# technetix

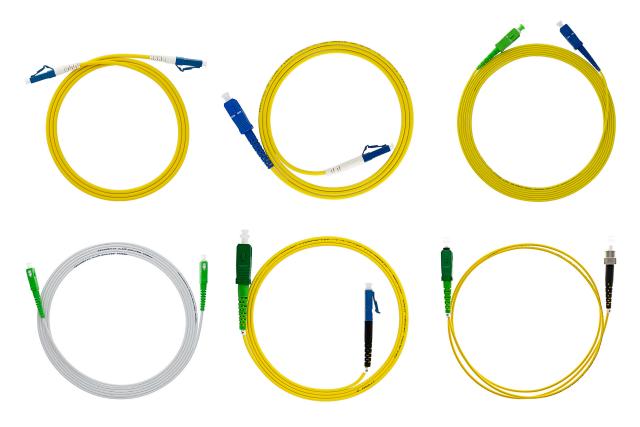
Cable assemblies

technetix.com

Our ISO9001-certified range of fiber cable assemblies includes single- and multi-mode patch cords and pigtails, MPO and drop cable assemblies. technetix.com

# 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  $50 \mu m/62.5 \mu m$  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)



- 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 0.078 in (2 mm) (nominal diameter) cable
- RoHS compliant

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

Length of assembly		
Less than 1.640 ft (0.49 m)	-0/+3.937 in (99.99 mm)	
Between 1.640 ft (0.49 m) and 16.404 ft (4.99 m)	-0/+5.905 in (149.98 mm)	
Greater than 16.404 ft (4.99 m)	-0/+7.874 in (199.99 mm)	

# Simplex patch cords - single mode APC



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Parameter	Method	Tolerence	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 ft (0.49 m)	-0/+3.937 in (99.99 mm)			
Between 1.640 ft (0.49 m) and 16.404 ft (4.99 m)	-0/+5.905 in (149.98 mm)			
Greater than 16.404 ft (4.99 m)	-0/+7.874 in (199.99 mm)			
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)



- 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 0.078 in (2 mm) (nominal diameter) cable
- RoHS compliant

Parameter	Method	Tolerence	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		
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Between 1.640 ft (0.49 m) and 16.404 ft (4.99 m)	-0/+5.905 in (149.98 mm)	
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# Duplex patch cords - single mode APC



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Greater than 16.404 ft (4.99 m)		-0/+7.874 in (199.99 mm)		
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 can be installed in place of conventional patch cords to provide a constant level of attenuation to optical signals in a link 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 long-term network reliability and performance. 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 optimum optical performance.



- 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 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



#### 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

These multi-fiber assemblies are designed for short internal optical links. Tight buffers and loose tube multi-fiber optical cable assemblies are suitable for installation in patch panels, wall boxes or optical distribution frames (ODF). Crush-resistant protective tubing assures secure transportation and installation, and a high-strength element allows fast, safe and effective pulling. Light and compact assembly and packing for reduced transport costs, storage space and installation waste.

Unique link loss certificates with all multi-fiber assemblies, which are available in both multi-fiber MTP and discrete connectors that offer a flexible hybrid solution for application diversity.

# Multi-fiber cable 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



#### Features:

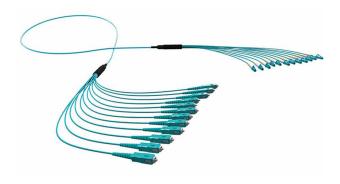
- Available in OM1, OM2, OM3, OM4 and OS1/OS2 fiber types
- 2 24 core full breakout cable
- 0.078 in (2 mm) ruggedized tails
- Internal LSZH cable jacket
- Available with all standard connectivity

# Requirements to be specified:

- Application & fiber type: Indoor or Outdoor, CPR, LSZH, etc...
- Number of fibers: 2 to 144
- Fanout length (both ends): 1.64 ft (0.5 m), 3.28 ft (1 m), 4.92 ft (1.5 m), 6.56 ft (2 m), up to 16.40 ft (5 m)
- Fanout type (both ends): 0.03 in (0.9 mm), 0.07 in (2 mm), 0.11 in (3 mm), etc.
- Fanout kit/adapter (both ends): None, PG gland or 5/8 in x 24 aluminum gland with rubber grommet, etc...
- Fanout marking/labelling: Standard numbering 1 to x, or customer specific
- Length from connector to connector: Up to 1.242 ml (2000 m)

# Multi-fiber micro cable assemblies with 2mm tails

A flexible-yet-ruggedized product with improved optical performance. These standard 2 mm patch lead-style tails secure optical fiber in unprotected environments outside patch panels or ODFs. This reduces and simplifies network topology with direct connections to active equipment to bypass wall boxes and ODFs for lower energy costs and improved fiber management.



#### 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

# Multi-fiber micro cable assemblies with 900 µm tails

Flexible and ruggedized, our 900 µm tails are ideal inside patch panels, and applications in ODFs or wall boxes for optimal fiber management.



- 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 loose tube cable assemblies

Designed for loose tube mult-fiber optical cable assembly, our prime option uses a patented transition module to guarantee superior tensile strength and crush resistance. Scalable from 2 up to 144 fibers, with options for both 900 μm, ruggedized 2 mm tail leads, and multi-fiber MTP and discrete connectors for a flexible, hybrid solution for application diversity.



# Features:

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

# Requirements to be specified:

- Application & fiber type: Indoor or Outdoor, CPR, LSZH, etc.
- Number of fibers: 2 to 144
- Fanout length (both ends): 1.64 ft (0.5 m), 3.28 ft (1 m), 4.92 ft (1.5 m), 6.56 ft (2 m), up to 16.40 ft (5 m)
- Fanout type (both ends): 0.03 in (0.9 mm), 0.07 in (2 mm), 0.11 in (3 mm), etc.
- Fanout kit/adapter (both ends): None, PG gland or 5/8 in x 24 aluminum gland with rubber grommet, etc.
- Fanout marking/labelling: Standard numbering 1 to x, or customer specific
- Length from connector to connector: Up to 1.242 ml (2000 m)



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