

Fiber Optic



MILITARY & AEROSPACE















Fiber Optic



High Speed Fiber Optic Solutions











Tactical Network Solutions





Optical Interconnect Products



Fiber optic interconnect technologies deliver high data rate and virtually unlimited bandwidth performance in land, sea, air, space and C4ISR applications. Precision-engineered fiber optic termini are the key to delivering low data loss and reliable, repeatable performance over long distances in mission-critical applications with bandwidth. Our depth of understanding of connector and termini design, and the complete control of connector materials, make Amphenol's fiber optic cable assemblies one of the best in the industry.

High Speed Fiber Optic Solutions

Five Reasons to Upgrade to Fiber Optics:

01 - Reduced Size and Weight

02 - EMI Immunity

03 - High Data Rate Capacity

04 - Spark/Arc Immunity

05 - Enhanced Security

Connector	Termination	Features
	MIL-PRF-29504	CF38999 pin and socket termini that feature high precision, pre-radiused ceramic ferrules to help improve insertion loss performance and reduce polishing time. Products are available in both single mode and multi-mode versions. The socket has a plastic protective shroud over the ceramic alignment sleeve that incorporates a built-in anti-rotation feature. HD20 - Pin and socket termini that have the same benefits of the MIL-PRF-29504 termini, but in a smaller size 20 contact that allows for increased density in D38999 connector shells.
	JSF	Tight tolerance, nickel-plated composite plugs and receptacles approved for use in F35/JSF applications.
	ARINC 801 termini	Genderless fiber optic termini that use a precision 1.25 mm ceramic ferrule. Precision inserts with guide pins and keyed termini enhance multi-mode and single mode performance. ARINC 801 termini facilitate an angled polish for improved return loss.
	MT ferrules	Industry-standard, very high density plastic ferrules available in either 12-fiber or 24-fiber versions, in multi-mode PC, single mode PC, and single mode APC configurations.







Features:

- Removable alignment sleeve insert for easy cleaning of fiber optic termini
- Three stages of alignment: shell-to-shell keys, guide pins and ceramic alignment sleeves
- Includes all of the features of standard D38999 straight plug and wall mount receptacle shells
 - Scoop-proof designs
 - Option for alternate keys and keyways
 - Rear accessory threads
 - Standard insertion/extraction tools (M81969/14-03)
- Genderless terminus allows for use on both sides of a connector
 - Precision ceramic ferrules and sleeves ensure accurate fiber to fiber alignment
 - Keyed to provide anti-rotation
 - Available with both PC and APC end-face finishes
 - Terminus body is crimped to the cable providing a "Pull- Proof" advantage



TVOP - LJTOP - RNJOP - STARTOP

TVOP, LJTOP, RNJOP and Startop product range offers the most comprehensive range of ruggedized optical connectors based on MIL DTL 38999 Series and its derivatives. More than ten years ago, Amphenol developed the first generation of optical termini for multiway connectors in accordance with the MIL 29504 specification. Combined with the MIL DTL 38999 serie III shells, the Startop offers the intermateability with other MIL 29504. The new generation TVOP, LJTOP, RNJOP uses the proven 38999 or derivated shell, and the standard termini (Ø 2.5 mm) which is designed to provide a high reliability performance and cost effectives solutions for outdoor and indoor applications. These products are widely used in navy, rail + mass transit, industrial, aeronautic civil and military applications.

- Wide range of various locking mechanism:
 - Screw
 - Bayonet
 - Rackable
- Developed for 100% Scoop proof and blind mating
- Up to 8 channels
- Wavelength 850 1300 nm -1550nm
- · Multimode for all series
- Singlemode for TVOP and LJTOP



Multi Channel 38999 Fiber Optic

- Meets or exceeds MIL-DTL-38999 Series III requirements
- EMI Shielding-solid metal to metal coupling, grounding fingers, electroless nickel plating, and thicker wall sections provide superior EMI shielding capability of 65dB min. at 10 GHz.
- Termini Protection-recessed pins in this 100% scoopproof connector minimize potential termini damage
- Corrosion Resistance-shells of stainless steel or cadmium over nickel plating withstand 500 hr. salt spray exposure
- Vibration/Shock-operates under severe high temperature vibration
- Threaded coupling quickly and completely mates in one 360° turn of the coupling nut

Additional, composite connectors features include:

- Lightweight 17%-70% weight savings
- Increased Corrosion Resistance-olive drab cadmium (175°C) and electroless nickel plating (200°C) both withstand 2000 hours of salt spray exposure.
- Durability-1500 couplings minimum (in reference to connector couplings, not termini)



38999 Embedded LC

The patented RJStop® system allows use of a standard LC or LX5 patchcord in a metallic plug, which will protect it from shock, dust and fluids. There is no need for field termination.

This metallic plug is c onnected into a receptacle, using a Tri Start Thread coupling mechanism (MIL-DTL-38999 Series III type) with anti-decoupling device for high vibrations.

Features

- Sealed against fluids and dust (IP67)
- · Shock and vibration proof
- No cabling operation in field and no tools required for installation

Specifications

Description Measurement/Detail

Number of Channels 2

Typical Insertion Loss 0.5db in multimode and single mode

Durability 500 mating/unmating cycles





THDM Modular Series MT Connector System

Amphenol has announced the latest addition to its high density product portfolio. The THDM is a MIL-PRF-28876 derived mechanical transfer (MT) rugged fiber optic connector for military and aerospace applications.

Feature & Benefits:

- 3 configurations: 2, 4 and 8 MT ferrules for up to 192 fiber channels
- Ratcheting coupling nut for high vibration environments (derived from M28876)
- IP 68 sealing
- Removable and replaceable MT ferrules
- Expanded beam capable
- Environmental:
 - Operating temperature -54C to +65C
 - 500 cycles mating durability
 - Vibration per MIL-STD-1344, method 2005
- Available in cadmium and nickel plated aluminum, stainless steel, PTFE and black anodize
- Performance:
 - IL: 0.5dB nominal MM
 - IL: 0.65dB nominal SM

Applications:

• Military and Aerospace • Shipboard • Oil & Gas



Lux Beam

Amphenol introduces the LUX-BEAM™ Single Expanded beam termini. A solution to upgrade the optical physical contact technology to an optical contacless technology. LUX-BEAM™ is easy to clean, less sensitive to pollution by dust or debris. The contactless coupling of LUX-BEAM™ is not subject to degradation of performances resulting from friction of optical surfaces as it usual is on traditional butt joint termini. With its patented pin to socket realignment feature, LUX-BEAM™ is compatible with connectors from different suppliers and provides an efficient adjustment to tolerances during mating. Per design, LUX-BEAM™ is as easy to install or replace as a FUSE on a patch board.

Features And Benefits

Expanded Beam technology

- Surface expanded bundle > 35X
- Reduced sensitivity to dust
- No degradation of the optical face
- Easy cleaning
- Low maintenance

Compatibility

- Cavity #12
 - MIL-DTL-38999 series III TV/CTV, EN3645
 - EN 4165 (SIM)
- Accept ARINC 801 or dia. 1.25 mm optical termini

Other benefits technology

- Easy installation and replacement as a FUSE (without optical wiring)
- Realignment Patented, for compatibility with multisources connectors
- Possibility to mix with Electrical contact for Hybrid solutions

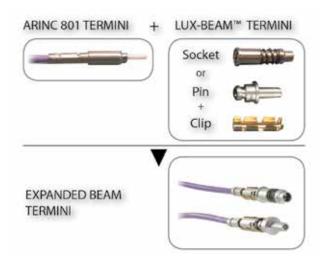


LRM with Fiber Optic Termini

High speed fiber optic transmission is available within LRM connectors for use in advanced avionics systems. Optical performance of fiber optic termini within in LRM connectors are the same as termini used in circular connectors.

Insertion losses range from .3dB to <1.5dB depending upon launch conditions, fiber NA, fiber size and the type of termination. Inserts for MIL-T-29504/1, /2, /14 and /15 can be incorporated. Termini for LRMs can be supplied - consult Amphenol Aerospace for ordering information. The termini are determined by insert and shell style of the connector.

LRM interconnects can have hybrid arrangements of fiber optics with Brush contacts, as well as other contact types.





Copper to Fiber 4G

Features and Benefits:

- No need for internal subsystem fiber harnesses, interconnect, or transceivers
- Utilizes copper transceivers and existing interconnect (backplane, harnessing, faceplate) for system fiber connection
- Media conversion at the connector reduces system complexity and cost
- APH Epoxy staking protects delicate fiber components for environment and assembly process

Overall Unit Dimensions:

- Connector + dog house
- 13 shell size + flex copper assembly; other shell sizes available
- PC tails available

Fiber Interface:

- Jamnut or flange mount
- Shell size 13 38999; options for EPX/ARINC 400/600
- MS29504 system fiber interface; options for expanded beam/ARINC 801/MT
- 2X bi-directional interfaces
- Speeds of 1G, 2G, 4G, 10Gbps
- Interface support for 1/2/4/8G FC and 1/10GbE; option for DVI, SFDP

Copper Interface:

- 2X high speed channels on 6.5 Gbps capable split pair quadrax PC tails or flex assembly
- Interfaces for power, diagnostics, and others

Ruggedization:

- Full ruggedization for environmentals and EMI/EMP
- · Interfaces for power, diagnostics, and more





Copper to Fiber 10G

Features & Benefits:

- 1 channel (1 Tx, 1 Rx)
- D38999 Shell Size 11
- 10.3125 Gbps
- XAUI interface
- Built-in Test
- 12 dB worst case between transmit power and receive sensitivity
- Up to 10G Ethernet, 8G Fibre Channel, PCI-Express 3.0, DVI and more

Fiber Interface:

• Uses M29504/5 Fiber Termini

Copper Interface:

• Samtec EQDP Series

Ruggedization:

- Industry standard rugged transmitters and receivers -40°C to +85°C
- Qualified for Airborne and Ground Vehicles

Flexibility:

• Options for ARINC-801, MT, PC Tail Copper and more





Copper to Fiber Quad

Features & Benefits:

- Quadrax form factor embedded fiber optic transmitters and receivers
- Replace any quadrax pin in receptacle and configure with media conversion copper to fiber and fiber to copper
- Utilizes standard quadrax receptacle connectors and inserts

Fiber Interface:

- Industry standard 1.25mm fiber optic ferrules (LC & ARINC-801)
- Plug/socket side utilizes quadrax socket to ARINC-801 pin adapter for system fiber connection

Copper Interface:

- Speed support from DC to 10 Gbps in both transmitter and receiver
- PCB lead connection to customer circuit board or PCB lead connection to flex with nano

Ruggedization:

- Industry standard rugged transmitters and receivers -40°C to +85°C
- Components epoxy sealed in place

Cable Assemblies

The D38999 circular connector series is designed for harsh environments, particularly those with wide temperature ranges and high mechanical vibrations. This electrical connector is adapted for fiber optics by using M29504/4 and /5 termini. These termini fit into any size 16 contact cavity.

Precise alignment is critical to fiber optic connectors. The tightly toleranced fiber optic D38999 connectors ensure precise alignment with precision-machined polarization keys and keyways which reduce radial misalignment. This precision yields superior optical performance when compared to standard D38999 connectors. Tight tolerance D38999 connectors also have a positive bottoming surface and conductive surface plating, assuring exceptional EMI/RFI performance.

All D38999 connectors feature a non-conductive insert, making this an excellent connector choice when optical fibers and electrical wires must be used in the same connector. The D38999 series offers a wide range of shell sizes, backshells and insert patterns. Standard contacts and termini are available, making any design simple and cost-effective.

Features

- Rugged, multi-channel D38999 Series III connectors
- Incorporates proven M29504 termini
- Available in aluminum, stainless steel or composite materials
- Size 16 single and multimode termini
- Butt joint interface is guaranteed through a spring loaded terminus design











Amphenol











Expanded beam technology expands and collimates the optical signal through the connector interface path resulting in a diameter many times that of the original beam. The optical beam is then refocused into the core of the receiving fiber. The larger beam diameter improves insertion loss performance in the presence of dust and debris. Also, because the lenses do not physically contact, there is no wear on the termini, which allows the connector to be mated and demated thousands of times without affecting optical performance.

Tactical Network Solutions

Amphenol provides Ethernet Network Solutions for use in harsh environments, where reliability and resistance to outside influences, such as temperature, shock, vibration, water, dust, etc. are paramount. Our rugged and durable solutions give you the assurance of a continuous and secure data transmission between all your communication equipments in the harshest environments.

Amphenol capabilities in Ethernet networks include:

Network Design Network Evaluation Network Gateways and Converters Cable Assemblies and Accesorries Measurement Equipment









CTOS and CTOL series are robust optical connectors for rapid deployment of high-speed transmission links under harsh environments. The hermaphroditic mating makes it possible to "daisy chain" cable assemblies without using any interconnect adapters. The specific lens design guarantees a large beam diameter and a low loss connection, less sensitive to dirt and dust. A specific front design and ergonomic keys ensure blind mating. The flat protective window mounted On shock absorbers provides an easy to clean surface for improved performances and protection. CTOS and CTOL harnesses are easily and cost effective field maintainable with the FTOS splice kit.

Amphenol unique CTOS and CTOL design have already gained worldwide acceptance in the ground military using. CTOS has been qualified by NATO according to STANAG 4290 requirements. These products are also widely used in geophysical, civil safety, railway, broadcast and industrial markets.

In the CTOS, 1, 2 or 4 channels are inserted in a small size design (o.d. 38mm). CTOL is a CTOS larger version up to 8 channels (o.d. 52mm). CTOL is intermateable with CTO, the first expanded beam connectors version.

- · Hermaphroditic interface with rapid ramp coupling
- Design for gloved handling and blind mating in difficult conditions
- · Large expanded beam
- Anti-reflective protective window easily reached and cleaned
- The rubber ergonomic shell allows an easy handling with or without gloves and ensures a high protection against shocks
- Up to 8 channels
- Cost effective field repairs
- Multimode Wavelength 850 1300 nm (Z version); 1300 nm (Y version)
- Singlemode Wavelength 1300 1550 nm (W version)



AXOS

The Amphenol AXOS fiber optic expanded beam is a miniature, hermaphroditic and cost effective alternative to other expanded beam connectors, offering a robust and protected optical connection in a small size (OD 27 mm). This allows the user to establish a variable length daisy-chain link in both indoor and outdoor applications. The beam diameter makes the connection resistant to environmental contamination, temperature variations and humidity, while the design facilitates easy cleaning of the mechanical and optical connector parts.

Features

- 1, 2 or 4-channel plugs and receptacles with protective plastic caps
- Hermaphroditic interface with rapid ramp coupling
- Protective window to ensure an easy cleaning of the optical device
- Moving coupling nut allows cleaning the front mechanical parts
- Anti-corrosion metal body with ergonomic protective rubber shell
- Termination and maintenance tool kits available Drums and accessories available

Specifications

Description Measurement/Detail
Insertion Loss 1.5 dB typically; 2 dB max

@ 1300 nm 1.6 dB typically/ 2.5 dB max @ 850 nm

Operational Wavelength 850 nm and 1300 nm Fiber Size 50/125 and 62.5/125 μm

Cable Type 4 to 7 mm

OD tactical tight structure

Durability 2500 mating cycles

Operating Temperature -40°C +85°C



Amphenol offers a MIL-PRF-83526/20A & /21A compliant expanded beam rugged fiber optic connector for military and industrial applications.

TACBeam® is hermaphroditic, which facilitates the concatenation of multiple cable assemblies to support varying distance requirements. The connector is available in both single mode and multimode versions, can be configured to support one to four fiber optic channels using a common insert and has been designed to accept a wide variety of cables to suit any application.

Features

- Supports both multimode and single mode fiber
- Expanded beam technology is less susceptible to dust and debris
- · Monolithic insert design facilitates cleaning
- Hermaphroditic design enables daisy-chaining of cable assemblies to support varying distances
- Non-contacting interface allows thousands of mating cycles

Specifications

Description	Measurement/Detail
Insertion Loss	≤2.0 dB multimode,
	≤2.5 dB single mode
Return Loss	≥-31.0 dB mated,
	≥-34.0 dB unmated
Mating Durability	>2000 cycles
Operating Temperature	-46°C to 71°C
Transit Temperature	-54°C to 71°C
Storage Temperature	-57°C to 85°C



TFOCA

The TFOCA connector is a hermaphroditic design utilized for tactical deployable communications systems. This genderless characteristic allows for concatenations of cable assemblies without regard for connector interface compatibility.

The ruggedized connector and housing will withstand the repeated handling and mating cycles typically required for rapid fiber optic cable deployment and retrieval in a tactical environment.

Features

- · Hermaphroditic design ideal for deployable conditions
- Replacement for US Army and US Marine Corps legacy TFOCA (AT&T)
- Multimode
- · Field maintainable and repairable
- Biconic termini

Benefits

The TFOCA's unique design and environmentally protected construction provide protection from high compressive and tensile loads. Seals at every interface ensure outstanding resistance to moisture penetration. The cable termination is designed to firmly anchor the cable Kevlar® strength members to the connector housing without special tooling. The AFSI TFOCA connectors can be terminated and repaired in the field using existing US Army equipment or the AFSI TFOCA Termination Kit (P/N KTBK7000).





TFOCA-II® 4-Channel TFOCA-II® 12-Channel TFOCA-II® EX TFOCA-III®

The heart of the TFOCA-II® family of deployable fiber optic connectors centers on the TFOCA-II® sealed free floating termini. The unique termini design enables TFOCA-II® connectors to seal against high humidity and moisture conditions while allowing full axial and orbital movement of the mated termini, providing low insertion loss and minimal back reflection.

Features

- Hermaphroditic design for versatility, enables multiple TFOCA-II® plug assemblies to be concatenated
- Removable end cap, allows for easy field maintenance and cleaning
- 4-channel connector design, two fold improvement over TFOCA with better optical performance
- 12-channel connector design six fold channel increase over TFOCA with better optical performance
- TFOCA-II® EX connector to provide fiber optic connectivity in Zone 1 and Zone 21 hazardous environments. AFSI was awarded an ATEX certification number (09ATEX1033X) from Sira for its fiber optic 4-channel TFOCA-II® hermaphroditic plug and receptacle connectors.
- 6 & 24-channel connector design is ideal for highdensity harsh environment applications
- Improved cable retention strength, designed to meet 400 lb pull strength while protecting fibers from stress
- Zn-Ni plating, provides substantial longevity to corrosive environments. Meets new mandate set by the Environmental Protection Agency for eliminating heavy metal plating
- Commercial ceramic ferrule technology, enables TFOCA-II® connector to provision multimode and single mode interconnect with a variety of polishes including SPC and UPC
- Solid core alignment sleeves, more robust than split alignment sleeves
- Hermaphroditic dust cap, plug and/or receptacle dust caps connect together to prevent dust and moisture penetration during deployable conditions
- Field repairable using existing parts, additional connector components (other than termini) are not required to perform field repair
- Also available in stainless steel and brass, allowing the connector to be used in a variety of applications



TFOCA-XBT4™

The TFOCA-XBT4™ is the next logical step, integrating expanded beam technology into the most popular harsh environment fiber optic connector in the world. Features:

- Expanded beam technology less susceptible to contaminants affecting optical performance
- Available in both multimode and single mode fiber
- Hermaphroditic design enables daisy-chaining of cable assemblies to support varying distances
- Non-contacting interface allows thousands of mating cycles
- 2 and 4-channel configurations available
- Cable retention designed to meet 400 lb pull strength while protecting fibers from stress
- Zn-Ni plating, provides substantial longevity to corrosive environments. Meets new mandate set by the Environmental Protection Agency for eliminating heavy metal plating
- · Easy field maintenance and cleaning
- Also available in stainless steel and brass, allowing the connector to be used in a variety of applications



Features

- Hermaphroditic design facilitates concatenation
- Single mode and multimode versions
- Compact size
- Multiple finishes and materials available
- RoHS compliant
- Environmentally sealed
- 2000 mating cycles durability

Performance

Insertion loss (SM or MM): -0.75dB max



Ethernet Switches & CTOS Media Converters Ethernet Switches & TACBEAM Media Converters

Our Ethernet Switches, the heart of the network, meet the following standards:

MIL-STD-461 (environment)
MIL-STD-461 (EMI)
MIL-STD-704 or MIL-STD-1275 (power)

Our range of Media Converters and Connectors Adapters:

Ethernet Copper/Fiber optic Ethernet/CAN Bus RJ45/Quadrax adapters RJ45 and USB/38999 adapters

Our Network Design is 100% secure for data transmission with:

MIL-STD standards compliance Resistant components selected to support extreme conditions







TACBeam® FOM

Amphenol offers the TACBeam® Fiber Optic Modem (FOM) to provide optical-electrical (O-E) and electrical-optical (E-O) conversion for harsh environments. This stand-alone unit features ruggedized optical transceivers integrated in a compact housing with single or dual T1 RJ48 electrical interfaces and TACBeam® 4-channel expanded beam connector.

The TACBeam® FOM's compact size also significantly reduces the footprint devoted to O-E and E-O conversion. The standard TACBeam® FOM provides conversion for G.703 T1 (1.544Mb/s) electrical signals via a standard RJ-48 to multimode optical signals via TACBeam®. The TACBeam® is compliant to the M83526/20 & /21 specification and uses expanded beam technology to reduce the impact of particulate matter on the optical performance. Expanded beam technology also facilitates the cleaning of the connector, reducing maintenance costs and improving up-time. Because the connector faces do not touch, the TACBeam® can be mated/demated more frequently than traditional physical contact connectors.









MediaTAC

Amphenol offers MediaTac harsh environment fiber optic active cable assemblies for oil & gas land seismic and military applications. Active cable assemblies allow equipment manufacturers to enjoy the advantages of fiber optics (lighter weight, longer distances, higher bandwidth, and EMI immunity) over copper without needing to redesign their external interfaces.

The MediaTac supports bi-directional operation and can provide full duplex transport of 10/100 BaseT Ethernet over one single mode or multimode fiber.

In addition, the unit can be configured to support simplex (one single mode or multimode fiber) or full duplex over two single mode or multimode fibers. The unit is equipped with a universal adapter plate, allowing the user to select a simple cable entry or various fiber optic connector interfaces (mTACh,TFOCA-II®,TACBeam®), depending upon requirements.

Ideal for extended outdoor use, the MediaTac is sealed to IP68 and is equipped with a sacrificial anode used to protect a submerged MediaTac from corrosion. The unit can be specified with rugged tactical or Amphenol's ArmorLite rodent-resistant fiber optic cable.

Features

- Active plug eliminates system redesign when converting to fiber optic transport
- Extensive sealing and sacrificial anode allows the unit outdoor exposure indefinitely
- Supports simplex or full duplex transport over a single fiber
- Supports single mode or multimode fiber
- Auto-configurable 10/100 Base T
- Universal adapter plate allows straight cable entry or your choice of harsh environment connector types



TFOCA-II® Fiber Optic Modem

Amphenol offers the TFOCA-II® Fiber Optic Modem (FOM) to provide optical-electrical (O-E) and electrical-optical (E-O) conversion for harsh environments. This stand-alone unit features ruggedized optical transceivers integrated into a compact housing with 10/100/1000 Ethernet electrical interface and TFOCA-II® connector.

The "plug and play" unit allows systems engineers to effortlessly convert their systems to take advantage of the benefits of fiber optics without the need to design and develop harsh environment fiber optic transceivers and associated electronics. Also, the TFOCA-II® FOM's compact size significantly reduces the footprint devoted to O-E and E-O conversion using discrete components. The standard TFOCA-II® FOM supports conversion for 10/100/1000 (auto adaptable) Ethernet providing up to 1.0Gb/s transport over 10 miles using single mode fiber. The unit incorporates TFOCA-II® field-proven connector (US Army standard fiber optic connector) with hundreds of thousands of units deployed. The rugged four-channel TFOCA-II® is hermaphroditic, allowing the user to easily concatenate cable assemblies in the field to meet the required length.

Features

- Effortlessly converts systems to fiber optics (longer distances, EMI/RFI immunity, lighter weight) without major system design/redesign
- Compact size significantly reduces O-E/E-O conversion compared to traditional discrete designs
- Harsh environment transceivers support extended temperature range and military vibration/shock requirements
- Supports single mode or multimode operation
- Supports single or dual auto-adaptable 10/100/1000 Ethernet O-E/E-O conversion
- Compliant with IEEE 802.3
- Field-proven TFOCA-II® connector



DRUMS

Amphenol can offer a wide range of tactical cable drums designed to cater for deployable harsh environment optical links. Drums are available in a variety of applications, sizes, materials, accessories, and for various diameters and lengths of cable.





Tactical Cable Assemblies

Amphenol builds custom cable assemblies for virtually any applications. Our stringent quality system, certified to MIL-STD-790, ensures the highest levels of workmanship and performance available today in each and every cable assembly built.

In addition to 100% optical performance testing, Amphenol also provides value-added services such as thermal cycling, high-temperature aging, and other postbuild environmental testing.

- · Expanded Beam, Lens and Window technology
- Stainless steel and rubber protection
- · Hermaphroditic & easy daisy chaining
- Singlemode & Multimode option
- Ethernet & RF compliant
- STANAG 4290 compliant





Amphenol

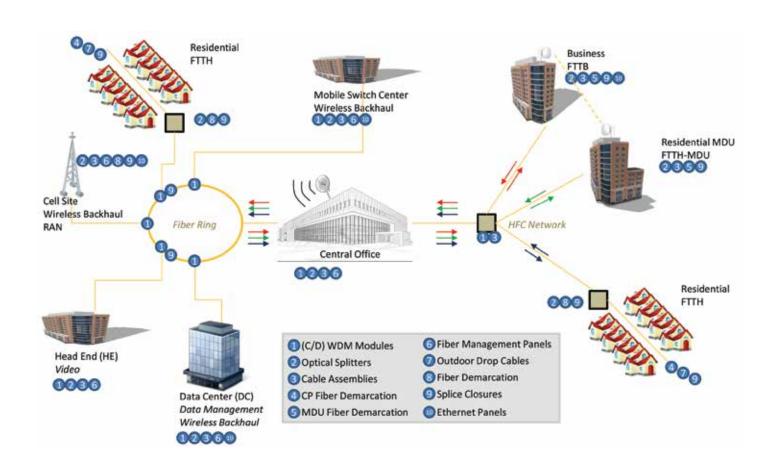
GLOBAL ETHERNET NETWORK SOLUTIONS

Network Design & Evaluation



Amphenol is a premier manufacturer of optical interconnect products. Amphenol's experience in fiber optics dates back more than thirty years when the company developed the first industry standard connector, the SMA. The product line rapidly expanded to include other popular connector types, cable assemblies and optical couplers. Today, Amphenol Fiber Optic Products is an ISO 9001 certified company providing complete fiber optic interconnect solutions. A broad product offering includes fiber management systems, cable assemblies, adapters, attenuators, couplers and wavelength divison multiplexers for use in virtually any fiber optic application.

Optical Interconnect Products





Indoor Cable Assemblies

- Amphenol offers a wide variety of standard optical connectors and cable assemblies, including:
 - LC
 - SC
 - MTP/MPO
 - ST
 - FC
 - MU
 - MT-RJ
- Multitude of cable types available, including:
- OS1, OM1, OM2, OM3, OM4, and bend insensitive versions
- Simplex, zip cord, ribbon, distribution, breakout, outside plant, etc.



Service Cables (Node Cables)

Amphenol's Service Cable Assemblies are primarily used to link the fiber optic transport cable directly to the fiber optic processing equipment. This connection is critical and requires an environmental seal between the cable and the node housing. Amphenol's Service Cables utilize a unique feed-through adapter, featuring an anti-twist coupling body. The anti-twist feature, allows the coupling body to be secured to the outdoor housing, without twisting of the cable. Amphenol's Service Cables also use a fully water blocked loose tube cable, with either armored or non-armored versions available. Assemblies can be equipped with a variety of breakout lengths, fanout types or connector options.



Connectors and Adapters



FC Connectors and Adapters



LC Connectors and Adapters



MPO Adapters



SC Connectors and Adapters



ST Connectors and Adapters







One of the largest manufacturers of interconnect products in the world.

WE · · · DESIGN · · · · · MANUFACTURE · · · · MARKET





•MILITARY•••••AEROSPACE••••INDUSTRIAL

•OUR PHILOSOPHY • • • • • •

01



02

FOCUS

Concentrate all resources on serving a limited number of tightly defined markets, and understanding the needs of those markets.

INNOVATION

Provide these markets with new, creative solutions in both products and services. 03

RESPONSIVENESS

Identify and respond to market and product needs more rapidly than any other supplier.





MILITARY & AEROSPACE

Amphenol Turkey&MiddleEast

