

Passive Fiber Optic Systems

In today's information society, our thirst for information and entertainment keeps pushing bandwidth requirements to higher levels. Fiber optic technology has proven to be the only physical medium that can meet current and future bandwidth requirements.

Amphenol FCI (AFCI) brings you a complete range of fiber connectivity products for your end-to-end fiber optic requirements. AFCI focuses on solutions which meets and exceeds the bandwidth requirements of current and future applications with innovations, highest performance, technology leadership and flexibility.

APPLICATION OVERVIEW

FIBER TO THE HOME (FTTH)



- Rack & Wall Mount Enclosures
- Fiber Cable Assemblies
- Splitter
- Connectors & Adapters

DATA CENTER



- MPO Cassette Solution
- MPO Cable Assembly Solution
- MPO QSFP Assembly
- Multi-Fiber Assembly Solution

PREMISE CABLING



- Rack & Wall Mount Enclosures
- Fiber Cable Assemblies
- Connectors & Adapters

SECURITY SURVEILLANCE



- Fiber Cable Assemblies
- Wall Mount Enclosures

▶ RACK MOUNT FIBER MANAGEMENT SYSTEMS



TARGET MARKETS/APPLICATIONS

- Data Centers
- Telecommunications & Data Communications Networks
- Central Offices (FTTx)
- Indoor Premise Networks

OVERVIEW

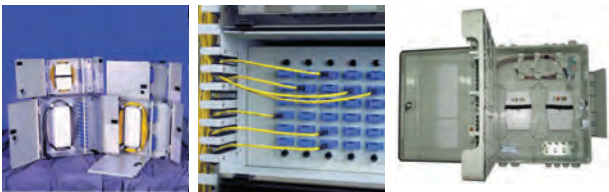
AFCI's rack mount panels combine all the features of a patch panel and splice panel in one enclosure. They provide a protective area for patching, splicing and storing fiber optic cables. Fixed and sliding drawer type panels are available.

Multifunctional panels provide easy access during installation and maintenance without hindering existing fiber cables. It also allows multiple cable entries. All our network panels can be fully equipped with adapter panels and pre-terminated cables. Full integration of our splitters and WDM technologies can further enhance your network.

KEY FEATURES & BENEFITS

- Wide variety of connector types available
- Pre-loaded panels with adapters saves times and eases installation
- Pre-loaded panels with pigtail cable assemblies option further eases installation
- Single part number for semi-loaded or fully-loaded enclosures simplifies the ordering process
- Panels allows storage of fiber slack while maintaining bend radius protection for the stored fibers
- All enclosures include mounting hardware, installation instructions, laser warning labels and cable ties
- RoHS compliant

▶ WALL MOUNT FIBER MANAGEMENT SYSTEMS



TARGET MARKETS/APPLICATIONS

- Telecommunications & Data Communications Networks
- Outside Plant, Intra building, MDU's
- Security Surveillance Systems
- Building Management Systems

OVERVIEW

AFCI's wall mount panels combine all the features of a patch panel and a splice panel into one enclosure. They provide a protective area for patching, splicing and storing fiber optic cables.

Distribution panels are typically used at building entrances, telecom closets, customer premise applications, or in equipment rooms for termination of interbuilding backbone cables. The panels come equipped with a cam lock at the installer side (large door) of the panel, allowing unrestricted access to the patching side. A second factory-installed cam lock is available to lock both areas of the panel. Splice trays are also included with each enclosure.

KEY FEATURES & BENEFITS

- Wide variety of connector types available
- Pre-loaded panels with adapters saves times and eases installation
- Pre-loaded panels with pigtail cable assemblies option further eases installation
- Single part number for semi-loaded or fully-loaded enclosures simplifies the ordering process
- Panel's compact design provides ample fiber optic cable routing, organization and storage
- Customized with splitters for P2MP applications
- All enclosures include mounting hardware, installation instructions, laser warning labels and cable ties
- RoHS compliant

▶ OPTICAL SPLITTERS



TARGET MARKETS/APPLICATIONS

- CATV Networks
- Telecommunication Networks
- FTTH–Passive Optic Network (PON)
- Local/Wide Area Networks (LAN/WAN)
- Test and Measurement Instrumentation
- Signal Monitoring Devices

OVERVIEW

AFCI's splitters are manufactured using a precision computer-controlled manufacturing process capable of producing large volumes and tight unit-to-unit uniformity. The optical splitter has proved to be a beneficial component of any optical network design.

AFCI's low insertion loss, cost-effective devices provide a means for network design flexibility, system monitoring or increasing capacity. The excellent uniformity from unit to unit eases the network design, resulting in resource, time and cost savings for customers. All splitters are designed to meet and exceed GR1221 and GR1209 Telcordia standards. Depending on the technology and application, there are fused fiber splitter and PLC fiber splitters. PLC splitters come in 1xN to 64 and 2xN to 32 splitting types with a wide range of working wavelength from 1260nm to 1620nm.

KEY FEATURES & BENEFITS

- Quick and easy installation
- Designed to meet Telcordia GR1209 and GR1221
- Low insertion loss
- Polarization insensitive
- Proven FBT fabrication techniques
- Excellent uniformity
- Miniature or ruggedized package
- Standard connectors and cable leads available
- RoHS compliant

▶ FIBER OPTIC PATCH ASSEMBLIES



TARGET MARKETS/APPLICATIONS

- Data Centers supporting high speed multi-channel video, data and voice services
- CATV & Video
- FTTH– Passive Optic network (PON)
- ATM, SONET and WDM

OVERVIEW


AFCI's fiber optic patch assemblies comes with an extensive range of patch cords and pigtails with full range of single-mode and multimode fiber supporting OS1, OS2, OM1, OM2, OM3 and OM4 applications. Patch assemblies are available in SC, ST, FC, LC, MPO/MTP and other connectivity types in standard and customized lengths.

KEY FEATURES & BENEFITS


- SC, LC, ST, FC, MPO connector types available
- LSZH or PVC jacket
- 900µm, 3mm & 2mm cables
- Simplex and duplex assemblies
- Straight and angled boot design options available
- Armored option also available
- RoHS compliant

PRODUCT	OVERVIEW	KEY FEATURES & BENEFITS
 <p>LC Connectors & Adapters</p> <p>TARGET MARKETS/APPLICATIONS</p> <ul style="list-style-type: none"> ▪ Telecommunications & Data Networks ▪ Optical Test Labs ▪ FTTH-Passive Optic Network (PON) ▪ Central Offices ▪ Premise Networks ▪ High Density Network Applications 	<p>LC small form factor (SFF) connectors utilize the familiar RJ45 latching mechanism. The LC connector is only half the size of the popular SC connector, providing great space savings in the network. With accelerated growth demanding greater bandwidth in less physical space, LC connectors are viable solutions for high density frames and patch panels, without any sacrifice to performance.</p>	<ul style="list-style-type: none"> ▪ Single-mode and multimode types available ▪ Small footprint ▪ PC, UPC and APC types available ▪ Compliant to EIA/TIA-604, IEC 61754, IEC 874 and GR 326 ▪ RoHS compliant
 <p>SC Connectors & Adapters</p> <p>TARGET MARKETS/APPLICATIONS</p> <ul style="list-style-type: none"> ▪ Telecommunications & Data Networks ▪ Optical Test Labs ▪ FTTH-Passive Optic Network (PON) ▪ Central Offices ▪ Premise Networks 	<p>SC connectors utilize a push-pull retention feature which enables easy insertion and removal, making it ideal for high density applications. The SC connector features an internal cavity and epoxy injection tube that virtually eliminates the possibility of improper epoxy application, thus providing higher manufacturing yields and superior quality.</p>	<ul style="list-style-type: none"> ▪ Single-mode and multimode types available ▪ Mini boot and standard boot design available ▪ PC, UPC and APC types available ▪ Compliant to EIA/TIA-604, IEC 61754, IEC 874 and GR 326 ▪ RoHS compliant
 <p>ST Connectors & Adapters</p> <p>TARGET MARKETS/APPLICATIONS</p> <ul style="list-style-type: none"> ▪ Telecommunications & Data Networks ▪ Optical Test Labs ▪ FTTH-Passive Optic Network (PON) ▪ Central Offices ▪ Premise Networks 	<p>ST and ST II connectors utilize a bayonet style mating concept to provide a secure, robust coupling mechanism. The enclosed spiral slotted coupling nut allows easy insertion in densely packed patch panels. The ST connector has been used extensively in telecom, data premise installation, and test lab applications. Special attention has been given to every ST performance parameter, increasing product repeatability and exceeding industry standards. The ST connector is available with a plastic or die cast body and a ceramic or stainless steel ferrule.</p>	<ul style="list-style-type: none"> ▪ Single-mode and multimode types available ▪ Short and long boot design available ▪ Polymetric nut or Metal nut option available ▪ RoHS compliant

CONNECTORS AND COUPLERS

PRODUCT	OVERVIEW	KEY FEATURES & BENEFITS
 <p>FC Connectors & Adapters</p> <p>TARGET MARKETS/APPLICATIONS</p> <ul style="list-style-type: none"> ▪ Telecommunications Networks ▪ Optical Test Labs 	<p>FC connectors effectively terminate optical fiber in a variety of network applications. The connectors are secured using a threaded coupling nut, providing a significant increase in pull-out performance. The FC connectors feature an internal cavity and epoxy injection tube that virtually eliminates the possibility of improper epoxy application, thus providing higher manufacturing yields. Every aspect of the connector system is precisely manufactured to produce reliable and consistent performance. The FC/APC connector system features a tight-fit keyway that prohibits the mismatching between FC/PC and FC/APC connectors.</p>	<ul style="list-style-type: none"> ▪ Single-mode and multimode types available ▪ Pre-polished ceramic ferrules ▪ PC and APC types available ▪ Tunable or non-tunable PC versions available ▪ RoHS compliant

MTP/MPO AND HIGH DENSITY SOLUTIONS

PRODUCT	OVERVIEW	KEY FEATURES & BENEFITS
 <p>MTP/MPO Cassette Solution</p> <p>TARGET MARKETS/APPLICATIONS</p> <ul style="list-style-type: none"> ▪ Data Centers ▪ Data Test Labs 	<p>MTP/MPO cassette solution provides a seamless connection within the network. This pre-terminated modular system is easily deployed and simplifies future expansions and modifications. The MTP/MPO trunk cable assembly facilitates rapid deployment of high density backbone cabling in Data centers and other high fiber environments. The trunk assemblies are built with highest quality components to offer low insertion loss for high speed networks. MTP/MPO components feature superior optical and mechanical properties.</p>	<ul style="list-style-type: none"> ▪ LC or SC front panel interface (other connector options also available) ▪ Flat or angled rear panel configurations available ▪ 12 or 24 fiber options available ▪ OS1/OS2, OM1, OM2, OM3, OM4 options ▪ Polarity A, B, or C available ▪ Compatible with AFCI's Fiber Management Systems and other similar footprints ▪ Cassette modularity provides quick installation and makes future moves, additions and changes simple ▪ Factory terminated and tested module ensures high quality performance and reliability ▪ Custom configurations available upon request ▪ RoHS compliant

PRODUCT	OVERVIEW	KEY FEATURES & BENEFITS
 <p>MPO Cable Assemblies</p> <p>TARGET MARKETS/APPLICATIONS</p> <ul style="list-style-type: none"> ▪ Data Centers ▪ Data Test Labs 	<p>MPO assemblies are becoming increasingly popular due to the increase in high density applications in the marketplace. MPO assemblies are offered with 8, 12, and 24 fiber connector options. Available with ribbon, round and trunk cable configurations, AFCI's MPO connectors meet TIA/EIA 604-5 and IEC 61754-7. MPO assemblies are offered with straight, crossed, or QSFP pin outs.</p>	<ul style="list-style-type: none"> ▪ Wide variety of connector types, cable designs and lengths available ▪ All assemblies meet TIA/EIA and IEC intermateability standards ▪ Customized breakout lengths and fan-out sizes available ▪ Single-mode and multimode fiber types available ▪ Straight, crossed and QSFP pin outs available ▪ Custom configurations available upon request ▪ RoHS compliant
 <p>MPO QSFP Cable Assemblies</p> <p>TARGET MARKETS/APPLICATIONS</p> <ul style="list-style-type: none"> ▪ Data Centers ▪ Data Test Labs 	<p>MPO QSFP (Quad Small Form Factor Pluggable) with 4TX and 4RX channels meets QSFP requirements up to 10Gb/s per channel for a 40G interface. Available in MPO-to-MPO or MPO-to-LC breakout configurations, AFCI's MPO connectors meet TIA/EIA604-5 and IEC61754-7.</p>	<ul style="list-style-type: none"> ▪ Assemblies wired for QSFP applications ▪ All assemblies meet TIA/EIA and IEC intermateability standards ▪ Customized breakout lengths and fan-out sizes available ▪ Custom configurations available upon request ▪ RoHS compliant
 <p>Multi-fiber Cable Assemblies</p> <p>TARGET MARKETS/APPLICATIONS</p> <ul style="list-style-type: none"> ▪ Data Centers ▪ Data Test Labs 	<p>Multi-fiber assemblies are becoming increasingly popular due to the increase in high density applications in the marketplace. Assemblies are available in various fiber counts and utilize a variety of connectors. Cable is offered in distribution (900µm tight buffered), breakout, ribbon and loose tube configurations in both single-mode and multimode options.</p>	<ul style="list-style-type: none"> ▪ Wide variety of connector types, cable designs and lengths available ▪ All assemblies meet TIA/EIA and IEC intermateability standards ▪ Customized breakout lengths and fan-out sizes available ▪ Single-mode and multimode fiber types available ▪ Custom configurations available upon request ▪ RoHS compliant

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