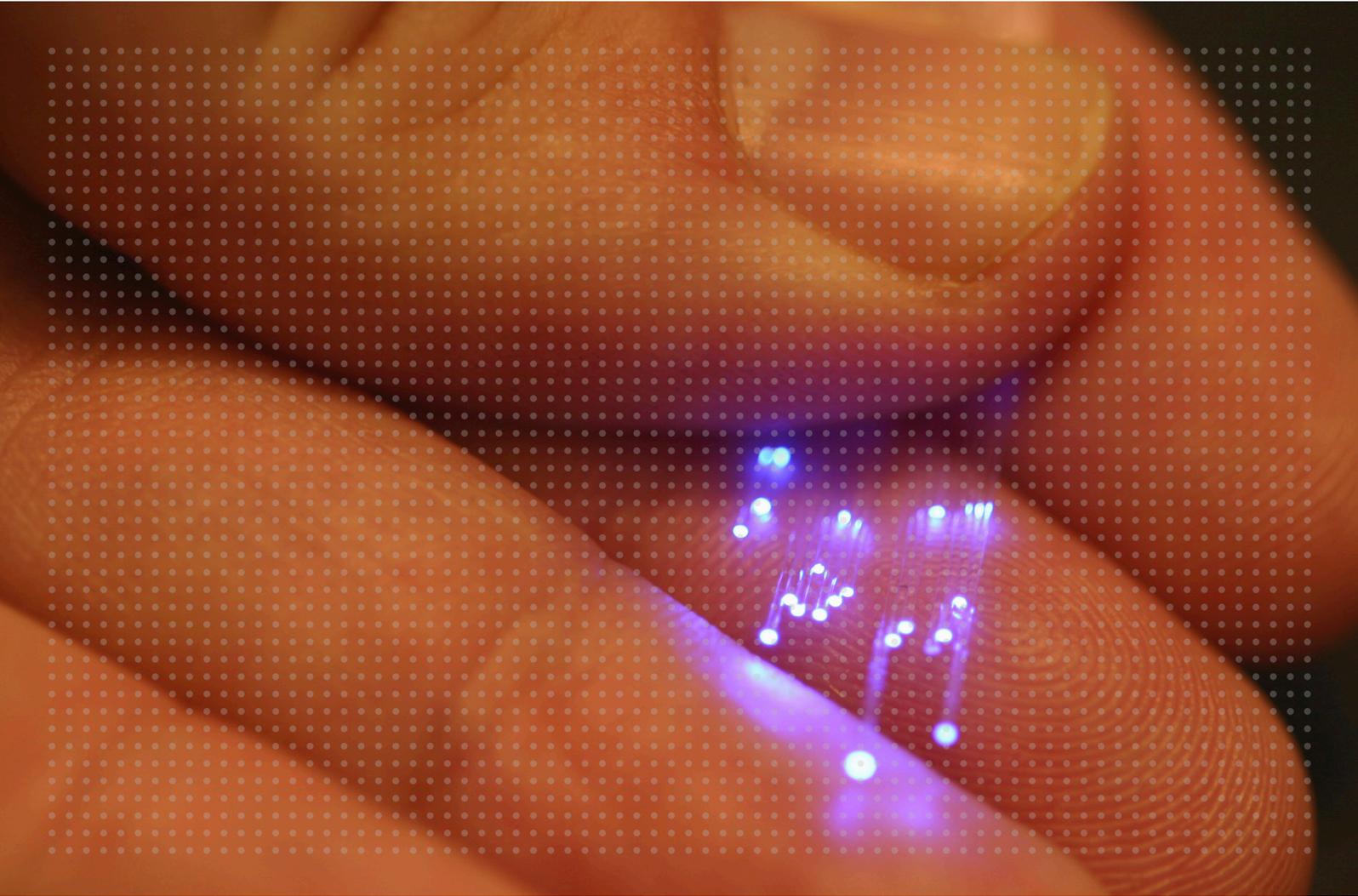


LIGHTBAND™ > COMPREHENSIVE FIBRE SOLUTIONS

Supporting your physical layer IP infrastructure



molex®

LIGHTBAND™ > FIBRE FOR YOUR IP INFRASTRUCTURE

Fibre has been an integral medium for structured cabling systems for many years. Used traditionally in the backbone – fibre is now becoming more prevalent in high speed networks by virtue of its bandwidth capabilities, size and the security it offers over and above copper media.

Molex manufactures some of the most comprehensive fibre systems in the structured cabling market, incorporating a variety of connector technologies such as; ST®, Duplex SC, MT-RJ® and LC. The Molex fibre product range consists of management panels, enclosures, adaptors, patch cords, splicing equipment, field termination connectors, tool kits and testers.

Molex also offers a comprehensive pre-terminated end-to-end solution within the fibre product range, offering the greatest levels of performance in terms of speed, bandwidth and security, and is ideally suited for deployment in data centres. This pre-terminated end-to-end 10G fibre solution offers a number of advantages over traditional fibre installations - the cables are factory terminated, supplied ready to install and with guaranteed optical performance specifications. The pre-terminated cables and patch cords can also be configured using a number of cables and industry standard fibre connectors.

Versatile Solutions for any Working Environment

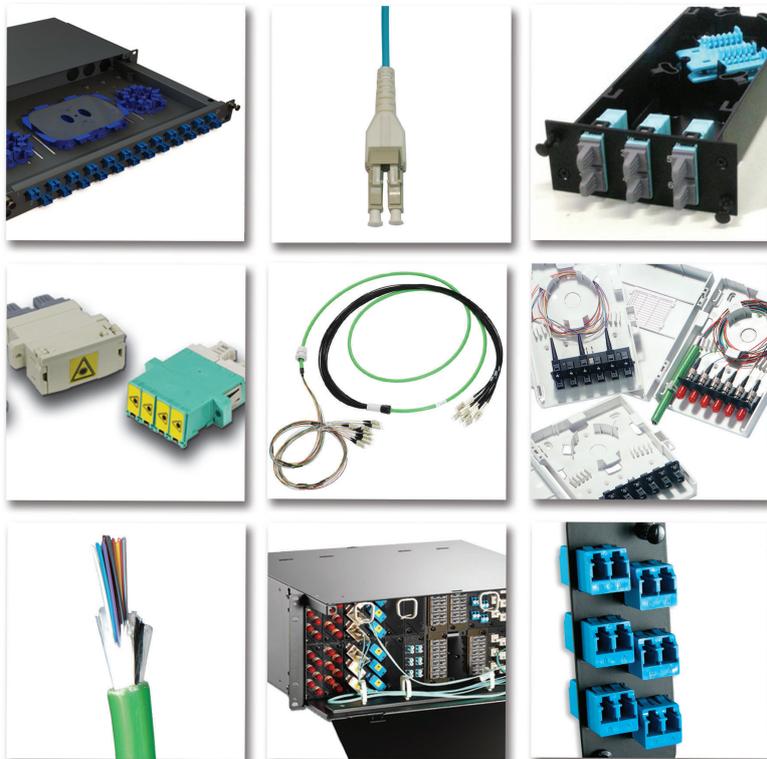
Molex's comprehensive range of fibre-to-the desk wallplates and modular systems suit all applications and market requirements. Elegantly designed, these products offer a low profile and versatile modular construction, allowing the user to easily expand the network as it grows.

Available with a variety of connector types, such as ST, SC and LC, fibre wallplates are suitable for both singlemode and multimode installations and include Molex's unique 'shuttered' technology protecting the user from harmful light emissions.

Long Term System Reliability

Molex's optical fibre products exceed all relevant international performance standards, including TIA/EIA 568-C.3, ISO/IEC 11801 and AS/NZS 3080, maximising the user's return on investment by extending the useful life of the system. Designed for maximum versatility, the fibre systems provide a flexible end-to-end solution capable of running the most demanding optical fibre current network protocols. Stringently tested to ensure optimum network performance, all products are engineered and manufactured using state-of-the-art technology guaranteeing business's day-to-day network operations.

Please note that not all products are available in all regions.



XTREME DENSITY > TRUE FLEXIBILITY FOR YOUR IP INFRASTRUCTURE

The Xtreme Density System is a configurable rack mount unit for storing and terminating incoming fibre cable. The chassis is available in a 1U 5 cassette module and 2U 12 cassette module chassis – delivering from 120 to 288 fibre via 24 fibre plug and play LC/MTP modules connected 24 fibre MTP/MTP optical cables. The system is ideal for data centre, SAN, enterprise/campus and telco central office applications.

- 24 fibre LC/MTP plug & play cassettes – provides 120(1U) and 288 Fibres (2U)
- Future Proofing – Low loss OM3, OM4 and OS2 cabling and cassettes offered as standard
- 24 fibre MTP/MTP cable assemblies – reduced cable weight and footprint with lower impact on cable routing requirement and HVAC interference
- Rack mount chassis configurable with a combination of front door and rear cable management options.
- Optional sliding management and storage tray available
- Quick release tab on cassettes – allows for tool-less and easy removal from chassis. mounting tabs on side of cassette lock into the panel. Intermediate lock position locks forward the cassette of the chassis for patch cord installation
- Slide out port labelling - standard with modules
- High density LC quad adapter footprint – No extraction tool need for patch cord installation. Revised footprint improves front space management and port access.
- Internal fibre management inside the cassettes – ensures effective cable management guaranteeing performance

Uniboot LC Low Loss Patch Cords

The Uniboot LC Low Loss Patch Cords are slim-line patch cords, ideal for high density/high speed applications. Using a uniboot patch cord provides a 50% space saving when compared to traditional optical patch cords. Ideal for data centre, SAN, enterprise/campus and telco central office applications.

Hybrid Pre-Terminated Cable Assemblies

Molex Pre-Terminated Fibre Optic Cable Assemblies offer premium factory-controlled optical performance on a variety of connectors that enable rapid deployment and economical installation. Pre-Terminated Cable Assemblies are ideal for mission-critical backbone applications such as data centre tie cables and low optical loss backbone riser cables.

Xtreme Density Cables

OFNP and LS0H rated round distribution cables are factory terminated on both ends with multi-fibre MTP® connectors for maximum fibre density. Their round, flexible outer jacket is easy to bend, route and install, the patented flexible transition sleeve maintains the routing feature of the round cable, absorbs vibration shock and provides an ideal surface to secure the MTP connector.



MODLINK™ PLUG AND PLAY

The ModLink system provides premium factory-controlled optical performance, enabling flexible system configuration and fast, economical installation. ModLink suits most fibre installations, but is ideal for mission critical applications, such as data centres and storage area networks, applications where fast installation is paramount and environments where moves, adds and changes are frequent or managed in-house.

What are the Benefits of Pre-Terminated Technology?

Pre-terminated solutions provide the advantage that each fibre connection is factory terminated. Each individual connector is pre-wired into a MTP/MPO interface and tested in-house to ensure correct fibre bend radius has been maintained and that each connector provides optimum performance. Therefore upon installation the user simply needs to plug the cable into the rear of the cassette and the link is operational – providing the user with an excellent solution for fast track installations with guaranteed performance.

Additional Product Features

Compactly sized, individual ModLink cassettes simply click into Molex's range of rack mount fibre management panels and enclosures, providing up to 96 ports in a 1U rack space. They offer front port identification plus labelling field on the cassette top for fibre documentation. Cables utilise OFNP or LS0H rated round loose tube cable featuring a flexible outer jacket that is easy to bend, route and install.

Supports all major Fibre Connector Technologies

The ModLink system is available to support LC, SC, or MT-RJ fibre connectivity. Providing up to 24 fibre ports in each cassette, the SC and LC range are designed to adhere to TIA/EIA 568-C.3, ISO/IEC 11801 and AS/NZS 3080 international fibre performance standards, the ModLink system supports OM1, OM2, OM3, OM4, OS1 and OS2 fibre applications.

12 and 24 Port LC ModLink Cassettes

ModLink Cassettes provide a cost-effective, quick and easy fibre system, for backbone and to-the-desk applications. 12 and 24 Port LC ModLink Cassettes provide premium factory-controlled optical performance, enabling flexible system configuration and fast, economical installation. Simply plug the cable into the rear of the unit and the link is operational - an excellent solution for fast-track installations.

Keyed LC ModLink Advanced Fibre Cassettes

Molex's Keyed LC Adapters, used in conjunction with compatible connectors, provide mechanical security and prevent inadvertent cross connection while allowing for high density layouts without performance compromise. Combining this with Molex's plug and play advanced fibre optic systems offers premium factory-controlled optical performance, enables flexible system configuration and fast, economical installation.

ModLink Cables

ModLink LS0H and OFNP rated cables are factory terminated on both ends with multi-fibre MTP® connectors for maximum fibre density. The round, flexible outer jacket is easy to bend, route and install. The cable offers standard and industry-leading low insertion loss (0.35dB maximum insertion loss for laser optimised OM3/4 cables and OS1/2 cables, 0.10dB typical) varieties. ModLink advanced fibre optic cables are 100% tested



LIGHTBAND™ > CABLES

Molex offers a variety of high performance, multimode and single fibre cables, including:

Multi-Purpose Loose Tube Fibre Cable

Molex multi-purpose fibre optic loose tube cable is suitable for LAN backbones, telecom access lines and campus backbones. The cable is a gel filled central loose tube design with swellable glass yarns as a strength member and rodent resistance. The outer jacket is a blue HFFR (halogen free flame retardant) material.

Internal/External Tight Buffered Fibre Cable

Molex Internal/External Tight Buffered Fibre Cable is available in multiple cores. Using tight buffered 9/125µm, 50/125µm and 62/125µm distribution grade fibre that either meets or exceeds, OM1, OM2, OM3, OM4, OS1 and OS2 standards.

Direct Burial Armoured Loose Tube Fibre Cable

Molex Direct Burial Armoured Loose Tube Fibre Cable is constructed of gel filled loose tubes (4-12 fibres). The core is water blocked, wrapped in polyester tape with an inner and outer MDPE sheath. Corrugated steel armouring makes the cable rodent resistant. The cable is designed for direct burial, outdoor data communication applications.

Building Distribution Fibre Cable

The building distribution cable features flexible, small diameter cable with high tensile strength for cable routing and installation. Easy strip buffers enable fast, consistent stripping for termination. The cable is available in OFNR/FT4, OFNP/FT6 and low smoke zero halogen variations. RoHS compliant

Armoured Building Distribution Fibre Cable

The armoured building distribution cable utilises 900µm buffered fibres surrounded by aramid yarn strength members with a flame-retardant outer jacket incorporated in a jacketed interlocked armour encasing. These cables are ideal for interbuilding backbone, data centre and horizontal installations. Molex armoured building distribution cable is available in 50µm, 62.5µm Multimode and Singlemode fibres.

Indoor/Outdoor Loose Tube Fibre Cable

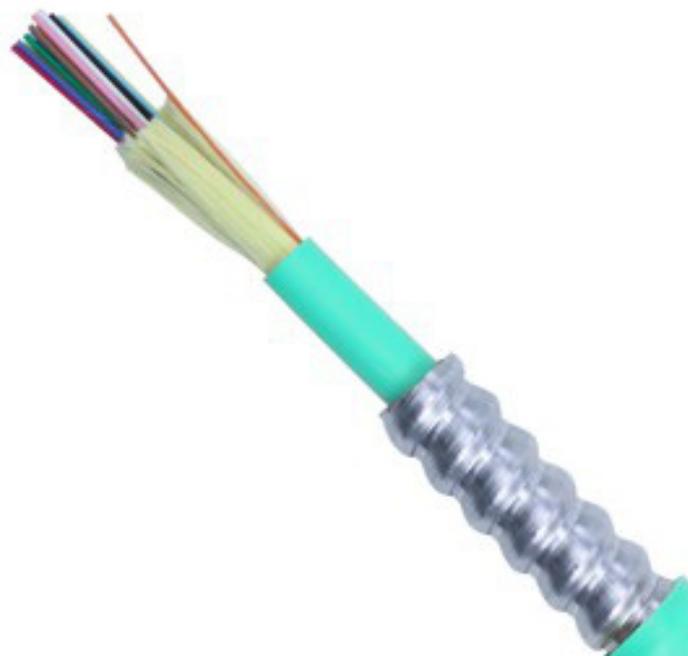
The Loose Tube Indoor/Outdoor cables utilise dry water blocking technology with super absorbent polymers rather than traditional petroleum based gels both inside the fibre tubes and the core of the cable. Molex offers designs for both plenum (OFNP) flame rated and non-plenum (riser/OFNR) flame rated applications while meeting the demanding requirements for outside plant installations. The versatile design allows users to install a single cable for both their indoor and outdoor environments without mechanical or optical compromise. Molex Loose Tube Indoor/ Outdoor cables are available in 50µm, 62.5µm Multimode and Singlemode fibres.

Armour Loose Tube Fibre Cable

Molex Armour Loose Tube consists of indoor/outdoor rated fibre optic loose tube cables encased with aluminium or steel spirally wrapped armour in an interlocking configuration. The armoured cable is then covered with a plenum rated jacket to prevent snags during installation.

Light Armoured Loose Tube Outside Plant Fibre Cable

All dry single jacket, single armour cable combines durability and ease of handling for a rugged, easy-to-install outside plant cabling solution.

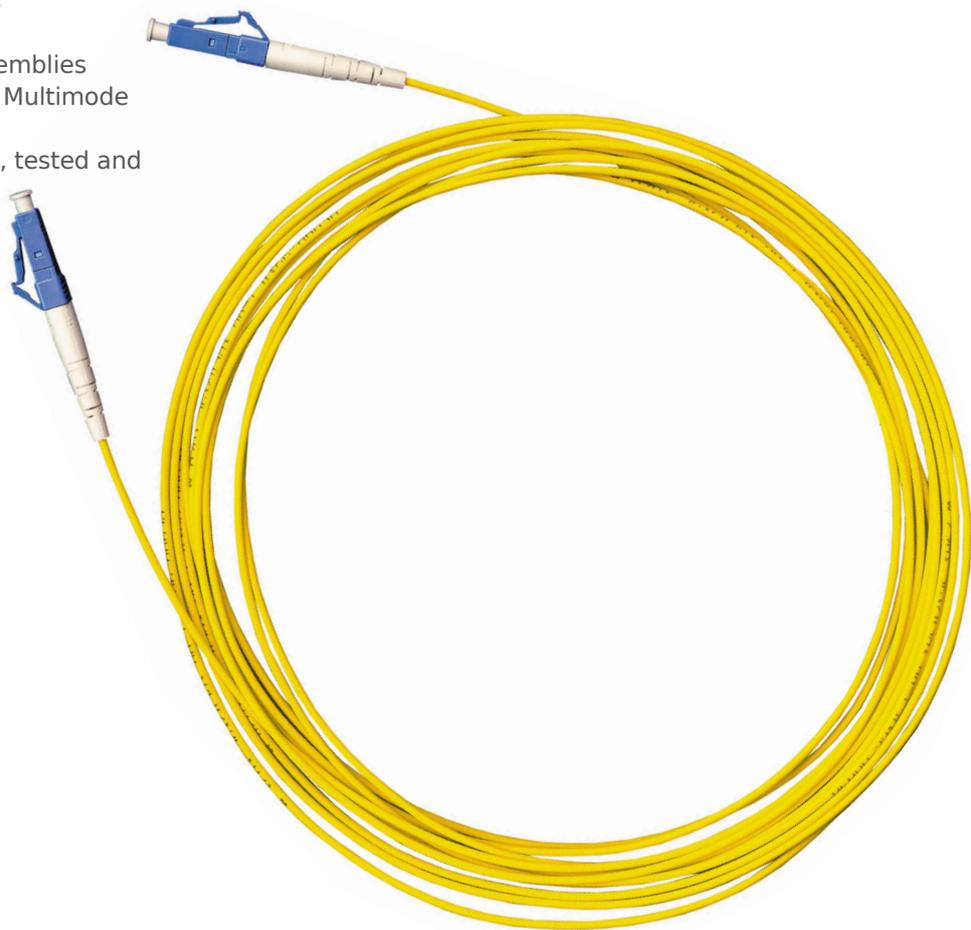


LIGHTBAND™ > PATCH CORDS AND PIGTAILS

Our comprehensive range of fibre optic patch cords are suitable for singlemode and multimode applications and our advanced manufacturing process provides exceptional performance in patch cord assemblies. Molex maintains strict control over the ferrule endface surface. With the aid of an interferometer, the ferrule endface geometry is measured for radius, concentricity and apex offset, ensuring high performance and long-term reliability of all terminations. Fibre patch cords are available as standard in 1m, 2m, 3m, and 5m lengths. Fibre pigtails are also available in varying lengths. Customised lengths can be ordered for both patch cords and pigtails.

Molex patch cords and pigtails:

- Deliver ruggedised cable construction
- Offer flexible, small OD 2mm x 4.1mm mini cordage
- Provide insertion loss better than 0.35 dB
- Support popular SC, LC and ST connectors
- Ensure controlled fibre protrusion
- Conform to either standard or custom assemblies
- Meet or exceed OM1, OM2, OM3 and OM4 Multimode and OS2 Singlemode standards
- Reflect quality factory processes; polished, tested and serialised
- Meet RoHS compliance
- Include test results (for patch cords)



LIGHTBAND™ > ENCLOSURES

Molex offers a variety of racks mount and wall mounted, enclosures, designed to store and terminate fibre optic cable, accommodate a variety of different Molex adapter plates, cassettes or splice trays

1U Multi-Function Fibre Enclosure

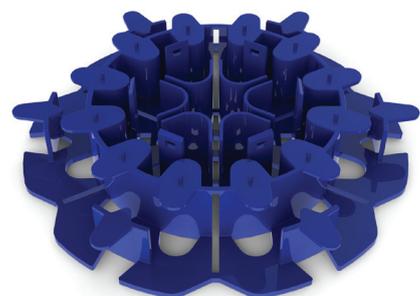
The 1U Multi-Function Fibre Enclosure is a configurable rack mount unit for storing and terminating incoming fibre cable. The fibre enclosure has been designed to accommodate various termination types and adapter configurations. The floor of the enclosure is constructed to allow maximum flexibility in routing fibres. The enclosure incorporates a heavy duty ball bearing slide mechanism, allowing easy access to fibres. The interchangeable front plate facilitates upgrades as required. The enclosure has an optional front locking kit and an optional front cable management to securely route patch cords.

Specification Grade Fibre Enclosures

Specification Grade Fibre Optic Enclosures are a configurable rack mount unit for storing and terminating incoming fibre cable. Designed to accommodate both the needs of the installer for the initial assembly and the end user for access, maintenance and fibre protection. Great care has gone into the design to protect fibre optic cables and patch cords from damage and to maintain stable optical integrity throughout the life and use of the enclosure.

Standard Grade Wall Mount Fibre Enclosure

The Standard Grade Wall Mount enclosures are configurable wall mount units for storing and terminating incoming fibre cables.



601 Fibre Enclosure

The 601 Fibre series enclosures are compact units for fibre optics. Available in ST, Duplex SC and LC versions they provide either 6, 8 or 12 fibre ports. The 601 fibre enclosure has a low profile design and provides the proper internal fibre management to ensure the integrity of the optical network. There is also provision for a user supplied seal for added security.

Fibre Swing-Out Plastic Patch Panel

The Swing-Out Plastic Patch Panel is a light-weight, robust fibre optic patch panel designed for the installation of up to 48 fibres. The panel offers an economic alternative to metal fibre enclosures. The lower tray is designed to pivot enabling access to the pre-formed fibre and splice management areas for easy cable dressing and installation.

WM-12

The WM-12 is a wall mounted steel enclosure that provides up to 24 fibre ports in a minimum of space. The WM-12 has an integral configurable panel that accepts up to 6 USO II modules. Its design also guarantees that all of the media will be protected and proper fibre bend radius is maintained.



LIGHTBAND™ > CONNECTORS

Our range of connectors are available in both multimode and singlemode variants. Designed to the highest performance specifications, meeting international standards and providing low insertion loss, the connectors are available as heat-cured, cold cured and field terminable variants.

SC Connectors

Molex's SC fibre connector has been designed to NTT-SC standards and is completely compatible with other SC hardware. This design, which provides non-optical disconnect terminations is a push pull coupling mechanism, has been tested to the rigorous Bellcore 326 standards. Because of its versatility, this connector is well suited for telecommunication, CATV and datacom applications.

LC Connectors

The LC connector is the result of increased demands for smaller easier-to-use fibre connectivity. The LC connector has reduced the space requirements on equipment bays and distribution panels by 50%. Connectors accommodate 900µm buffered fibre and 1.6mm and 2.4mm jacketed cable. Its six position tuning feature enables unprecedented insertion loss performance by optimising the alignment of the fibre cores.

ST Connectors

The ST series of connectors are specially designed for distribution applications and are compatible with existing ST type hardware. The screw on captivation mechanism in the long boot style provides excellent Kevlar retention without the expense and inconvenience of crimp tools.

FC Connectors

FC connectors are specifically designed for telecommunication applications. Designed to NTT-FC standards and provides true non-optical disconnect performance. FC connectors support both singlemode and multimode applications and have a pre-assembled design and provide economical terminations both in factory and in-the-field.

Keyed LC Connectors - Secure Connectors

Molex Keyed LC Connectors used in connection with the Keyed LC Adapters, provide mechanical security and prevent inadvertent cross connection while allowing for high density layouts without performance compromise

Xpress G2 Pre-Polished Pre-Assembled Connectors

Molex's Xpress G2 (second generation) Pre-Polished, Pre-Assembled Connectors provide quick reliable terminations and are easy to use.

Connector Cleaners

The connector cleaners have been specifically designed for use with multi-fibre MPO/MTP, SC or LC connectors. The cleaner removes debris from the entire endface in a single action.

Designed with the latest engineering polymer and ceramic materials, our line of high performance fibre adapters have been tested to and meet all the rigorous Telecommunication, CATV and data communication industry standards. The range also includes adapters with Molex's patented shuttered adaptor technology which protects each connector from dust and contaminants, whilst ensuring that the user is protected from harmful laser light emissions.



LIGHTBAND™ > ADAPTERS

Duplex SC and SC/ST Adapters

Duplex SC and SC/ST Adapters feature either a snap or flange mount and are designed to support the TIA/EIA commercial building telecommunication wiring standards.

Duplex SC/APC Adapters

Duplex SC/APC Adapters feature either a snap or flange mount and are designed for use with angled polish connectors.

LC Adapters

The LC adapter is the result of increased demands for smaller easier-to-use fibre connectivity. The LC Adapter has reduced the space requirements on equipment bays and distribution panels by 50% when compared to SC adapters.

Quad LC Adapters

Designed for high-density applications, the Quad LC Adapter provides a 4-position LC Adapter solution in a traditional duplex SC footprint.

Quad LC/APC Adapters

Designed for high-density applications, the Quad LC/APC adapter provides a 4-position LC adapter solution in a traditional duplex SC footprint and are designed for use with angled polish connectors.

Keyed LC Adapters

Keyed LC Adapters used in conjunction with the Keyed LC Connectors provides mechanical security and prevent inadvertent cross connection while allowing for high density layouts without performance compromise.

ST Adapters

A broad range of singlemode and multimode adapters are available to accommodate ST and ST II connectors. Metallic or polymer versions are available with either precise zirconia ceramic, rugged phosphor bronze or cost-effective polymer alignment sleeves.

MT-RJ Adapter

Occupying approximately the same space as a simplex SC adapter, the MT-RJ Adapter is a feed through adapter that connects the male and female MT-RJ Connector to give a stable and reliable connection.

FC Adapters

FC adapters combine a metal housing and either a precision zirconia or a rugged phosphor bronze sleeve. Flange mount or "D" hole mount adapter styles are available.



LIGHTBAND™ > ADAPTER PLATES

Molex makes it easy to field configure many of its fibre optic products by offering an extensive line of Adapter Plates. The plates are loaded with high quality adapters and require no tools - the plates install with a simple snap rivet, making installation and/or changes simple.

6 Fibre Adapter Plates - shuttered or unshuttered

6 Fibre Adapter Plates fit directly into the Molex Multi-Function and Specification Grade Fibre Enclosures. The simple design requires no tooling as the plates install with a simple snap rivet. Shuttered 6 Fibre Plates feature Molex's unique shuttered technology which protects installers and end users from LED/Laser light emissions.

12 Fibre Adapter Plates

12 Fibre Adapter Plates fit directly into the Molex Multi-Function and Specification Grade Fibre Enclosures. The simple design requires no tooling as the plates install with a simple snap rivet.

12 Fibre Keyed LC Adapter Plates

Molex's Keyed LC Adapters used in conjunction with compatible patch cords provide mechanical security and prevent cross connection while allowing for high density layouts without performance compromise. The Keyed LC Fibre Optic Adapter Plates are a modular platform compatible with various Molex enclosures and fibre splicing systems. The plates require no tools for installation.

24 Fibre Adapter Plates

24 Fibre Adapter Plates fit directly into the Molex Multi-Function and Specification Grade Fibre Enclosures. The simple design requires no tooling as the plates install with a simple snap rivet.

High Density MPO/MTP Adapter Plate

Molex's high density MPO/MTP Adapter Plates are a modular platform that are compatible with various Molex Enclosures. The adapter plates incorporate six adapters and are upgradeable/reusable. The plates are 100% factory tested.



LIGHTBAND™ >

FIBRE-TO-THE-DESK

Our range of fibre-to-the-desk modular systems to suit all applications and market requirements. Elegantly designed, these products offer a low profile and versatile modular construction, allowing the user to easily expand the network as it grows. Supporting SC, LC and ST fibre adapters, Molex's work area solutions are suitable for both singlemode and multimode installations and include Molex's unique 'shuttered' technology protecting the user from harmful light emissions.

50 x 50mm Angled Modules

50 x 50mm Angled Modules ensure that correct bend radius is maintained in a fibre-to-the-desk environment and feature shuttered adapters, protecting the user from harmful light emissions.

25x50mm Modules

25x50mm modules provide a singlemode or multimode solution, supporting SC, ST and LC fibre technology.

Single Bezel ST, SC and LC Modules

Designed for use within the Molex Synergy range of wallplates and surface blocks, ST, SC and LC modules are available in five colours and provide singlemode and multimode performance.

Secure Keyed LC Duplex Synergy, LC Euromod and USO II Modules

Molex's Keyed Adapters used in conjunction with compatible connectors provide mechanical security and prevent inadvertent cross connection while allowing for high density layouts without performance compromise. Combining this with Molex's fibre-to-the-desk applications prevents unauthorised connections at the desk.

Fibre Management Backbox

The Fibre Management Backbox provides enough space for direct termination or splicing of up to eight fibres and is designed to maintain the minimum bend radius requirements for fibre optic cable when used in conjunction with Euromod Angled Modules. This product is also suitable for applications which require copper modules and can accommodate up to 2 flat Euromod PowerCat or secondary voice modules as well as 4 fibres. It is packaged complete with threaded inserts for trunking applications and adhesive strip for mounting in a surface mount backbox.

Universal Splice Trays & Fusion Splice Protectors

The Universal Splice Tray is a configurable enclosure for both mechanical and fusion splices. Loose tube cable is routed into and out of the tray through adjustable tube grips located at each corner. Grips eliminate the need for cable ties and can be tightened and loosened preventing over-compression of the loose tube cable.

Fibre Optic Breakout Kits

Fibre Optic Breakout Kits are for use on multifibre-per-tube loose tube cables to modify the cable for direct termination. Each kit breaks out 250µm fibres from a multi-fibre loose tube into individual 900µm buffer tubes. The fibres can then be terminated using the connector manufacturer's recommended termination procedures for 900µm tight buffered fibres. Each kit is individually packaged in a sealed plastic bag.

Pocket Fault Locator

The Pocket Fault Locator is designed for either singlemode or multimode use. This pen-sized unit allows you to visually locate micro-bends, fibre breaks and other sources of optical attenuation in fibre patch cords, patch panels and enclosures.



Corporate Headquarters

Illinois, U.S.A.

Tel: +1 866 733 6659

Fax: +1 630 813 9770

EMEA

Hampshire, England

Tel: +44 844 815 0955

Fax: +44 2392 205801

Fourways, South Africa

Tel: +27 11 513 4223

Fax: +27 11 513 3068

Middle East

Dubai, U.A.E.

Tel: +971 4 2990430

Fax: +971 4 2994590

Poland

Warsaw, Poland

Tel: +48 22 33 38150

Fax: +48 22 33 38151

Moscow

Moscow, Russian Federation

Tel: +7 495 6426455

Fax: +7 495 6426455

Ukraine

Kiev, Ukraine

Tel: +380 44 494 2642

Fax: +380 44 494 2637

Australia

Victoria, Australia

Tel: +61 3 9971 7111

Fax: +61 3 9971 7199

Greater China

Shanghai, China

Tel: +86 215 048 0889

Fax: +86 21 50481185

India

Bangalore, India

Tel: +91 80 4129 3500

Fax: +91 80 4129 3601

www.molexpn.com