GEM
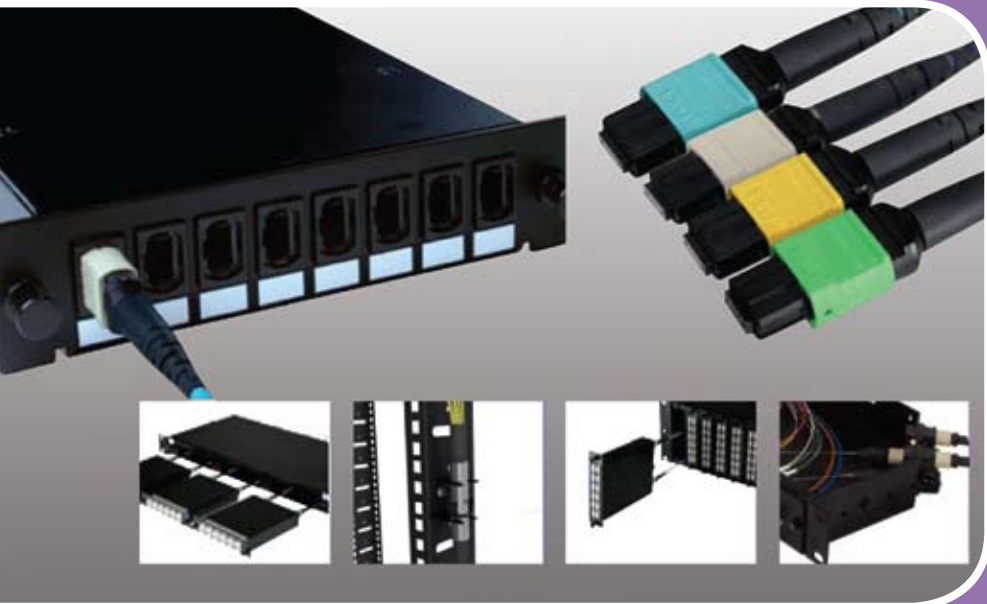## CABLE SOLUTIONS

MTP® Solutions

MPO High Performance
Fibre Optic Solutions
for High Density Networks

**SMARTER
GLOBAL
CONNECTIONS**

Data Centre Cabling Solution

The Data Centre

The number of data centres is increasing globally. Demand for greater processing power, data storage space and high-speed internet access means, choosing the right cabling infrastructure is essential, to ensure that those who rely on IT systems and telecommunications networks get access to information when and where they need it.

The Right Solution

Your network is the heartbeat of your organisation. Cabling infrastructure now has to be designed to deliver mission-critical applications to a converged network that demands reliability, speed and availability. A factory terminated fibre optic cabling solution is a simple, yet scalable, reliable method of deployment. Installation time compared to traditional copper cabling systems can be reduced by up to 75%. Simply pull, plug and go.

The MPO cabling solution from is the answer. Utilising the high-performance MTP® MPO style connectivity, Europe is able to design, manufacture and test a full range of MTP ® MPO assemblies which all adhere to TIA/EIA and IEC industry standards. The MTP ® MPO style plugs have introduced a new benchmark of high quality and performance into the MPO market. The connector complies with both IEC-61754-7 and TIA/EIA-604-5 and is fully backward compatible with previous versions of the MPO connector and has these unique enhancements;

A floating ferrule allowing greater mechanical durability during mating and preventing damage caused by side load. Elliptical guide pin tips providing greater durability by decreasing guide pin hole wear and tear. Easy identification of fibre type with simple colour code.

These features deliver a higher level of reliability and a reduction of potential downtime.

The Right Technology Partner

Optronics have a commitment and vision to ensure that tomorrow's data centres are supported with fibre optic networking products of the highest technical standard and performance reliability. We ensure that our sales, engineering and manufacturing teams are highly trained and qualified so that you receive the right technical solution tailored to meet your requirements and the requirements of TIA/EIA942(2005), ISO/IEC11801(2002) and EN50174 cabling standards.

MTP ® MPO Cabling Solutions For Data Centres

Optronics have established state-of-the-art manufacturing facilities, that provide a rapid turnaround on all of your orders.

MTP ® MPO System Solution For High Density Fibre

The MTP ® MPO cabling system is ideally suited for a high density environment that demands space saving cable density and innovative cable management solutions.

MTP ® MPO Trunk Cables

Factory terminated and tested.
12 fibres per connector.
Push-pull type mating/un-mating.
Bespoke lengths to customer's requirements.
Fibre types: OS1, OM1, OM2, OM3 and OM3+.

MTP ® MPO Fan Out Assemblies

From distribution cable to single fibres.
Available in LC, SC, ST and MT-RJ styles.
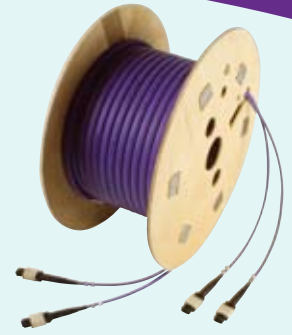Reduces need for patch panels.

MTP ® MPO Patch panels

3U patch panel to accept 14 cassettes (up to 336 fibres).
Panels are supplied pre-configured to customer requirements.

MTP ® MPO Cassettes

Provides transition between MTP ® MPO and standard interfaces (LC, SC, ST and MT-RJ).
Fits into 1 U patch panels (3 cassettes) or 3U patch panels (14 cassettes).

Patch leads

Connector types include MTRJ, SC, ST and LC. Our patch leads are individually tested and come with an accompanying test certificate. They are available with options for unibody strain reliefs and non-contact protective caps.

MTP ® MPO Trunk Cables

MTP ® MPO Fanout Assemblies

MTP ® MPO Cassettes

Patch Leads

24 Way MTP ®/MPO (2 x1 2)

MPO to SC Fanout

Break out Pre-Term with fanout style tails

MTP ® MPO Implementation

Typical Data Centre Installation

Slimline Patch Panel

The Technology

Key Features

Installation is simple and fast.
MTP ® MPO connectors are robust.
Connectors click into their adaptors and are reverse polarity protected.
Easy to use cable management solutions.

High density

72 fibres per 1 U of space.
12 fibres per Connector.
Less cable yields more space in cabinets and cable raceways, giving better airflow.
Up to 15,000 fibres per rack.

Reliability

Cables terminated and factory tested.
State of the art termination processes.
Quality controlled at every step.
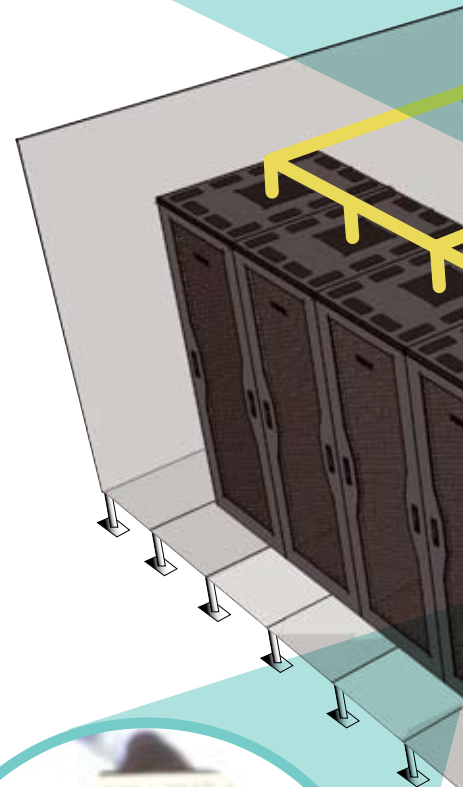Immune to EMI/RFI.

Low cost of ownership

Reduces labour cost and saves time on installation and testing.
Reduces cost of consumables and space requirements for cabinets.

Scalability

Future proof network infrastructure, to protect your investment.
Supports 10/100-1Gbps ethernet and fibre channel standards.
Singlemode capability beyond 10Gbps.

Simplicity

Modular systems designed for the fastest moves, adds and changes.
Designed for simple and easy handling, installing and testing.
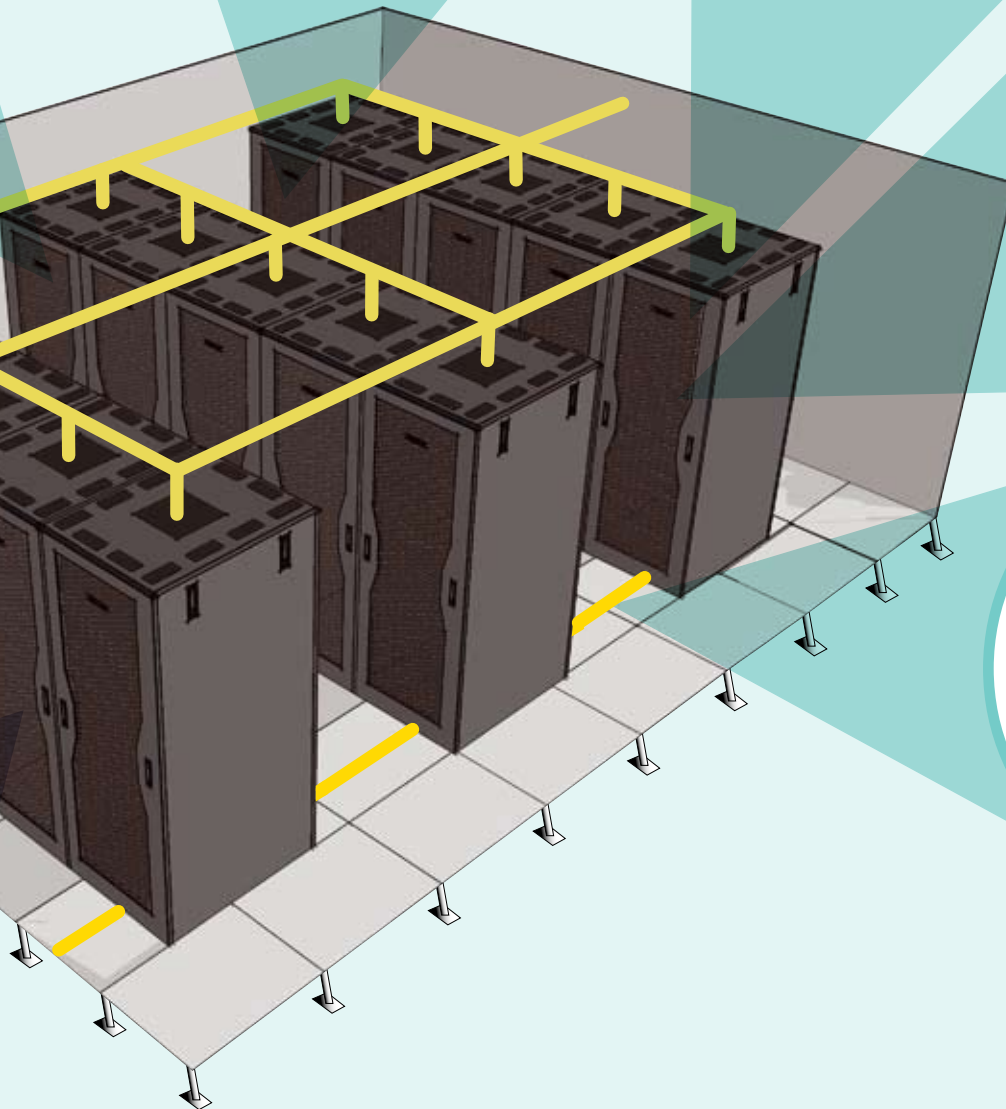

The Connector

Modular Patch Panel

Fan Outs

Patch Leads

Trunk Cable

Tailored Solutions

The modular nature of our MTP ® MPO system means it is totally flexible. At Optronics we understand there is no such thing as a "standard" installation. In Data Centres there are many different cable routes, requiring varying cable lengths, not to mention the different polarity configurations that may be required. We can supply factory tested products tailored to your requirements including helping you to plan your space and physical layouts to maximum space efficiency with potential for growth and flexibility in the future. From the smallest project to multi-site installations we will deliver the right solution for you, on time and ready to install.

Patch panels and cassettes configured and labelled to meet your needs.
Trunk cables and ruggedised fan out assemblies are made to the lengths you need.
Bespoke packaging of products to suit your requirements.

State Of The Art Manufacturing

At all of our manufacturing facilities we have the advantage of both expertise and advanced technology. Our manufacturing processes are unique and controlled at every stage.

From our extensive stocks we are able to cut cable to any length and terminate, test and label every connection to suit your requirement.
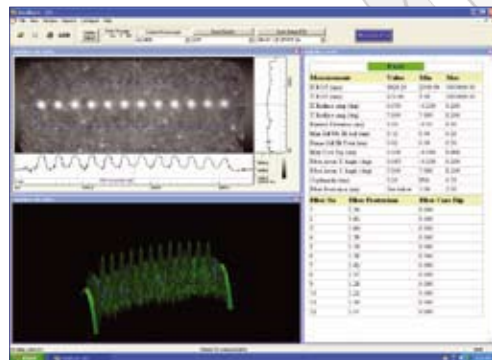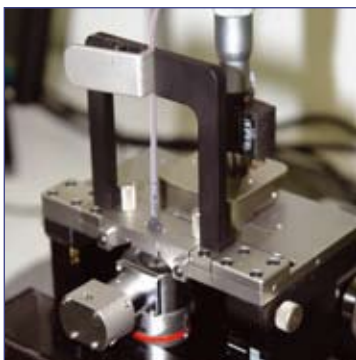
Equipment

Domaille Engineering HDC-5100 Fibre Polishing Machine.

The HDC-5100 is recognised as the industry's leading high-performance Polishing machine. Complemented by precision polishing plates holders designed for MT ferrules.

The result is high throughput, high-performance consistent MPT ˚/MPO polished ferrule end faces.

Norland Advantage Multifibre Array Interferometer.

Norland's industry leading equipment provides verification of our MPT ˚/MPO polishing processes. The Interferometer guarantees that all parameters of the polished MT ferrule complies and exceeds the MTP ˚/MPO industry standards.

EXFO IQS-610P tester.

The EXFO multi channel testers underwrite our ability to provide high-performance optical cable assemblies and optical test data. The flexibility of the tester provides the complete spectrum of optical testing required for complex and high fibre count cable assemblies.

The Future - Parallel Optics

The requirement for greater bandwidth in data centres increases daily. Currently we see fibre links being run at speeds in excess of 10 gigabits per second performance, parallel optics is a way to increase this performance through put.

Typically data is transmitted over one fibre and received on another. Parallel optics uses multiple fibres to both transmit and receive data simultaneously. In a typical application one byte of information is split into bits and each bit is then coded and sent across individual fibres, it is then decoded and put back together at the other end, although there are many methods of doing this. Using parallel optics it is easily possible to achieve 30 gigabits per second throughput. With new interface cards such as QSFP (quad small form pluggable), POP4 (pluggable optics 4-channel) and SNAP12 (12 channel parallel pluggable optics) the technology is developing rapidly and becoming ever more popular in telecommunications and computing.

The MPT ®/MPO connector is the connector of choice for parallel optics..

Quality

ISO Registered

Optronics has an aggressive quality policy aiming to continuously improve products and processes.

All of our main manufacturing sites are   ISO:9001   certified, supporting the company's position as a producer to the largest suppliers of communication products in the world.

RoHS & WEEE Compliant

All of our products and sub assemblies comply with the   RoHS & WEEE   directives.

Contact us

For further details, please visit our new online catalogue or call our sales team.

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