflectance, and potential network failures. Thorough cleaning is essential to maintain low insertion loss, minimise signal degradation and prevent costly downtime.



Single action cleaners
LC/MU (1.25mm) SC/FC/ST (/2.5mm)



Single action cleaners
MTP®/MPO



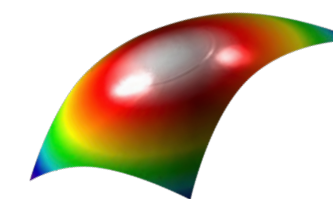
Optical Fibre Connector Cleaner
LC/SC/ST/FC



INSTALLATION & MAINTENANCE

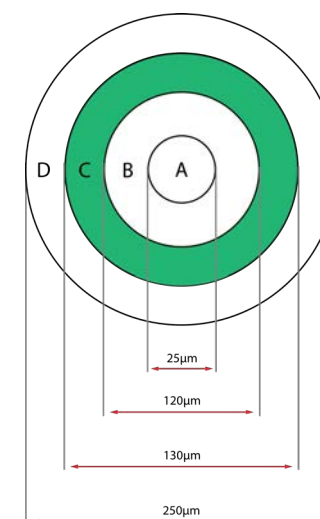
A fibre optic cleaning kit suitable for installation & maintenance has all the cleaning supplies necessary for 1.25mm, 2.5mm and MPO end-face cleaning.

Supplied in a robust Peli case ensuring long life, protection and on-site organisation.



Surface Geometry

The surface quality of the fibre end plays a crucial role in determining the transmission properties and service life of a connector. Dirt can and will permanently damage the surface and often causes changes in the connector geometry. If one considers that connectors in the region of 250µm are elastically deformed by the contact stress, it is clear that a dirt particle will generate enormous forces at specific points and is capable of permanently damaging the optical fibre and/or the bonding gap.

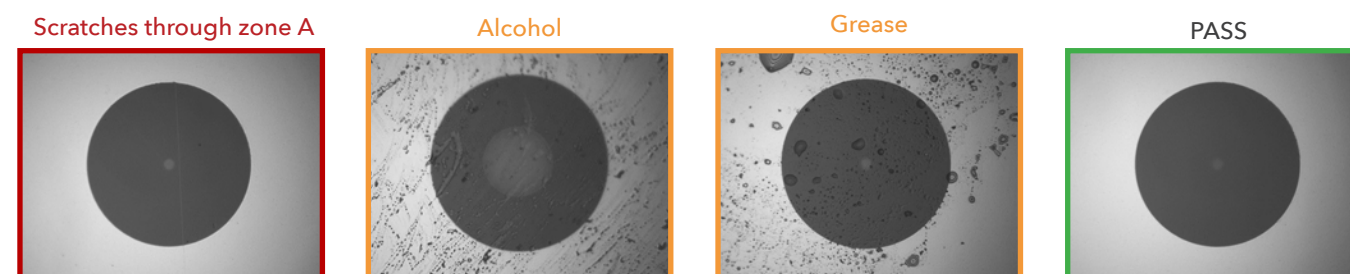


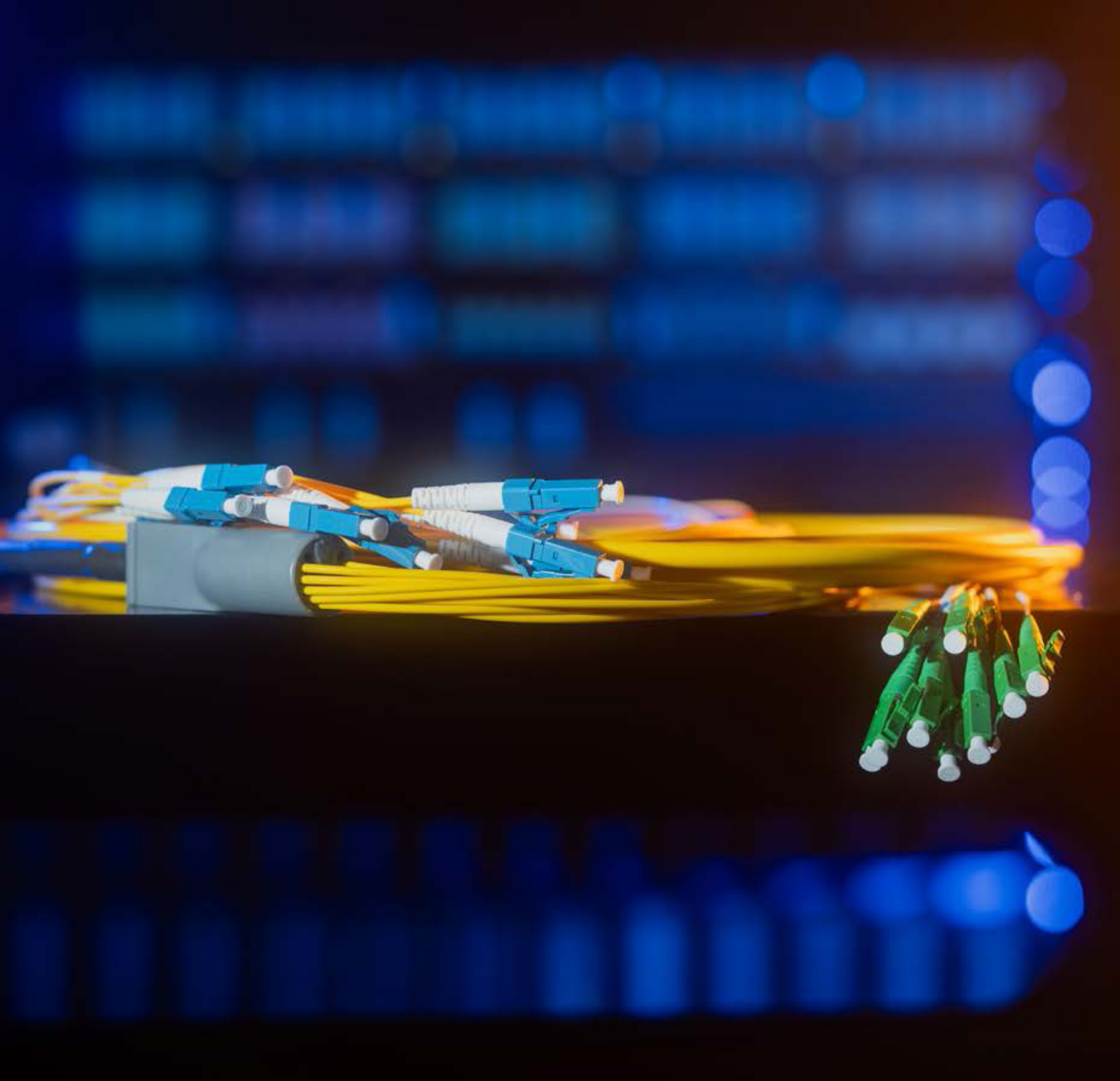
- Zone A: No scratches or pits permitted. 25µm is three times the core diameter. Therefore, the zone must be checked especially carefully.
- Zone B to C: Small scratches and cavities may be permitted. Here, too, absolutely no dirt must be present.
- Zone D: Although this is already the ferrule region, this zone must still be checked as it is also part of the transmission area due to the contact stress on the connector. The interferometry test also registers a diameter of 250µm.

Clean Fibre Peak Performance

Clean fibre optics are crucial for ensuring peak performance in communication networks. Dirt, dust, and other contaminants can cause significant signal loss and degradation, leading to reduced data transmission speeds, increased error rates, and overall network inefficiency. Cleaning and proper maintenance of fibre optic connections prevent these issues, maintaining optimal signal clarity and strength. This ensures reliable, high-speed communication, which is essential for the smooth operation of modern digital infrastructure, from internet services to telecommunications and beyond.

Examples of end-face inspection using a fibre microscope





Contact Us

+44 (0) 1582 665050

www.premiercables.com

11 Humphrys Road,
Dunstable, LU5 4TP