

technetix

Fiber Connectivity Products

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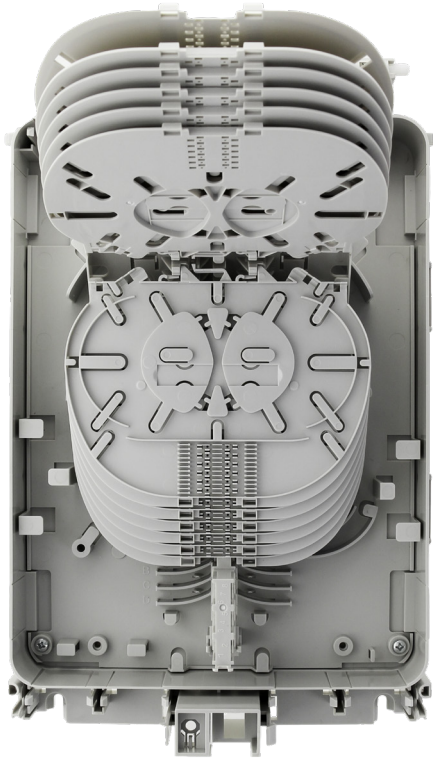
Fiber termination

Our range of fiber termination boxes (FTB) provide compact, robust and easy to deploy termination solutions for indoor and outdoor applications. Technetix offers solutions for single dwelling unit (SDU) and multi-dwelling unit (MDU) configurations.

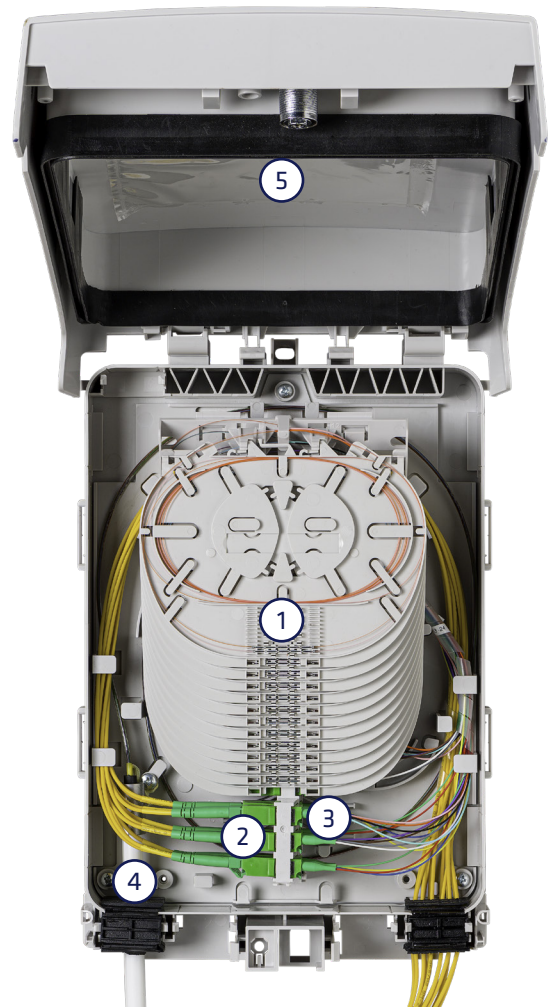
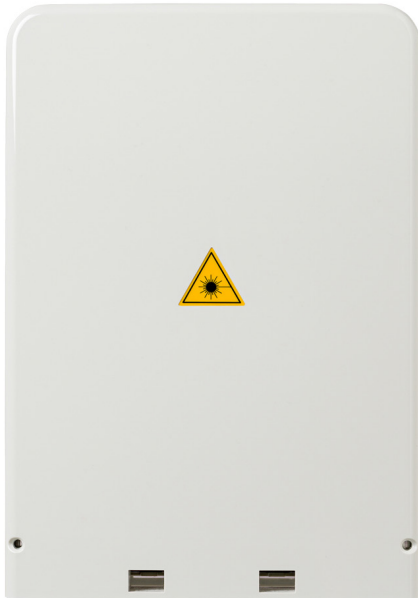
The FTB product family offers modularity and ease of installation supporting multiple application options, significantly reducing the cost of carrying multiple units and installation. A long service life and maximum protection for your investment are assured.

FTB Max

The fiber termination box Max (FTB Max) is designed for mass deployment projects in residential units. The installation effort has been significantly reduced with easy wall-mounting and access protection an essential part of the design.



- ① 168 splice holders
- ② 4x holders for PLC splitters
- ③ 2x 12 couplings in fold-out holder (48x LC)
- ④ 4x flexible, divisible sealing sets for 2 - 10 mm Ø
- ⑤ Easy access removable cover



FTB Speed

With its innovative fiber management and sealing design, the fiber termination box (FTB) Speed offers the greatest number of application options and is quick to install, provides a long service life and maximum investment protection. The FTB Speed can support multiple FTTH topologies with the flexibility to accommodate splitter, patch and splice options.



- ① 12 x splices
- ② 1x holder PLC splitter
- ③ 6x couplings in fold-out tray (12x LC)
- ④ Divisible sealing sets for 2 - 10 mm Ø
- ⑤ Easy access removable cover

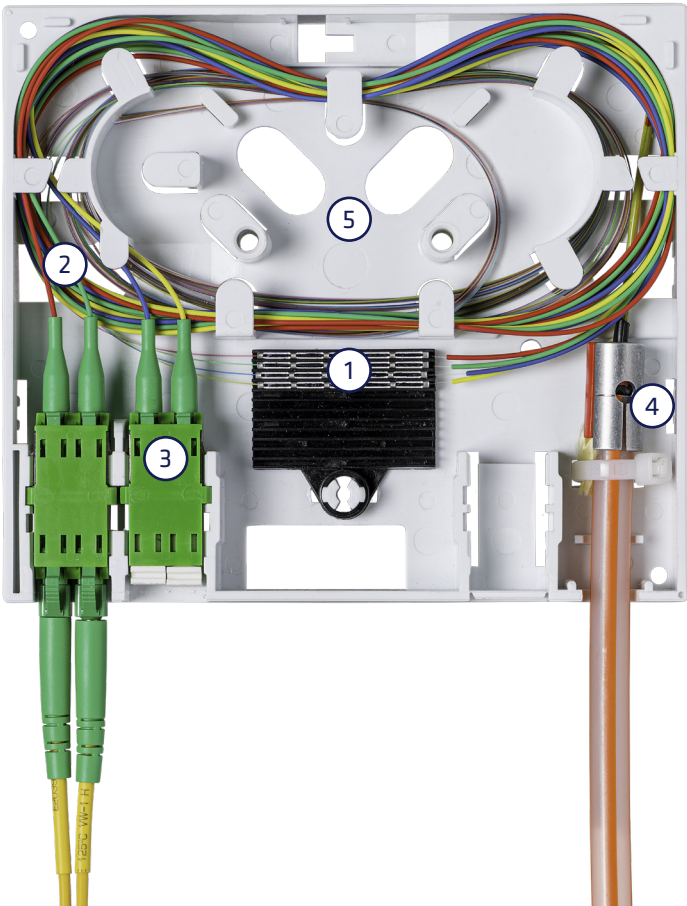


FTTH box APL

A modern fiber optic network requires flexible termination boxes. FTTH box APL offers an appealing design, extreme robustness and ease of access. The box is designed for holding pre-assembled fibers or splices spooled in the management tray.



- 1 12x splice tray
- 2 Optimized for pre-assembled fibers
- 3 3x couplings, plan and set back position (6x LC)
- 4 Space for micro-gas-stop on pipe
- 5 Metal installation plate on wall or outlet

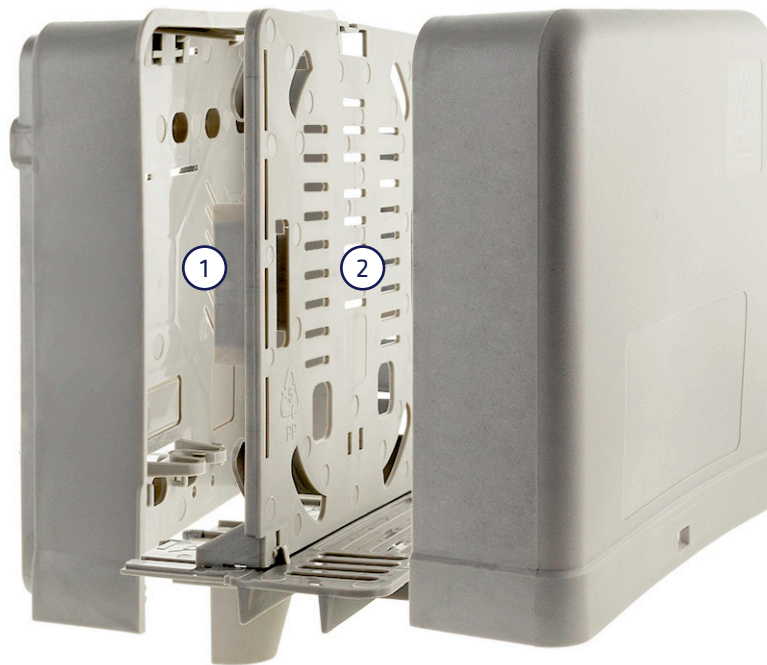


External and internal fiber termination boxes

With ever-expanding networks and data usage rising exponentially, the fiber external termination box (F-ETB) and fiber internal termination box (F-ITB) are the perfect solutions for your FTTH network. Easy-to-install with a range of configurations for both outdoor and indoor usage, each box provides a secure platform for your HFC equipment.

The F-ETB and F-ITB are designed to meet the needs of developing network architectures by providing functionality for electrical, hybrid and full FTTH networks. The F-ETB grows with the network, reducing installer time and material costs by incorporating modular components. The ETB and ITB bases have multiple wall fixing points with rear knockouts for cable entry and exit. Once the box is installed, the process is fully toolless, allowing quick and easy installation and network maintenance.

- ① Multi-layer panel setup allows for safe fiber storage
- ② Flexible connector and splice storage



F-ITB (Top view)

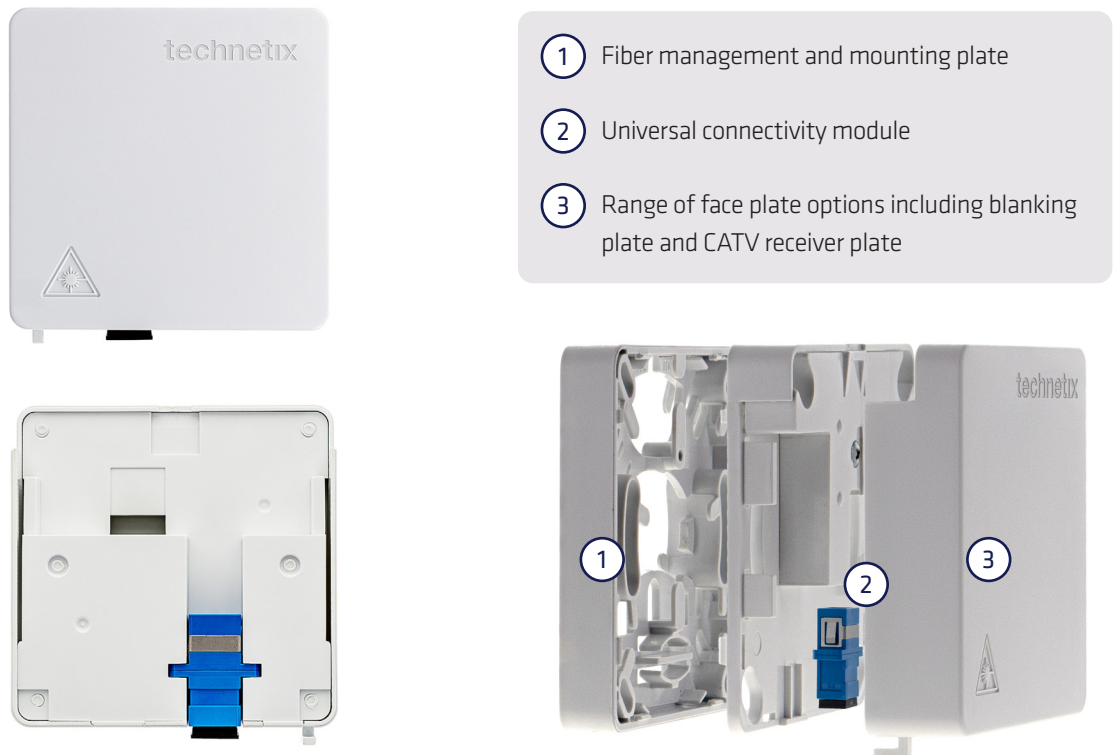


F-ETB (Front view)

OAP fiber line connection box

The Open Access Point (OAP) is one of the smallest fiber-optic network termination systems available and can be integrated into every FTTH network – irrespective of whether it is active Ethernet or PON. As a neutral network termination, the OAP is flexible, innovative technology for connecting fiber-optic customer premises equipment (CPE) and helps you access each house and apartment at a low unit cost.

The OAP can be incorporated during the planning phase of an FTTH project due to its modular structure. The OAP can be used at any stage as a CATV receiver for television with a plug-in module without reconstruction. End users can install the plug-in module without specialist knowledge, avoiding high set-up costs with long ROI times. The OAP is the perfect fiber termination unit (FTU) for self-install CPE such as PON ONUs.



Benefits of the fiber line OAP connection box:

- 3.149" x 3.149" x 1.771" – suitable for common under-plaster systems
- Universal fiber termination - whether active Ethernet or GPON
- One of the smallest fiber boxes worldwide – optional CATV module
- Ideal for FTTP deployments and open to third party CPE

Two models are available supporting face plates with or without RF connectivity for CATV distribution.

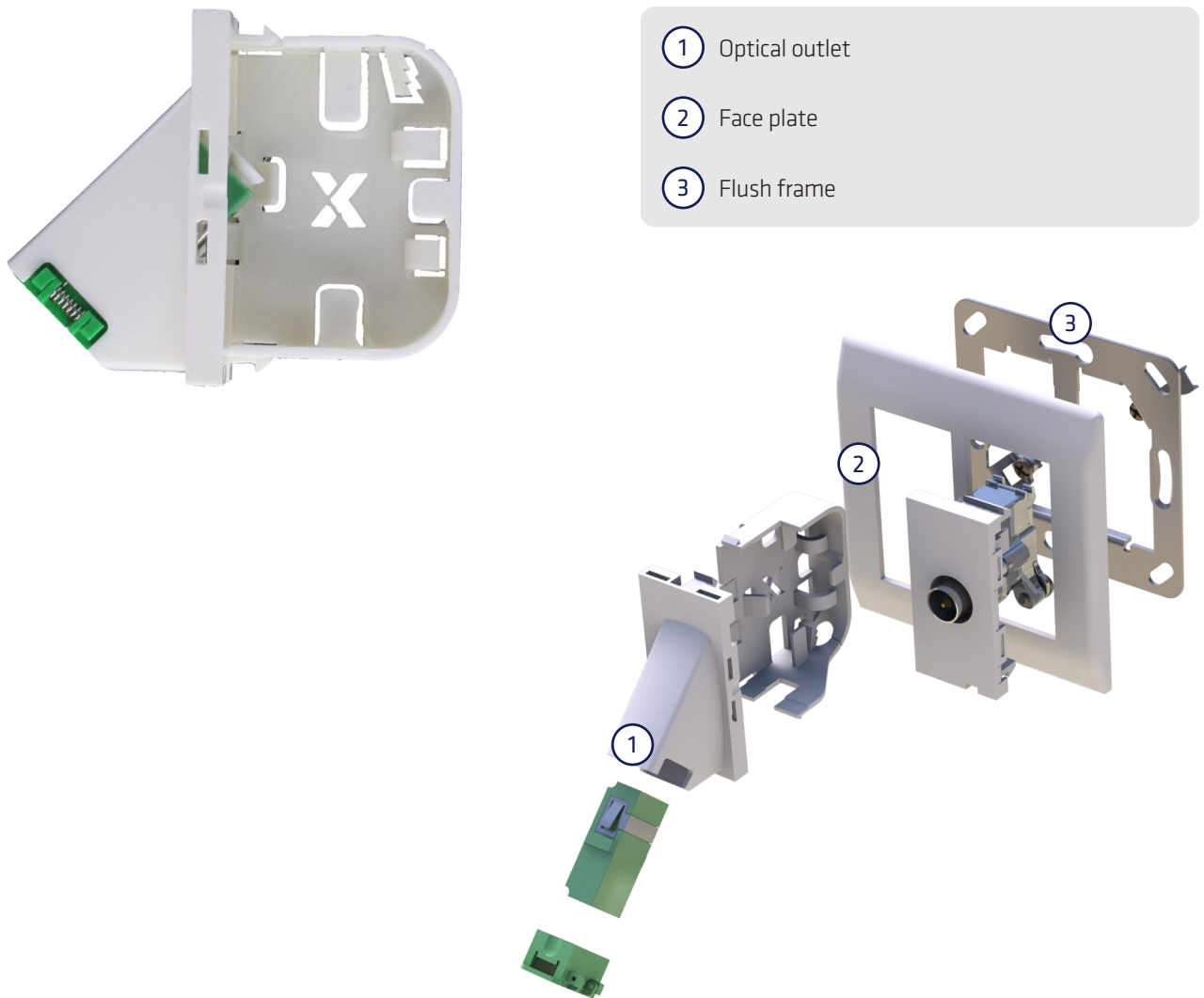
| Item code | Description |
|--------------|-----------------------------|
| PR0161010-01 | OAP equipped with SC/P |
| PR0161010-02 | OAP equipped with RF+ SC/PC |

Click50 modular wall outlet suitable for cable TV and FTTH deployments

The Click50 is a premises outlet solution designed for the DOCSIS 3.1 (2 GHz) installations. The system is designed with network migration in mind, reducing installation time and truck rolls.

The Click50 makes upgrading premises to FTTH easier, it is compatible with third party 1.968" x 1.772" modules too, so customers are able to add AV, network and other telecoms ports for both home and business.

The modular solution can be configured with upgradable components to support migrating networks from HFC to PON. It is entirely future-proof, is simple to install, easy to upgrade and can operate in RF and optical networks simultaneously.



Benefits of the Click 50:

- Allows easy migration from coax to full fiber networks
- Available with a wide range of accessories
- Reduces truck rolls



Passive splitters and filters

Optical splitters and wavelength division multiplexers (WDM) extend the reach and usable capacity of optical networks.

Passive optical splitters provide a low-cost solution for deploying a point to multipoint network at the physical level and are key components in a passive optical network and the mass rollout of FTTx. A range of configurations are available.

WDM enables multiple wavelengths or transmission channels to operate simultaneously on a single fiber and therefore increases the usable capacity in the fiber infrastructure. WDM is used to multiplex or de-multiplex fiber optical signals with different wavelengths and is differentiated by the number wavelength channels used.

PLC splitters

Technetix provides PLC splitters based on planar waveguide technology, providing a high performance, compact design, high reliability and low cost optical distribution solution.

Our splitters are designed for a wide range of uses in fiber networks including optical transmission, fiber to the home, campus networks and fiber distribution networks, CATV, LAN, WAN and PON.



PLC splitter

Technetix supplies its PLC splitters in a range of form factors, including:

- Mini metal box for mini PLC splitter with 1xN and 2xN splitter product availability
- Plastic box module
- LGX PLC splitters
- Rack mount PLC

Our splitter units are available in a range of configurations providing options in the split count including 1:1 to 1:128 and 2:1 to 2:128

Features:

- Low insertion loss
- Low PDL
- High return loss
- Uniform power splitting
- Compact design
- Wide operating wavelength and temperature
- Excellent environmental & mechanical stability
- Qualified under Telcordia GR 1221 and GR 1209

Specifications (1xN splitters)

| Parameter | | Unit | Value | | | | | | | | | | |
|-----------------------------------|---------|------|--|-----|-----|-----|------|------|------|------|------|------|-------|
| Operating wavelength | | nm | 1260 ~ 1650 | | | | | | | | | | |
| Product type | | dB | 1x2 | 1x3 | 1x4 | 1x6 | 1x8 | 1x12 | 1x16 | 1x24 | 1x32 | 1x64 | 1x128 |
| Insertion loss | Grade P | dB | 3.6 | 6.0 | 7.0 | 9.2 | 10.3 | 12.2 | 13.6 | 15.8 | 16.6 | 20.1 | 24.5 |
| | Grade S | dB | 4.3 | 6.2 | 7.4 | 9.5 | 10.7 | 12.5 | 13.9 | 16.0 | 17.2 | 21.5 | 25.5 |
| Uniformity (Max.) | | dB | 0.5 | 0.6 | 0.8 | 0.8 | 0.8 | 1.2 | 1.4 | 1.5 | 1.5 | 2.0 | 2.6 |
| PDL (Max.) | | dB | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.5 | 0.8 |
| TDL (Max.) | | dB | 0.5 | | | | | | | | | | |
| Return loss | | dB | ≥55 (APC type connectors) / 50 (UPC type connectors) | | | | | | | | | | |
| Directivity | | dB | ≥55 | | | | | | | | | | |
| Working power | | | Long term: 500 mW | | | | | | | | | | |
| | | | Short term: 1 W | | | | | | | | | | |
| Operating and storage temperature | | °F | -40 ~ + 185 | | | | | | | | | | |

Note: All data above does **not** include connectors.

UPC connectors IL add 0.2 dB, APC connectors IL add 0.3 dB.

Specifications (2xN splitters)

| Parameter | | Unit | Value | | | | | | |
|-----------------------------------|----------|------|--|-----|------|------|------|------|-------|
| Operating wavelength | | nm | 1260 ~ 1650 | | | | | | |
| Product type | | dB | 2x2 | 2x4 | 2x8 | 2x16 | 2x32 | 2x64 | 2x128 |
| Insertion loss | Grade PI | dB | 4.2 | 7.2 | 10.6 | 13.8 | 17.0 | 20.5 | 24.8 |
| | Grade S | dB | 4.5 | 7.7 | 11.0 | 14.8 | 17.9 | 21.5 | 25.8 |
| Uniformity (Max.) | | dB | 0.8 | 1.0 | 1.2 | 1.5 | 1.8 | 2.5 | 3.0 |
| PDL (Max.) | | dB | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.5 | 1.0 |
| TDL (Max.) | | dB | 0.5 | | | | | | |
| Return loss | | dB | ≥55 (APC type connectors) / 50 (UPC type connectors) | | | | | | |
| Directivity | | dB | ≥55 | | | | | | |
| Working power | | | Long term: 500 mW | | | | | | |
| | | | Short term: 1 W | | | | | | |
| Operating and storage temperature | | °F | -40 ~ + 185 | | | | | | |

High density FTTx splitter system

Our high density splitter system supports sixty-four 1:2 splitters or thirty-two 1:2 splitters for fiber to the premises deployments. The 1.5U high chassis solution is the ideal splitter system to co-locate with chassis based OLTs deployed in central offices, headends or street cabinets. Its compact form means it can be deployed in street cabinets that are 11.811" or less in depth.

All fiber access is via the front of the splitter system with no rear access required. The high density FTTx splitter system is the ideal first stage companion to chassis based OLTs from 32 to 128 ports deployed in central offices or street cabinets.

The 32 splitter cassettes are equipped with LC/APC connectors as standard for onward patching to your fiber plant. Connectivity to the OLT is provided by pre-connectorized pigtailed cables that can be tailored to your build requirement including fiber length, color and connector type.

Features:

- 1.5U, 7.874" deep, 19" rack mount
- Movable mounting bracket to allow chassis depth to be optimized for fiber management
- Modular system where up to 32 cassettes can be added

WDM filters

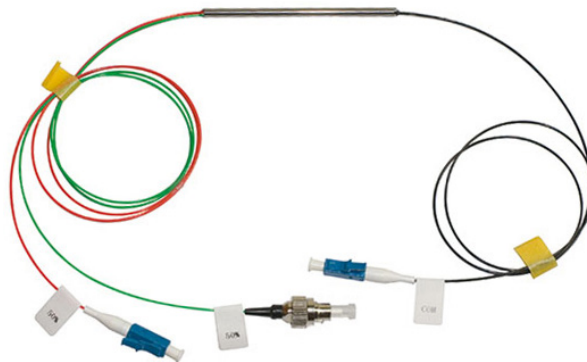
WDM filters are used to separate and combine optical signals in various network applications including FTTx, broadband networks, add/drop multiplexing and CATV systems. WDM filters are extremely stable, compact, reliable and feature high isolation and low insertion loss.

1310/1550 nm fused wavelength division multiplexers

The 1310/1550 nm fused WDM assembly can be used to combine or split 1310 nm and 1550 nm optical signals, doubling the fiber transmission capability and providing bi-directional communication in a single fiber. It is used widely for fiber communication system upgrades to expand the system capacity.

Features:

- Low insertion loss
- Low polarization dependent loss
- High isolation
- High stability and reliability



Coarse wavelength division multiplexer

The coarse wavelength division multiplexer (CWDM) assembly supports up to 18 separate optical channels. The CWDM offers a low cost and easy upgrade path to increase the fiber network capacity. It is tested to Telcordia GR-1221 and GR-1209 standards and is qualified for uncontrolled environment applications. The CWDM complies with industry green initiatives including RoHS.

We can provide customized designs to meet specific requirements and can be supplied as a rack mounted solution.

Features:

- Low insertion loss
- Super thermal stability
- High reliability
- Epoxy-free optical path

Applications:

- WDM system for metro networks
- WDM FTTx

| Parameter | Minimum | Typical | Maximum | Unit |
|---|---------|---------------------|---------|------|
| Operating wavelength | | 1420 ~ 1625 | | nm |
| Centre wavelength | | ITU Grid | | nm |
| Channel spacing | | 20 | | nm |
| Passband range | | $\lambda_c \pm 6.5$ | | nm |
| Insertion loss (over all wavelength range) 1 | | 1.2 | 1.4 | dB |
| Passband ripple | | | 0.3 | dB |
| PDL | | | 0.1 | dB |
| Adjacent band isolation | 30 | | | dB |
| Non-adjacent band isolation | 40 | | | dB |
| Directivity | 50 | | | dB |
| Return loss | 45 | | | dB |
| Operating power | | | 500 | mW |
| Operating temperature | +32 | | +158 | °F |
| Storage temperature | -40 | | +185 | °F |

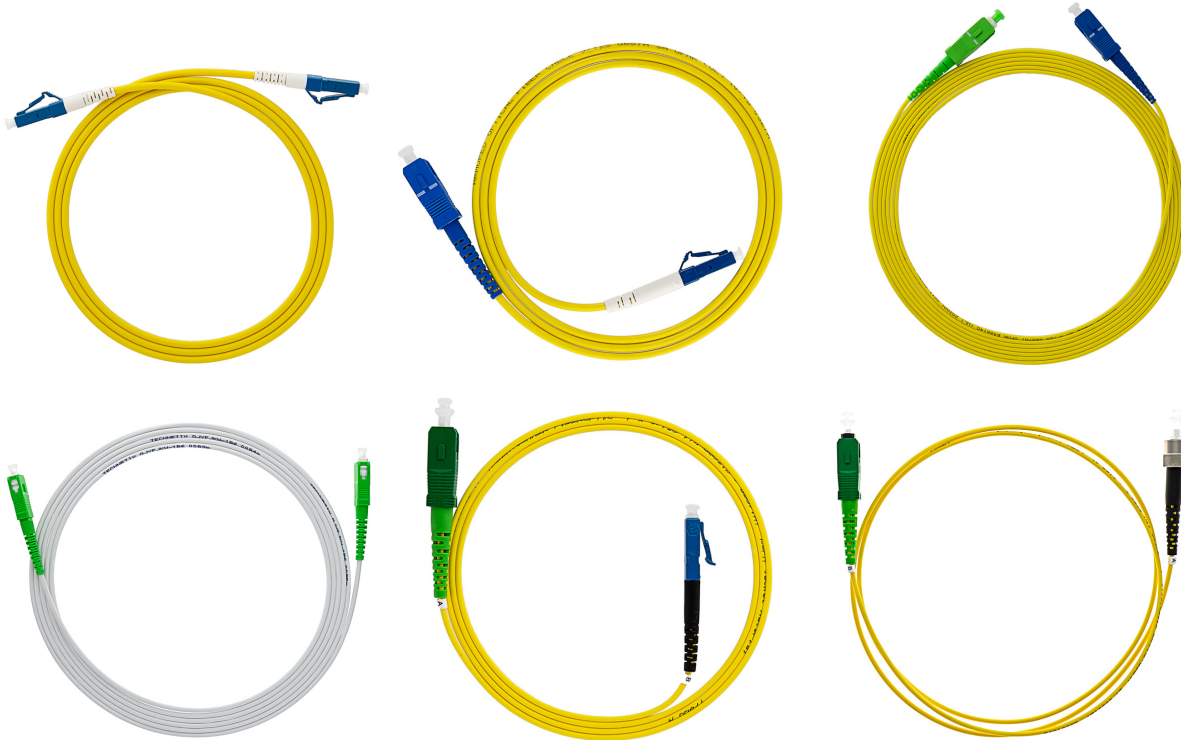


Cable assemblies

Technetix fiber cable assemblies are ISO9001 certified, the range covers single mode and multi-mode patch cords and pigtails, MPO cable assemblies and drop cable assemblies (available with all typical connector types).

Patch cords

Our range of fiber optic patch cords cover all your fiber interconnect needs, with any type of industry standard fiber optic connector. Supported fiber types are single mode G657A1 and G657A2 (100% compatible with G.652D), G657B and multi-mode 50 μm /62.5 μm OM1 to OM5. Patch cords are available as simplex or duplex.



Applications:

- Passive optical network (PON)
- WDM/DWDM
- FTTH
- Headends
- High-speed multi-channel video, data and voice services in metropolitan and access networks
- ATM, SDH and WDM
- CATV/VIDEO

Simplex patch cords - single mode PC (UPC)



Features:

- Available in SC, ST, FC, LC, E2000 and MU connector styles
- Standard product manufactured on 2.8mm (nominal diameter) LSZH cable
- Individual test sheet and unique product identification number for traceability
- Low insertion loss (<0.3 dB) and high return loss (>50 dB)
- Also available in 2mm (nominal diameter) cable
- RoHS compliant

| Parameter | Method | Tolerance | Specification |
|-----------------------------|-----------------|-----------|---------------|
| Connector type standards | IEC61574 series | | - |
| Insertion loss | IEC 61300-3-4 | | <0.30 dB |
| Flammability | IEC60332-1 | | - |
| Single mode return loss APC | IEC61300-3-6 | | >60 dB |

| Length of assembly | | | |
|----------------------------|--|------------|--|
| Less than 1.640' | | -0/+3.937" | |
| Between 1.640' and 16.404' | | -0/+5.905" | |
| Greater than 16.404' | | -0/+7.874" | |

Simplex patch cords - single mode APC



Features:

- Available in SC, ST, FC, LC, E2000 and MU connector styles
- Standard product manufactured on 2.8mm (nominal diameter) LSZH cable
- Individual test sheet and unique product identification number for traceability
- Low insertion loss (<0.3 dB) and high return loss (>50 dB)
- Also available in 2mm (nominal diameter) cable
- RoHS compliant

| Parameter | Method | Tolerance | Specification |
|-----------------------------|-----------------|-----------|---------------|
| Connector type standards | IEC61574 series | | - |
| Insertion loss | IEC 61300-3-4 | | <0.30 dB |
| Flammability | IEC60332-1 | | - |
| Single mode return loss APC | IEC61300-3-6 | | >60 dB |

| Length of assembly | | | |
|----------------------------|--|------------|--|
| Less than 1.640' | | -0/+3.937" | |
| Between 1.640' and 16.404' | | -0/+5.905" | |
| Greater than 16.404' | | -0/+7.874" | |

| | | |
|------------------------|-------------------------------|---------|
| Single mode patchcords | >60 dB APC (angled connector) | <0.5 dB |
| Maximum insertion loss | SM ceramic ferrule connectors | <0.3 dB |

Duplex patchcords – single mode PC (UPC)



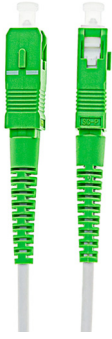
Features:

- Available in SC, ST, FC, LC, E2000 and MU connector styles
- Standard product manufactured on 2.8mm (nominal diameter) LSZH cable
- Individual test sheet and unique product identification number for traceability
- Low insertion loss (<0.3 dB) and high return loss (>50 dB)
- Also available in 2mm (nominal diameter) cable
- RoHS compliant

| Parameter | Method | Tolerance | Specification |
|-----------------------------|-----------------|-----------|---------------|
| Connector type standards | IEC61574 series | | - |
| Insertion loss | IEC 61300-3-4 | | <0.30 dB |
| Flammability | IEC60332-1 | | - |
| Single mode return loss APC | IEC61300-3-6 | | >60 dB |

| Length of assembly | | | |
|----------------------------|--|------------|--|
| Less than 1.640' | | -0/+3.937" | |
| Between 1.640' and 16.404' | | -0/+5.905" | |
| Greater than 16.404' | | -0/+7.874" | |

Duplex patch cords – single mode APC



Features:

- Available in SC, ST, FC, LC, E2000 and MU connector styles
- Standard product manufactured on 2.8mm (nominal diameter) LSZH cable
- Individual test sheet and unique product identification number for traceability
- Low insertion loss (<0.3 dB) and high return loss (>50 dB)
- Also available in 2mm (nominal diameter) cable
- RoHS compliant

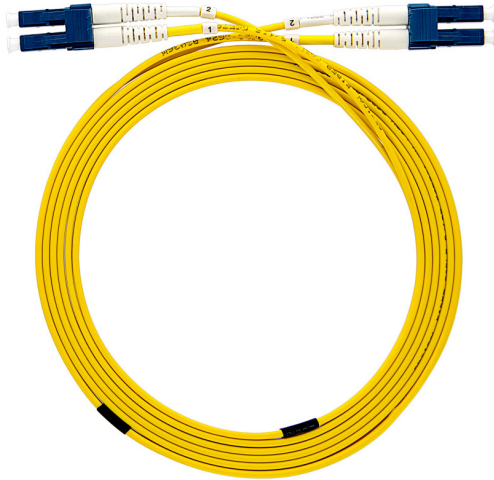
| Parameter | Method | Tolerance | Specification |
|-----------------------------|-----------------|-----------|---------------|
| Connector type standards | IEC61574 series | | - |
| Insertion loss | IEC 61300-3-4 | | <0.30 dB |
| Flammability | IEC60332-1 | | - |
| Single mode return loss APC | IEC61300-3-6 | | >60 dB |

| Length of assembly | | | |
|----------------------------|--|------------|--|
| Less than 1.640' | | -0/+3.937" | |
| Between 1.640' and 16.404' | | -0/+5.905" | |
| Greater than 16.404' | | -0/+7.874" | |

| | | |
|------------------------|--|---------|
| Single mode patchcords | >60 dB APC (angled polished connector) | <0.5 dB |
| Maximum insertion loss | SM ceramic ferrule connectors | <0.3 dB |

Attenuated patch cords

Our high-performance attenuated patch cords are used to attenuate the optical signal in a link. They can be installed instead of conventional patch cords to provide a constant level of attenuation with a return loss of >50 dB. They are a compact, multi-purpose passive device designed to operate at 1310 and 1550 nm wavelengths.



Features:

- Provides the functions of attenuator and cable assembly simultaneously
- Low back reflection
- 100% insertion loss testing

Pigtails

A secure and quality fiber optic connection is key to the long-term reliability and performance of your network. Our pigtails provide an excellent high performance (low attenuation and return loss) and cost effective method for connecting (jointing) fiber networks.

Single mode fiber pigtails

Single mode pigtails are used for high-speed multi-channel video, data and voice services. The buffer on our single mode pigtail conforms to IEC international standards and the pigtails are terminated with industry standard connectors which give optimum optical performance.



Features:

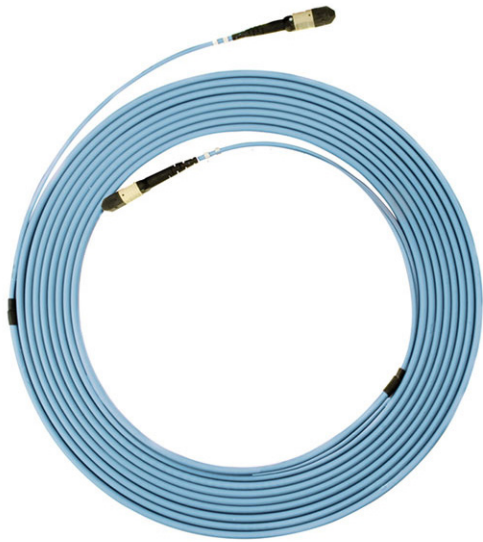
- SC, LC, FC connectors
- UPC and APC interface
- LSZH secondary buffer
- 900µm tight buffer or easy strip
- Reduced bend sensitivity, single mode optical fiber conforms to ITU-T G.657A1 and ITU-T G.652D

MTP fiber patch cords

Our MTP® multicore trunk assemblies drastically reduce initial installation and ongoing maintenance costs with their efficient plug and play architecture. They are available in a wide variety of fiber types and jackets in single 12, 24, 48, 72, 96 and 144 core constructions. MTP® trunks are constructed using only the highest quality components. Standard MTP® as well as low loss Elite versions are offered, featuring low insertion loss for demanding high-speed networks where power budgets are critical.

MTP trunk cable assemblies

Our MTP® multicore trunk assemblies drastically reduce initial installation and ongoing maintenance costs with their efficient plug and play architecture. They are available in a wide variety of fiber types and jackets in single 12, 24, 48, 72, 96 and 144 core constructions. Standard MTP® as well as low loss Elite versions are offered, featuring low insertion loss for demanding high-speed networks where power budgets are critical.



Features:

- OS1/2, OM1, OM2, OM3, OM4 fiber grades
- 12, 24, 48, 72, 96 and 144 core single jacket constructions
- OFNR, OFNP and LSZH jacket types available
- Female (standard) and male MTP® connectors
- Polarity method A, B or C

Interconnect cable assemblies

Our multi-fiber assemblies are specified for short internal optical links. The tight buffer and loose tube multi-fiber optical cable assemblies presentation lends itself to installation within a patch panel, wall box or optical distribution frame (ODF). Crush resistant protective tubing assures secure transportation and installation. The high strength pulling element allows fast, safe and effective pulling. The overall assembly and packing are light and compact, reducing transport costs and storage space. Installation waste is also reduced. A unique link loss certificate accompanies all multi-fiber assemblies. Assemblies can comprise both multi-fiber MTP and discrete connectors, offering a flexible hybrid solution for diverse applications.

Multi-fiber cable assemblies

Our fiber optic assembly is specified for short internal optical links. The 900 µm tight buffer presentation lends itself to installation within a patch panel, wall box or optical distribution frame (ODF). Crush resistant protective tubing assures secure transportation and installation. The high strength pulling element allows fast, safe and effective pulling. The overall assembly and packing are light and compact, reducing transport costs and storage space. Installation waste is also reduced. A unique link loss certificate accompanies all multi-fiber assemblies.



Features:

- Available in OM1, OM2, OM3, OM4 (ISO/IEC) and G.652D (OS1/OS2), G657A1 fiber types
- Available with SC, LC, FC, ST and E2000 connector types
- 2 - 24 core tight buffer cable with standard connectivity
- Fast installation plug and play system
- No splicing or connector termination required

Multi-fiber full breakout cable assemblies

This fiber optic assembly is specified for short internal optical links. The 900 µm tight buffer presentation lends itself to installation within a patch panel, wall box or optical distribution frame (ODF). Crush resistant protective tubing assures secure transportation and installation. The high strength pulling element allows fast, safe and effective pulling. The overall assembly and packing are light and compact, reducing transport cost and storage space. Installation waste is also reduced. A unique link loss certificate accompanies all multi-fiber assemblies.

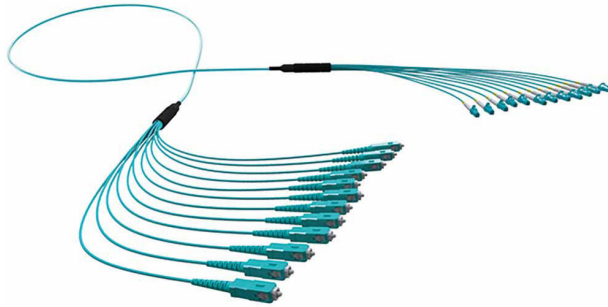


Features:

- Available in OM1, OM2, OM3, OM4 and OS1/OS2 fiber types
- 2 - 24 core full breakout cable
- 2 mm ruggedized tails
- Internal LSZH cable jacket
- Available with all standard connectivity

Multi-fiber micro cable assemblies with 2mm tails

The micro cable assembly provides a flexible but ruggedized product with the improved optical performance of the micro cable structure. The standard 2mm patch lead style tails are ruggedized to secure the optical fiber in non-protected environments outside the patch panel or optical distribution frame (ODF). The network topology can be reduced and simplified by direct connection to active equipment, bypassing wall boxes and the ODFs of fiber patch panels, resulting in lower energy costs and reduced fiber management space.



Features:

- OM1, OM2, OM3, OM4 and G.652D (OS1/OS2), G.657A1 fiber types
- 12 and 24 cores
- LSZH, OFNP, OFNR cable jacket
- All connector types
- Factory terminated and tested

Multi-fiber micro cable assemblies with 900 µm tails

This flexible, ruggedized product features a compact micro cable. 900 µm tails are ideal for applications inside patch panels, optical distribution frames (ODFs) or wall boxes where they improve fiber management.



Features:

- OM1, OM2, OM3, OM4 and G.652D (OS1/OS2), G.657A1 fiber types
- 12 and 24 cores standard (high core counts up to 144 fibers available)
- LSZH, OFNP, OFNR cable jacket
- Available with all standard connectivity
- Factory terminated and tested

Multi-fiber prime LT cable assemblies

Prime LT is specially designed platform for loose tube multi-fiber optical cable assembly. It uses a patented transition module and guarantees superior tensile strength and crush resistance. The high-density design can scale from two up to 144 fibers and can feature both 900 μm and ruggedized 2 mm tail leads. Assemblies can comprise both multi-fiber MTP and discrete connectors, offering a flexible hybrid solution for diverse applications.



Features:

- OS1/2, G.657A1, OM1, OM2, OM3, OM4
- Internal/external application
- Factory terminated and tested
- Armored option

Attenuators and adapter/couplers

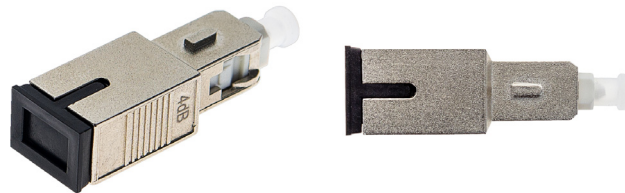
Technetix fiber cable assemblies are ISO9001 and are assembled in a controlled factory environment resulting in outstanding connectivity while supporting a wide variety of applications - from simple duplex patch cords to complex cable assemblies.

Attenuators

Single mode and multi-mode attenuators are used in communication systems to reduce the optical power launched onto the photo detector. These high-performance devices are designed to give accurate attenuation over a wide range of wavelengths. The plug-in configuration allows them to be used directly on the end of a patch cord, which in turn can insert directly into an adapter. Available in FC, SC, LC (short form factor) and ST connector styles with PC or APC finish, our attenuators provide ultra-low return loss and are available from 1 dB to 30 dB.

Features:

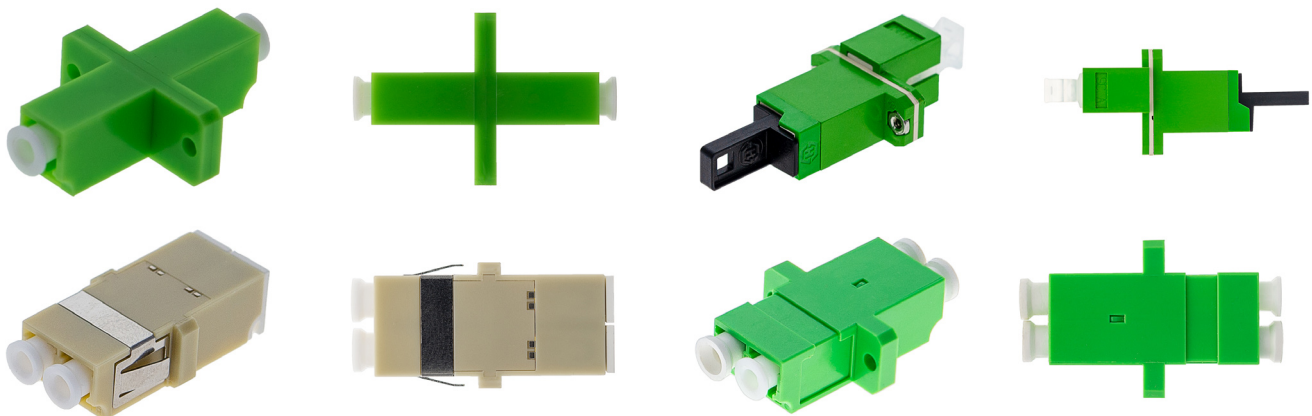
- Accurate attenuation
- Ultra-low back reflection
- Broad wavelength band
- Flat response over a wavelength range
- Environmentally stable



| | |
|--------------------------------------|---|
| Available range of attenuation | 1 to 30 dB with 1 dB increments |
| Operating wavelength | 1310 and 1550 nm (or single wavelength) |
| Operating band pass | Dual Window - 1310 and 1550 nm (± 25 nm) |
| Attenuation accuracy (1-5 dB) | +/- 0.5 dB |
| Accuracy attenuation from 6 to 30 dB | +/- 10% (of attenuation value) |
| Reflectance | UPC = 55 dB - APC = 60 dB |
| International standard | Telcordia GR-910-CORE |

Adapters/couplers

We offer a range of quality adapters/couplers which have high precision alignment sleeves for reliability and improved reconnectability. For single mode applications a ceramic sleeve is supplied to ensure precise alignment. For multi-mode applications a phosphor bronze sleeve is supplied. The housing is available in simplex, duplex and quad form, different colors with options for flange or flangeless body, metal clips or inbuilt clips.



Fiber adapters/connectors

LC adapters

Our LC adapters have high precision alignment sleeves for greater reliability and improved reconnectability. The housing is available in different colors with options for flange or flangeless body, metal or built-in clips.

Features:

- Single mode and multi-mode
- Zirconia sleeves or phosphor bronze sleeves
- NTT standard compatible
- Available without flanges or with flange for duplex, saving panel space
- SC2 8-port high-density for panel mount applications
- Meets JIS5974 and Bellcore GR-326 standard
- Compliant with IEC874-14 & IEC874-19
- ROHS compliant

| Optical performance | Ceramic | Phosphor bronze | Conformance |
|----------------------------|------------------------|-----------------|----------------|
| Insertion loss (typ) | 0.1 dB | 0.15 dB | IEC 61300-3-4 |
| Mating durability | 500 | | IEC 61300-2-2 |
| Receptacle retention force | 1 N - 2.5 N | | IEC 61754-20 |
| Operating temperature (F) | -13 to +158, 12 cycles | | IEC 61300-2-22 |

FC adapters

Our FC adapters have high precision alignment sleeves for greater reliability and improved reconnectability. The housing is available in different colors with options for flange or flangeless body, metal or built-in clips. The housing has an M8 threaded metal body with securing nut.

Features:

- Complies with IEC 61754-13 and TIA 604-4-A
- High precision alignment sleeve
- Low insertion loss and high reconnectability
- Narrow key
- RoHS, REACH SvHC compliant
- Available in simplex only

Applications:

- Telecommunication networks
- Local area networks
- Data processing networks
- Premises distribution
- Test and laboratory equipment
- Industrial and military application

| Optical performance | Ceramic | Phosphor bronze | Conformance |
|----------------------------|------------------------|-----------------|----------------|
| Insertion loss (typ) | 0.1 dB | 0.15 dB | IEC 61300-3-4 |
| Mating durability | 500 | | IEC 61300-2-2 |
| Receptacle retention force | 2N - 5.9 N | | IEC 61754-13 |
| Operating temperature (F) | -13 to +158, 12 cycles | | IEC 61300-2-22 |

SC adapters

Our SC adapters have high precision alignment sleeves for greater reliability and improved reconnectability. The housing is available in different colors with options for flange or flangeless body, metal or built-in clips.

Features:

- Complies with IEC 61754-4 and IEC 60784-14 standards
- High precision alignment sleeve
- Low insertion loss and high reconnectability
- RoHS, REACH SvHC compliant
- Available in simplex, duplex and quad adapters
- SC simplex adapters are available with a shutter

| Optical performance | Ceramic | Phosphor bronze | Conformance |
|----------------------------|---------|------------------------|----------------|
| Insertion loss (typ) | 0.1 dB | 0.15 dB | IEC 61300-3-4 |
| Mating durability | | 500 | IEC 61300-2-2 |
| Receptacle retention force | | 2 N - 5.9 N | IEC 61754-4 |
| Operating temperature (F) | | -13 to +158, 12 cycles | IEC 61300-2-22 |



Optical transceivers

We offer a growing range of MSA compliant optical transceivers for telecom network applications. Our transceivers are compliant with Ethernet and PON standards and complement our switch and PON OLT portfolio. Our transceiver options include 1GE SFP to 100GE QSFP28 and from short reach to extended reach for campus through to long haul applications. In addition, we can provide GPON, XGS-PON and combo PON (GPON + XGS-PON) transceivers in a small form-factor pluggable (SFP) format.

Transceivers

Technetix transceivers are tested and validated for use in carrier network applications. Our goal is to provide parts in short timescales and we hold high demand transceivers in stock ready for dispatch.

| Data Rate | Format | Description |
|----------------|--------|--|
| 1 Gbps | SFP | 1000BASE-SX MM 850nm 546.807 yds. LC Duplex |
| | | 1000BASE-LX SM 1310nm 6.213 miles LC Duplex |
| | | 1000BASE-LHX SM 1310nm 24.854 miles LC Duplex |
| | | 1000BASE-ZX SM 1550nm 49.709 miles LC Duplex |
| 10 Gbps | SFP+ | 10GE SR MM 850nm 328.084 yards LC Duplex |
| | | 10GE LR SM 1310nm 6.213 miles LC Duplex |
| | | 10GE ER SM 1550nm 24.854 miles LC Duplex |
| 25 Gbps | SFP28 | 25GE SR MM 850nm 109.361 yds LC Duplex |
| | | 25GE LR SM 1310nm 6.213 miles LC Duplex |
| 100 Gbps | QSFP28 | 100GE 100GBASE-SR4 MM OM4 109.361 yds MTP/MPO |
| | | 100GE 100GBASE-PSM4 SM 1310nm 1.242 miles MTP/MPO |
| | | 100GE 100GBASE-CWDM4 SM 1270 ~ 1330nm 1.242 miles LC |
| | | 100GE 100GBASE-LR4 SM 6.213 miles LC |
| GPON | SFP+ | OLT Class C+ 2488Mbps DS, 1244Mbps US 1490nm DFB, 1310nm APD 20km reach, SC/UPC |
| XGS-PON | SFP+ | OLT N1 1577nm EML and 1270nm APD, 12.427 mile reach, SC/UPC |
| XGS-PON + GPON | SFP+ | Combo 20 pin Class C+ , 9.953Gbps /2.488Gbps DS, 9.953Gbps /2.488Gbps/1.244Gbps US, 1577nm EML, 1490nm DFB, 1270nm and 1310nm APD, 12.427 mile reach, SC/UPC |

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