

OUTDOOR CABLE ASSEMBLIES

Amphenol Fiber Optic Products is the world's leading interconnectivity provider. Founded in 1976, Amphenol Fiber Optic Products designs, manufactures, and markets fiber optic, electrical, and coaxial interconnect products. Our products are engineered and manufactured in the Americas, Europe, Asia, and Africa and offered through a worldwide sales and marketing organization.

Creative Solutions for the Mobile Evolution

Amphenol Fiber Optic Products delivers a comprehensive product portfolio designed for the network evolution, including fiber optic connectivity and antenna systems. Our solutions are designed with the customer in mind

to (a) Improve Speed of Deployment, (b) Reduce Deployment Cost, (c) Reduce Maintenance Cost, (d) Reduce Risk of Failure, and (e) Simplify Infrastructure Deployment.

Experience

As a manufacturer with over 40 years of interconnect design and development, Amphenol Fiber Optic Products leads innovation in connector technology. Utilizing this experience, Amphenol is able to develop a cost effective end-to-end solution to satisfy a customer's full connectivity and cabling needs.

Customization

Amphenol Fiber Optic Products' relationship begins at the design stage to understand the customer's needs and project requirements in order to develop a complete customized solution.

Reliability

Amphenol Fiber Optic Products has a long history of total quality performance. Our high quality products, helpful customer service, and dependable product support, from design through production, result in satisfied customers.



Engineered Quality for the Toughest Environments



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Creative Solutions for the Future

Fiber Feeder Assemblies

Amphenol offers a wide selection of fiber feeder cable assemblies designed to support cell site installations using discrete fiber cables.

The assemblies can be terminated with the full range of Amphenol's harsh environment optical connectors.

Amphenol's fiber feeder assemblies are capable of performing in the toughest environments and are exceptionally suited for WiMax, LTE, 3G/4G wireless, and base station applications.



Features and Benefits

Compatible with all common models of FTTA equipment

Available in various lengths and configurations

Easy to Install

Available in a wide variety of wiring configurations and fiber types

Singlemode and Multimode versions

LC Duplex connectors on BTS side

Factory terminated assemblies provide reliable performance

Specifications

Multimode IL:
≤0.35dB Typical
<0.50dB Max.

Singlemode IL:
≤0.35dB Typical
<0.50dB Max.

Return Loss:
≤-45dB

Operating Temperature:
-40° to 85°C

Durability:
>50 mating cycles

Applications

FTTA

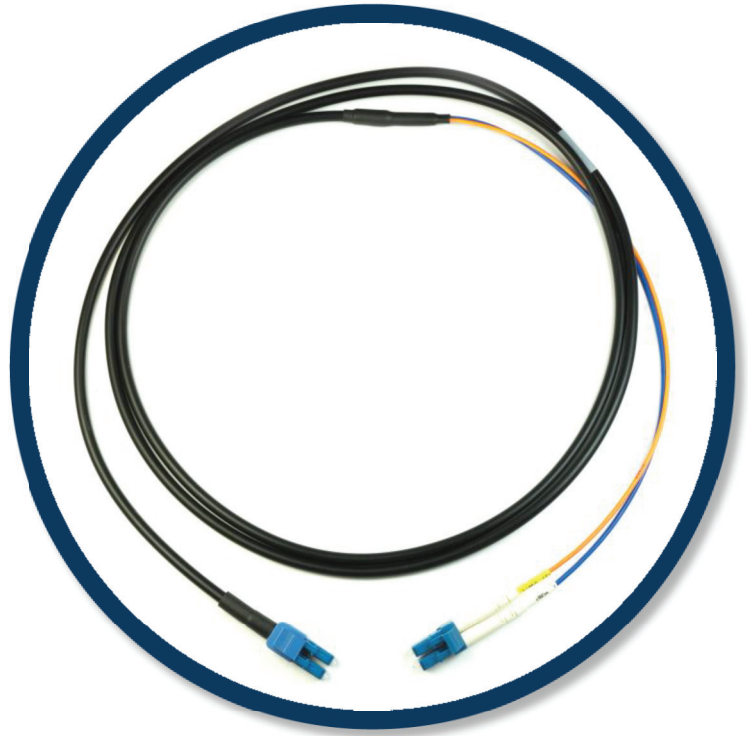
Wireless

Small Cells

Industry Compliance

Connectors are mechanically and optically intermateable with industry standard connectors and adapters and conform to TIA/EIA, IEC, and Telcordia specifications

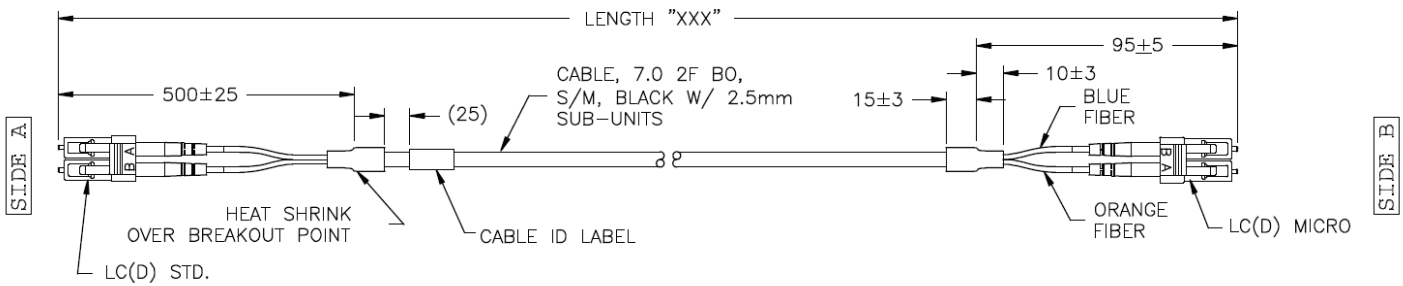
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Ordering Information

Part Number	Description
942-98666-10015	JUMPER, LC(D)-LC(D), SM, ARM OSP, 15M
942-98665-10010	JUMPER, LC(D)-LC(D), SM, I/O, 10M
943-99790-10012	JUMPER, LC(D)-LC(D), MM, ARM OSP, 12M

*Please call customer service for additional configurations



AARC Jumpers

The harsh environment AARC plug and receptacle assemblies are available in 2 fiber or 4 fiber cable assembly configurations.

Based on the N Type RF threaded connector housing, this interconnect system provides superior optical performance in outdoor environments using LC style 1.25mm ceramic ferrules.

The corrosion resistant metal housings provide a durable and environmentally protected solution for optical connectivity in areas exposed to elements such as rain and snow as well as dirt and other types of contamination.

The factory terminated AARC plug assemblies are available in plug, receptacle and in-line connector styles and can be supplied as Pigtails or jumpers in lengths starting from 1 meter. The factory terminated AARC receptacle assemblies are available with flange, jam nut, or in-line configurations. Amphenol's AARC connectors are exceptionally suited for WiMax, LTE, 3G/4G wireless, and base station applications.



Features and Benefits

Available in both Singlemode and Multimode fiber types

Available in 2 or 4 fiber configurations

Flange, Jam Nut, or in-line receptacles

N Type Threaded Connector Housing

Easy to Install

Metal housing provides improved EMI protection

Specifications

Multimode IL:
≤0.35dB Typical;
<0.75dB Max.

Singlemode IL:
≤0.35dB Typical
<0.75dB Max.

Return Loss:
≤-45dB

Operating Temperature:
-40° to 85°C

Durability:
>50 mating cycles

Tightening Torque:
6N Maximum
(4N to 5N recommended)

Applications

FTTA

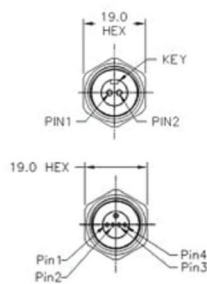
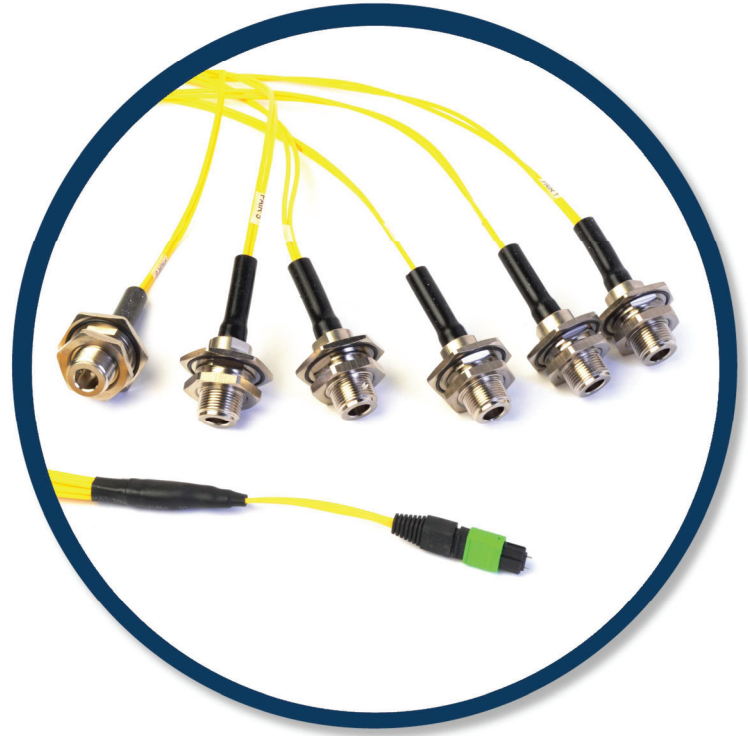
Outdoor Areas

Harsh Environment

Industry Compliance

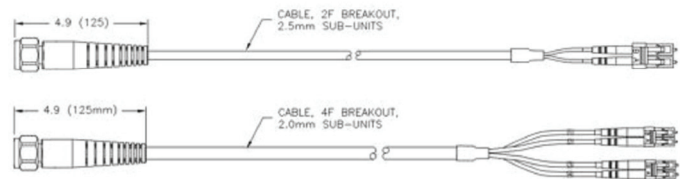
IP67 Water and Dust Ingress Protection

Connectors are mechanically and optically intermateable with industry standard connectors and adapters and conform to TIA/EIA, IEC, and Telcordia specifications



AARC Plug Assembly

Shown Here: AARC Plug to LC Duplex Assemblies



Ordering Information

Part Number	Description
942-98140-10001	JUMPER, AARC 2F PLUG-LC(D), SM, 1M
942-98155-10001	JUMPER, AARC 4F PLUG-2X LC(D),4F 0.5M BREAKOUT, SM, 1M
942-98156-10001	JUMPER, AARC 2F IN-LINE RECEPTACLE TO LC DUPLEX, 1M
942-98157-10001	JUMPER, 4F AARC IN-LINE RECPT TO LC(D), SM, 1M
942-98302-10001	JUMPER, AARC 2F PLUG TO PLUG, SM 4.8MM CABLE, 1M
942-98159	JUMPER, 2F AARC RECPT TO LC(D), 1M ZIP
942-98161	JUMPER, 4F AARC RECPT(F)-LC(D), SM 0.5M BO
942-98162	JUMPER, 2F AARC RECPT(N)-LC(D), SM 0.5M BO
942-98302-10001	JUMPER, AARC 2F PLUG TO PLUG, SM 4.8MM CABLE, 1M

*Please call customer service for additional configurations

PT/LC Cable Assemblies

The harsh environment PT/LC plug assemblies and mating receptacles leverage the proven MIL spec 26482 connector system to provide an environmental seal and mechanical protection for 2 fiber duplex LC style connections.

Available with either a quick mate bayonet or anti-vibration threaded coupling, the PT/LC provides a simple and reliable sealed connection. Factory terminated PT/LC plug assemblies, in various lengths, can be provided as jumpers to connect with most any industry standard optical connectors, allowing hassle free integration with existing hardware.

The PT/LC Receptacle accepts standard simplex or duplex LC assemblies to provide cost effective connections to active devices or patching with LC pigtails or jumpers. The PT/LC is capable of performing in the toughest environments and is exceptionally suited for WiMax, LTE, 3G/4G wireless, small cell and base station applications. Many available receptacle mounting configurations and cable types allow installation into almost any system or application.



Features and Benefits

- Available in both Singlemode and Multimode fiber types
- Blind Mate and Scoop Proof Interface
- Threaded or Bayonet mating style
- Easy to Install
- Metal housing provides improved EMI protection
- Mates to Standard LC simplex or duplex assemblies
- Excellent Vibration Characteristics

Specifications

- Multimode IL:
 - ≤0.35dB Typical
 - <0.50dB Max.
- Singlemode IL:
 - ≤0.14dB Typical
 - <0.30dB Max.
- Return Loss:
 - ≤-55dB
- Operating Temperature:
 - 40° to 85°C
- Durability:
 - >50 mating cycles

Applications

- FTTA
- Outdoor Areas
- Harsh Environment

Industry Compliance

Connectors are mechanically and optically intermateable with industry standard connectors and adapters and conform to TIA/EIA, IEC, and Telcordia specifications

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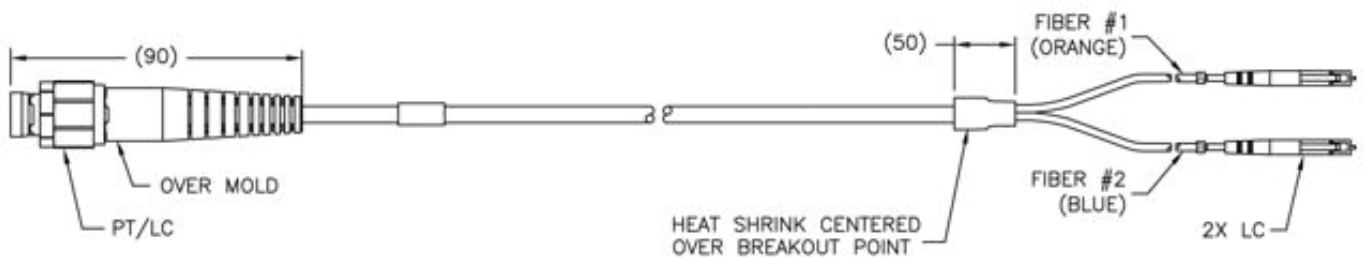
Ordering Information

Part Number	Description
942-98142-10001	JMPR, PT/LC TO 2X SC, SM, 0.25M BO
942-98160-10001	JMPR, PT/LC TO LC(D), SM 0.5M BO, 1M
943-99595-10001	JMPR, PT/LC TO LC(D), OM2, 0.5M BO, 1M

*Please call customer service for additional configurations

PT/LC Plug Assembly

Shown Here: PT/LC Threaded to LC Assembly



PT/MPO Cable Assemblies

The harsh environment PT/MPO plug assemblies and mating receptacles leverage the proven MIL spec 26482 connector system to provide an environmental seal and mechanical protection for 4 to 24 fiber MPO style connections.

The metal bayonet connector system is quick to deploy, requiring only ¼ turn. It is a metal construction and has a positive latching system (both audible and visual).

Factory terminated PT/MPO plug assemblies are available in lengths starting from 1 meter and can be provided as jumpers with a breakout to connect with most any industry standard optical connectors, allowing hassle free integration. The PT/MPO receptacle accepts industry standard MPO patch cables to be used inside the enclosure, allowing simple connection to QSFP devices, or can be used with a breakout cable for discrete single fiber or SFP connections. Amphenol's PT/MPO connectors are exceptionally suited for WiMax, LTE, and other applications requiring more than 2 fibers. The PT/MPO is capable of performing in even the toughest environments.



Features and Benefits

- Available in both Singlemode and Multimode fiber types
- Available in 4, 8, 12 or 24 fiber configurations
- Excellent Vibration Characteristics
- Mates to Standard MPO or MTP assemblies

Specifications

- Multimode IL:
 - ≤0.25dB Typical
 - <0.75dB Max.
- Singlemode IL:
 - ≤0.35dB Typical
 - <0.75dB Max.
- Return Loss:
 - ≤-55dB
- Operating Temperature:
 - 40° to 85°C
- Durability:
 - >200 mating cycles
 - > 100 lb. Strain Relief

Applications

- FTTA
- Outdoor Areas
- Harsh Environment

Industry Compliance

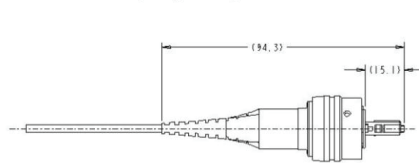
Connectors are mechanically and optically intermateable with industry standard connectors and adapters and conform to TIA/EIA, IEC, and Telcordia specifications

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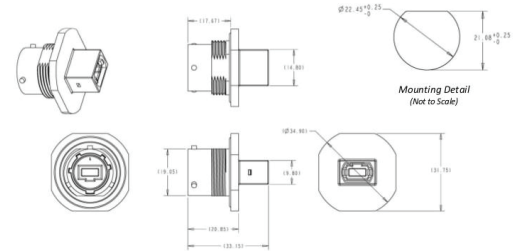
PT/MPO Plug Assembly

Shown Here: PT/MPO Pigtail Assembly with 4 fiber outdoor ribbon cable



PT/MPO Rear Mount Receptacle 955-220-5001

All dimensions in Millimeters



Ordering Information

Part Number	Description
942-98281-10001	JUMPER, PT/MPO TO 2F AARC RECEPTACLE, 4F FLAT RIBBON
942-98281-10001	JUMPER, PT/MPO TO 2F AARC RECEPTACLE, 4F FLAT RIBBON
942-98281-10001	JUMPER, PT/MPO TO 2F AARC RECEPTACLE, 4F FLAT RIBBON
942-98281-10001	JUMPER, PT/MPO TO 2F AARC RECEPTACLE, 4F FLAT RIBBON
942-98281-10001	JUMPER, PT/MPO TO 2F AARC RECEPTACLE, 4F FLAT RIBBON
942-98465-10001	JUMPER, LC/UPC(D)-LC/UPC(D) MICRO, 2F, S/M, 1M
942-98XXX-10003	JUMPER, AARC PLUG-LC 2F, SM, OUTDOOR CABLE, 3M
942-98XXX-1xxxx	JUMPER, PT/MPO TO 2F AARC RECEPTACLE, 4F FLAT RIBBON
943-98XXX-1xxxx	JUMPER, PT/MPO TO 2F AARC RECEPTACLE, 4F FLAT RIBBON

*Please call customer service for additional configurations

R2CT Assemblies

Amphenol R2CT jumper cable assemblies are commonly used on Remote Radio Head (RRH) equipment.

Offered in addition to field-installable R2CT connector system, the factory terminated cable assemblies with the R2CT connector housing pre-installed are ideal for faster implementation and IP67 sealing in new deployments.

Amphenol's R2CT assemblies are capable of performing in the toughest environments and are exceptionally suited for WiMax, LTE, 3G/4G wireless, and base station applications.



Features and Benefits

Available in both Singlemode and Multimode fiber types

Easy to Install

Corrosion resistant aluminum housing

Mates to Standard LC simplex or duplex assemblies

Specifications

Multimode IL:
≤0.35dB Typical
<0.50dB Max.

Singlemode IL:
≤0.35dB Typical
<0.50dB Max.

Return Loss:
≤-45dB

Operating Temperature:
-40° to 85°C

Durability:
>50 mating cycles

Applications

FTTA

Outdoor Areas

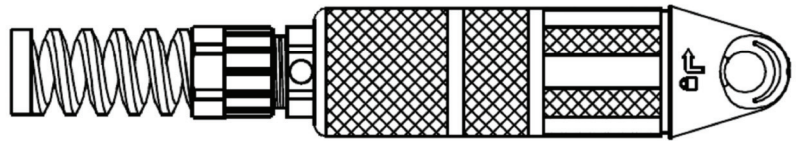
Wireless

Harsh Environment

Industry Compliance

IP67 Water and Dust Ingress Protection

Connectors are mechanically and optically intermateable with industry standard connectors and adapters and conform to TIA/EIA, IEC, and Telcordia specifications



Ordering Information

Part Number	Description
943-99787-10010	JUMPER, R2CT-LC(D), MM, 10M
942-98659-10010	JUMPER, R2CT-LC(D), SM, 10M
942-98660-10005	JUMPER, R2CT-LC(D), UNIBOOT, SM, 5M

*Please call customer service for additional configurations

TxRx Assemblies

The TxRx Harsh Environment Interconnect system is designed to provide connection of an outdoor LC duplex-based sealed connector directly to a board mounted SFP or RJ45 device within a sealed enclosure.

The system is designed to provide IP67 dust and water protection when connector and receptacle are mated or with dust caps installed.

Plug cap includes integrated pulling eye for easy installation.

Amphenol's TxRX assemblies are exceptionally suited for WiMax, LTE, wireless, wireless backhaul and base station applications.



Features and Benefits

- Common housing for Optical or RJ45 connectivity
- Direct connect to active device (SFP, SFP+, RJ)
- No internal jumper needed
- Provides ample float for proper alignment to active device
- Factory terminated assemblies provide reliable performance
- Available with Singlemode or Multimode fiber or Category 3, 4, 5, 5E or 6
- Bayonet style coupling

Specifications

- Multimode IL:
 - ≤0.35dB Typical
 - <0.50dB Max.
- Singlemode IL:
 - ≤0.35dB Typical
 - <0.50dB Max.
- Return Loss:
 - ≤-45dB
- Operating Temperature:
 - 40° to 85°C
- Durability:
 - >50 mating cycles

Applications

FTTA

Outdoor Areas

Industry Compliance

Connectors are mechanically and optically intermateable with industry standard connectors and adapters and conform to TIA/EIA, IEC, and Telcordia specifications

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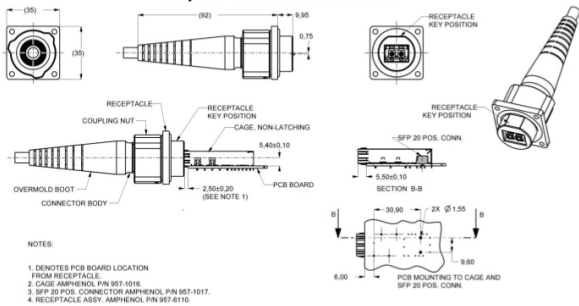


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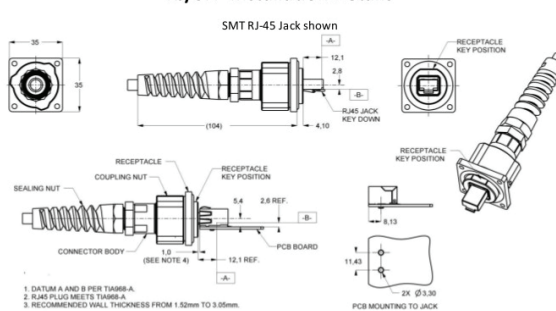
Part Number	Description
957-99001-10001	JUMPER, TXRX OPTICAL TO LC(D), SM, 1M
957-99002-10001	PIGTAIL, TXRX OPTICAL TO LC(D), SM, 1M
957-99018-10001	TXRX OPTICAL TO LC(D), OM3, 1M

*Please call customer service for additional configurations

LC/SFP Installation Details



RJ/SFP Installation Details



J-Connector Assemblies

The Amphenol Optical J-Connector is designed for optical connectivity to outdoor installed electronics. Using a 'Direct Connect' topology, the J-Connector accepts either SFP or SFP+ pluggable transceivers.

It maximizes both space and performance by removing the internal link from the enclosure wall to the PCB mounted optics, allowing the transceiver to plug directly into the SFP or SFP+ cage.

Factory terminated and tested assemblies are available with S/M or M/M fiber in a variety of configurations. The field installable version can be installed over an existing outdoor simplex or duplex LC assembly for applications requiring on-site or local assembly manufacturing.

The J-Connector optical bulkhead receptacle is designed to accept any MSA compliant SFP or SFP+ transceiver, providing both IP-67 ingress protection as well as grounding to the panel/cage for improved EMI shielding. Applications include connection to Remote Radio Units (RRU/RRH), FTTA equipment and other outdoor systems.



Features and Benefits

- Factory or Field Installable version available
- Accepts any MSA compliant SFP or SFP+ transceiver
- Direct connect style interface
- Metal housing provides improved EMI protection
- Bayonet style coupling

Specifications

- Multimode IL:
 - ≤0.35dB Typical
 - <0.50dB Max.
- Singlemode IL:
 - ≤0.35dB Typical
 - <0.50dB Max.
- Operating Temperature:
 - 40° to 85°C
- Durability:
 - >100 mating cycles

Applications

- FTTA
- Small Cells
- Outdoor Areas

Industry Compliance

Connectors are mechanically and optically intermateable with industry standard connectors and adapters and conform to TIA/EIA, IEC, and Telcordia specifications

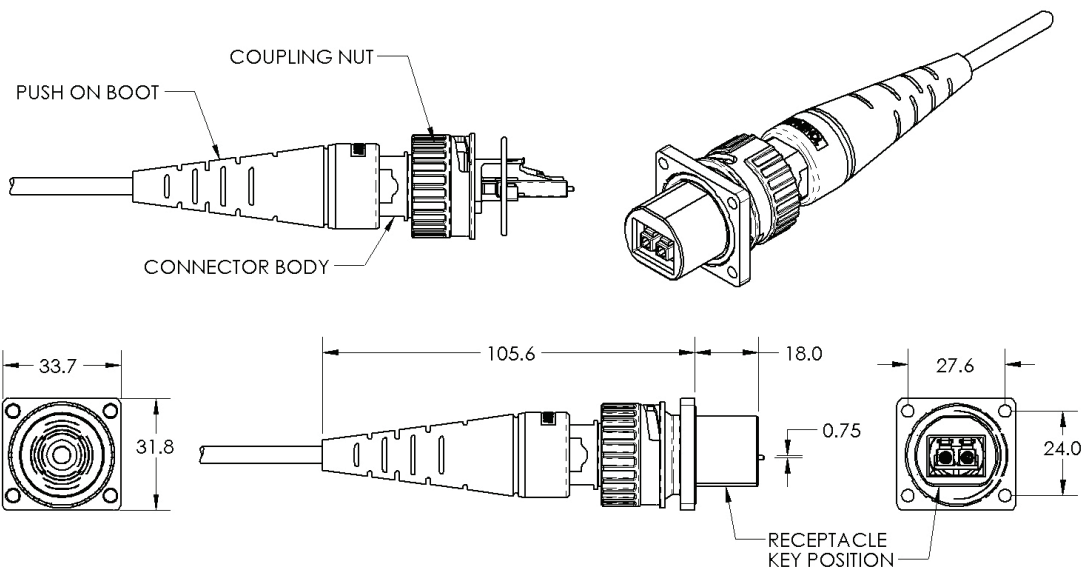
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Ordering Information

Part Number	Description
942-98363-10001	JUMPER, J-CONNECTOR TO 2F AARC, 1M
942-98364-10001	JUMPER, J-CONNECTOR TO LC (D), 1M
942-98365-10001	JUMPER, J-CONNECTOR TO LC SIMPLEX, 1M

*Please call customer service for additional configurations



Fiber Trunks Direct Connect

Amphenol fiber trunk direct connect solutions offer fiber optic connectivity in a single cable, with up to 48 fiber pairs available.

A single trunk enables connectivity to several RRH's without the need for a tower-top distribution box. The fiber trunk direct connect boxless solution is the most efficient and easiest to install solution on the market.

The plug and play installation system is one of preferred choices of many communication equipment manufacturers and operators.

An outdoor heat shrink divider splits fiber cables into separate ruggedized short branches equipped with fiber optic outdoor harsh environment connectors. The connection to the RRH is ensured with factory terminated Fiber jumpers with RRH interface (large range available to fit most of RRH in the market). An alternative system with metal canister is available. The metal canister provides a secure and reliable hoisting and grounding mechanism.



Features and Benefits

- Single fiber cable running to the RRH
- Boxless solution limiting esthetical impact, weight and wind load risk
- Fastest and easiest to install solution compared to conventional box
- Only RRH jumpers need to be changed when equipment is upgraded:
 - Easy to maintain
 - Future proof design
- Available in configurations up to 48 fiber pairs
- LC Duplex connectors on BTS side
- AARC connectors on tower-top side
- Singlemode and multimode fiber available
- Factory terminated assemblies provide reliable performance
- Protective Pulling sockets at Tower Top side (branch and canister), waterproof protection tube at BTS side

Specifications

- Fiber trunk cable
 - Jacket Material: PVC or LSZH
- Fiber Optic: 5mm cable with 2 fibers
- Bending radius:
 - Long term - 15x diameter
 - Short term: 20x diameter
- Crush resistance: 2000 N/m
- Cable shielding: Copper Tape
- Flame retardant: IEC 60032-1
- Temperature range
 - Operating: -40 to 80°C
 - Installation: -30 to 60°C
- Canister system
 - Number of Power pairs: up to 9
 - Number of Fiber pairs: up to 48
- Canister dimension:
 - Varies per configuration
- Canister Material:
 - Anodized aluminum
- 1 to 48 fiber capacity
- Impact resistance: UL-746C
- UV resistant: UL 1581 Sec. 1200
- Material flammability rating: UL-94



Industry Compliance

OFNR/FT-4 and IEEE Flammability

RoHS compliant

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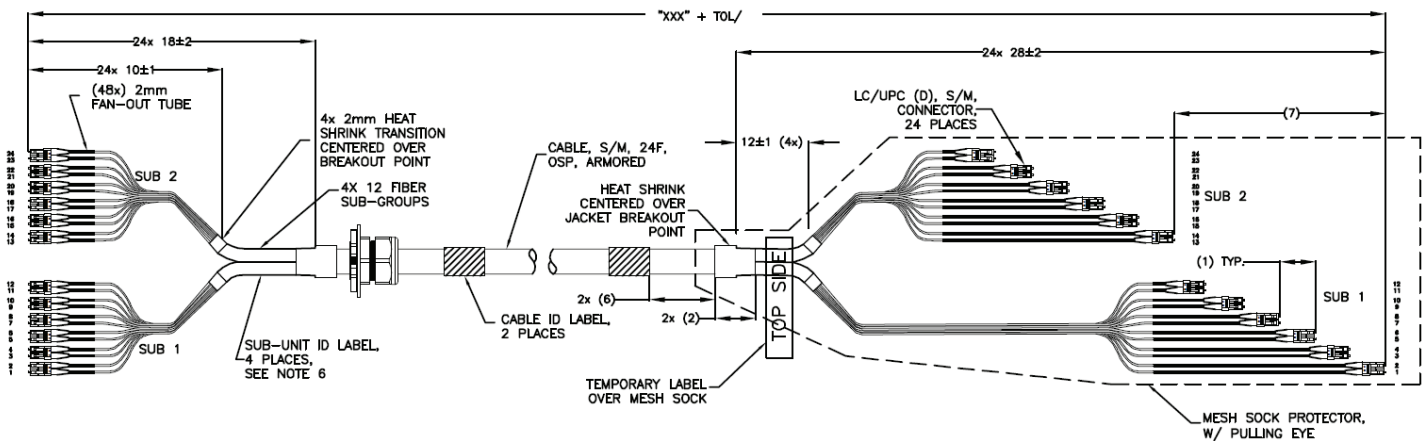
Applications

FTTA

Outdoor Areas

Wireless

Industrial



Ordering Information

Part Number

Description

942-98663-10040	FIBER TRUNK, SM, 24F, LC(D)-LC(D), 40M
942-98664-10020	FIBER TRUNK, SM, 24F, LC(D)-AARC, 20M
943-99789-10035	FIBER TRUNK, MM, 24F, LC(D)-LC(D), 35M

*Please call customer service for additional configurations

Fiber Trunks with Distribution Box

Amphenol's trunk solutions with distribution box offer a single cable with up to 48 fiber pairs.

A single fiber trunk enables connectivity to a distribution box available in different capacity.

Amphenol's fiber trunk is light weight, small diameter and is made with UV and flame resistant material.

Optional metal armor is available for resistance against rodent and bird attacks.

Amphenol's Fiber box is designed to be the easiest and fastest to install box solution on the market. The box is delivered preassembled, ready to connect to the fiber trunk and to any RRH with fiber optic jumpers.



Features and Benefits

Single fiber cable with box solution supporting several RRH units

Only RRH jumpers need to be changed when equipment is upgraded:

- Easy to maintain
- Future proof design

Available in configurations up to 48 fiber pairs with LC duplex connectors on both sides

Singlemode and multimode fiber available

Factory terminated assemblies provide reliable performance

Factory preassembled box with DC breakers and/or surge protection device, DC terminal blocks, cable gland, grommets, LC duplex adapters

The box is delivered with all necessary accessories, such as mounting bracket and labelling, to enable easy and fast installation in the field

Specifications

Fiber trunk cable

Jacket Material: PVC or LSZH

Fiber Optic: 5mm cable with 2 fibers

Bending radius:

- Long term - 15x diameter
- Short term: 20x diameter

Crush resistance: 2000 N/m

Cable shielding: Copper Tape

Flame retardant: IEC 60032-1

Temperature range

- Operating: -40 to 80°C
- Installation: -30 to 60°C

Fiber box

1 to 48 fiber capacity

Dimension: 16"x14"x7" (other sizes available)

Material: Polycarbonate

Color: Gray

Ambient temperature range:

- 30 to +129°C

Halogen free (optional)

Reconfigurable layout

Industry Compliance

IP67 Water and Dust Ingress Protection

Meets NEMA-4X requirements

UL Listed enclosure

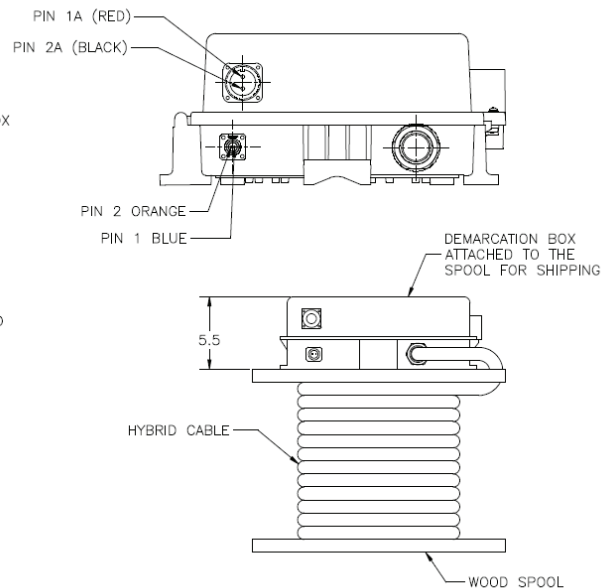
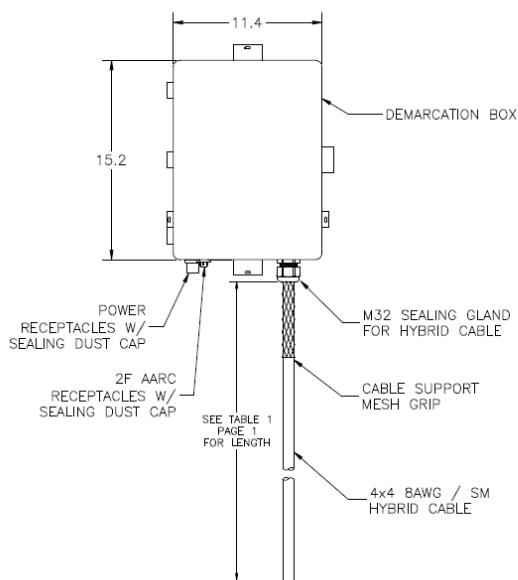
Applications

FTTA

Outdoor Areas

Wireless

Industrial



Ordering Information

Part Number	Description
942-98662-10030	FIBER TRUNK, 48F, SM, 30M
942-98661-10025	FIBER TRUNK, 24F, SM, 25M
943-99788-10050	FIBER TRUNK, 24F, MM, 50M

*Please call customer service for additional configurations

Hybrid Trunks Direct Connect

Amphenol hybrid trunk solutions offer fiber optic and power connectivity in a single cable, with up to 48 fiber pairs and 18 copper conductors available. A single trunk enables connectivity to several RRH's without the need for a tower-top distribution box.

The direct connect hybrid trunk is the most efficient and easiest to install solution on the market. The plug and play installation system is the preferred choice of many communication equipment manufacturers and operators.

A metal canister providing a secure and reliable hoisting and grounding mechanism splits power and optical cables into separate ruggedized short branches equipped with fiber optic outdoor harsh environment connectors and optional power connectors. The connection to the RRH is ensured with fiber jumpers factory terminated with RRH interface (large range available to fit most of RRH in the market) and optional power jumpers. An alternative system with a heat shrink divider instead of a canister is available for use with hybrid cable without drain or shielding.



Features and Benefits

Single cable running to the RRH

Boxless solution limiting esthetical impact, weight and wind load risk

Fastest and easiest to install solution compared to conventional box

Only RRH jumpers need to be changed when equipment is upgraded:

- Easy to maintain
- Future proof design

Base station side cable over-length management very easy due to the presence of a rip cord in the cable

Delivered on wooden drum with ends protected with protective and pulling socks and weatherproof sleeves

Specifications

Hybrid trunk cable

Jacket Material: PVC or LSZH

Fiber Optic: 5mm cable with 2 fibers

Individual Conductors:

Gauge: 6, 8, 10, 12 AWG

Cross Section: 13.3mm²

8.37mm²

5.26mm²

3.31mm²

Bending radius:

Long term - 15x diameter

Short term: 20x diameter

Crush resistance: 2000 N/m

Operating voltage: -48 Vdc

Cable shielding: Copper Tape

Flame retardant: IEC 60032-1

Temperature range

Operating: -40 to 80°C

Installation: -30 to 60°C

Canister system

Number of Power pairs: up to 9

Number of Fiber pairs: up to 48

Canister system

Number of Power pairs: up to 9

Number of Fiber pairs: up to 48



Industry Compliance

OFNR/FT-4 and IEEE Flammability

RoHS compliant

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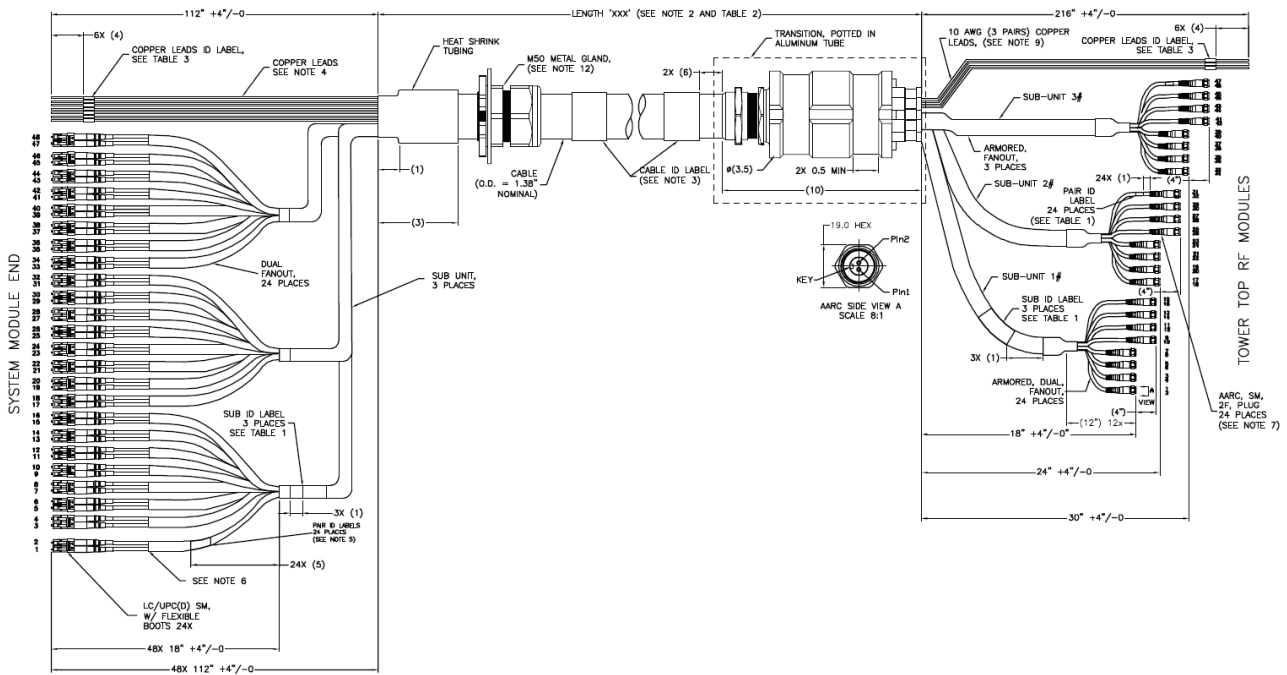
Applications

FTTA

Outdoor Areas

Wireless

Industrial



Ordering Information

Part Number

Description

942-98xxxx-xxxx

CUSTOMER SPECIFIC, CALL FOR DETAILS

*Please call customer service for additional configurations

Hybrid Trunks with Distribution Box

Amphenol's hybrid trunk solutions with distribution box offer fiber optic and power connectivity in a single cable with up to 48 fiber pairs and 18 copper conductors available.

A single hybrid trunk enables connectivity to a distribution box available in many configurations with DC breaker and/or surge protection devices.

The hybrid trunk with distribution box is the best choice for connectivity for rooftop wireless sites where access to the distribution box is possible.

DC breakers enable the installer to switch off any single RRH during installation or maintenance operation without having to access the power supply rack usually located on the ground.

Amphenol's hybrid trunk with distribution box is designed to be the easiest and fastest to install box- solution on the market. The box is delivered preassembled, ready to connect to any RRH with fiber optic and power jumpers.



Features and Benefits

Single cable with box solution supporting several RRH units

Only RRH jumpers need to be changed when equipment is upgraded:

- Easy to maintain
- Future proof design

Available in configurations up to 48 fiber pairs with LC duplex connectors on both sides

Singlemode and multimode fiber available

Available in configurations up to 18 power conductors in a variety of cross sections

Factory terminated assemblies provide reliable performance

Factory preassembled box with DC breakers and/or surge protection device, DC terminal blocks, cable gland, grommets, LC duplex adapters

The box is delivered with all necessary accessories, such as mounting bracket and labelling, to enable easy and fast installation in the field

Hassle free cable length management due to the presence of a rip cord in the cable

Specifications

Hybrid trunk cable

Jacket Material: PVC or LSZH

Fiber Optic: 5mm cable with 2 fibers

Individual Conductors:

Gauge: 6, 8, 10, 12 AWG

Cross Section: 13.3mm²

8.37mm²

5.26mm²

3.31mm²

Bending radius:

Long term - 15x diameter

Short term: 20x diameter

Crush resistance: 2000 N/m

Operating voltage: -48 Vdc

Cable shielding: Copper Tape

Flame retardant: IEC 60032-1

Temperature range

Operating: -40 to 80°C

Installation: -30 to 60°C

Distribution Box

Up to 18 power conductor capacity

1 to 48 fiber capacity

Dimension: 16"x14"x7" (other sizes available)

Industry Compliance

IP67 Water and Dust Ingress Protection

UL Listed enclosure

Meets NEMA-4X requirements

Connectors are mechanically and optically intermateable with industry standard connectors and adapters and

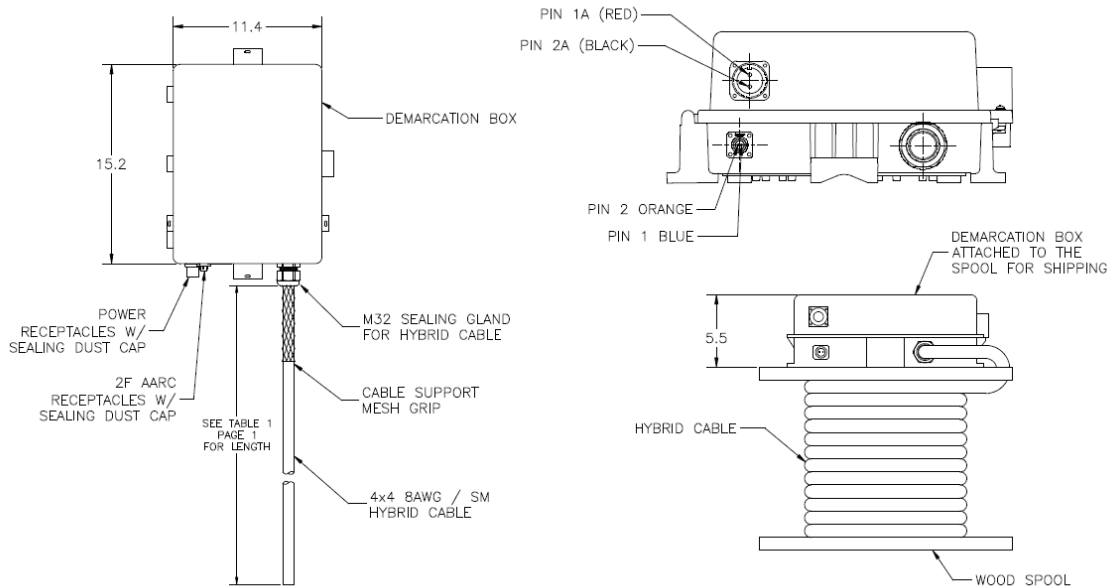
Applications

FTTA

Outdoor Areas

Wireless

Industrial



Ordering Information

Part Number

Description

942-98658-10025 HYBRID TRUNK, 48F, 6CX10AWG, 25M

943-99786-10030 HYBRID TRUNK, MM, 24F, 6CX8AWG, 30M

942-98657-10050 HYBRID TRUNK, SM, 24F, 6CX8AWG, 50M

*Please call customer service for additional configurations

Power Trunks Direct Connect

Amphenol's direct connect power trunk solutions offer discrete power connectivity for wireless infrastructure applications, with up to 18 copper conductors of various sizes available.

A single power trunk enables direct connectivity to several RRH's without the need for a tower-top demarcation box.

A metal canister design provides a secure and reliable hoisting and grounding mechanism.

Amphenol's power trunks are rated for IP67 water and dust protection, making them capable of performing in the toughest environments.



Features and Benefits

Single cable solution supporting several RRH units

Available in configurations up to 18 power conductors

Available in a variety of AWG sizes: 4AWG, 6AWG, 8AWG, 10AWG, 12AWG. Other sizes upon request

Factory terminated assemblies provide reliable performance

Suitable for Harsh Environment applications

Future-proof design (only RRH jumpers need to be changed when equipment is upgraded)

Specifications

Power trunk cable
Jacket Material: PVC or LSZH

Individual Conductors:
Gauge: 6, 8, 10, 12 AWG
Cross Section: 13.3mm²
8.37mm²
5.26mm²
3.31mm²

Bending radius:
Long term - 15x diameter
Short term: 20x diameter

Crush resistance: 2000 N/m

Operating voltage: -48 Vdc

Cable shielding: Copper Tape

Flame retardant: IEC 60032-1

Temperature range
Operating: -40 to 80°C
Installation: -30 to 60°C

Canister system
Number of Power pairs: up to 9
Number of Fiber pairs: up to 48

Canister dimension:
Varies per configuration

Canister Material:
Anodized aluminum



Industry Compliance

OFNR/FT-4 and IEEE Flammability

RoHS compliant

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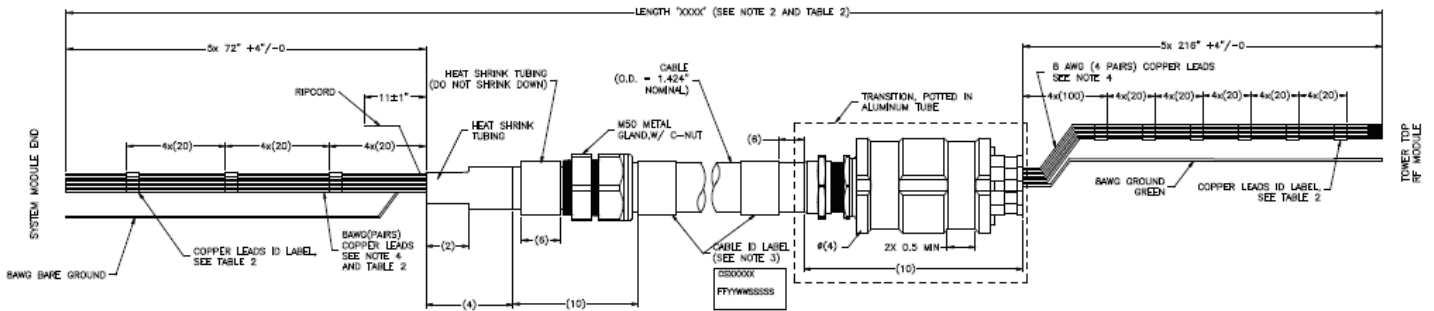
Applications

FTTA

Outdoor Areas

Wireless

Industrial



Ordering Information

Part Number Description

941-99024-10050	POWER TRUNK, 4CX8AWG, 50m
941-99023-10025	POWER TRUNK, 8CX10AWG, 25m
941-99022-10050	POWER TRUNK, 12CX8AWG, 50m

*Please call customer service for additional configurations

Power Trunks with Distribution Box

Amphenol's power trunk solutions with distribution box offer fiber optic and power connectivity in a single cable with up to 18 copper conductors available.

A single power trunk enables connectivity to a distribution box available in many configurations with DC breaker and /or surge protection devices.

The power trunk with distribution box is the best choice for connectivity for rooftop wireless sites where access to the distribution box is possible.

DC breakers enable the installer to switch off any single RRH during installation or maintenance operation without having to access the power supply rack usually located on the ground. Amphenol's power trunk with distribution box is designed to be the easiest and fastest to install box solution on the market.

The box is delivered preassembled, ready to connect to any RRH with power jumpers.



Features and Benefits

Single cable with box solution supporting several RRH units

Only RRH jumpers need to be changed when equipment is upgraded:

- Easy to maintain
- Future proof design

Available in configurations up to 18 power conductors in a variety of cross sections

Factory terminated assemblies provide reliable performance

Factory preassembled box with DC breakers and/or surge protection device, DC terminal blocks, cable gland, grommets, LC duplex adapters

The box is delivered with all necessary accessories, such as mounting bracket and labelling, to enable easy and fast installation in the field

Hassle free cable length management due to the presence of a rip cord in the cable

Specifications

Distribution Box

Up to 18 power conductor capacity

Dimension: 16"x14"x7" (other sizes available)

Material: Polycarbonate

Color: Gray

Ambient temperature range:
-30 to +129°C

Halogen free (optional)

Circuit breaker optional: C20A, C32A

Surge protection device optional:
SPD type 1+2 or type 2

Reconfigurable layout

Impact resistance: UL-746C

UV resistant: UL 1581 Sec. 1200

Material flammability rating: UL-94

Power trunk cable
Jacket Material: PVC or LSZH

Individual Conductors:
Gauge: 6, 8, 10, 12 AWG
Cross Section: 13.3mm²
8.37mm²
5.26mm²

Industry Compliance

IP67 Water and Dust Ingress Protection

Meets NEMA-4X requirements

UL Listed enclosure

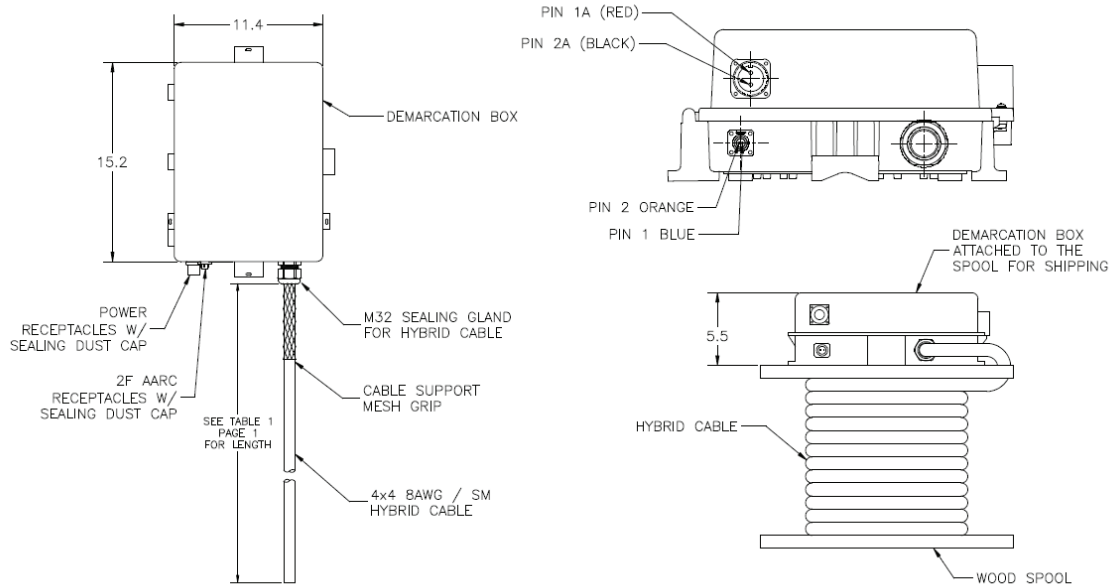
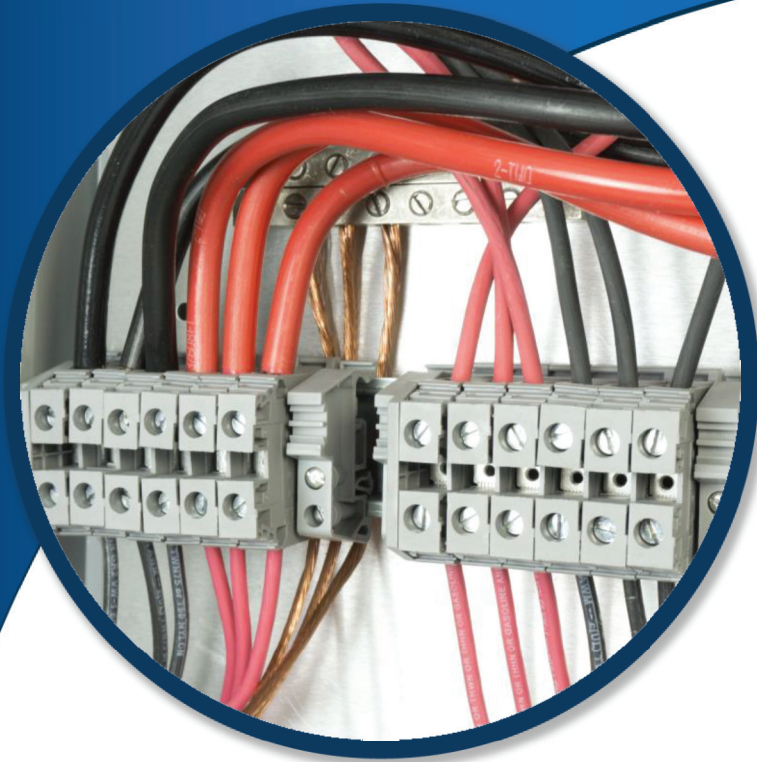
Applications

FTTA

Wireless

Outdoor Areas

Industrial



Ordering Information

Part Number	Description
941-99001-10050	POWER TRUNKS, 12X8AWG, 50M
941-99006-10050	POWER TRUNKS, 8X8AWG, 50M
941-99014-10050	POWER TRUNKS, 4X8AWG, 50M

*Please call customer service for additional configurations

Drop Assemblies

Amphenol's H-Connector assemblies provide a robust and sealed connection solution for fiber to the home (FTTH) connectivity.

The H-Connector incorporates an SC/APC type connection within a slim, sealed, threaded polymer housing allowing easy connection to either a panel mounted receptacle or in-line extension cable.

Standard indoor SC/APC connectors mate to the adapter providing a common interface to mate with optical systems within an enclosure or Network Interface Device (NID).

Available with flat drop or traditional round style OSP cables, the H-Connector provides an ideal solution for direct burial, conduit or arial installations.



Features and Benefits

Factory terminated assemblies provide reliable performance

Plug dust cap with pulling eye protects connectors during installation

Threaded style coupling

Specifications

Operating Temperature:
-40° to 85°C

> 33 lb. axial cable retention (150N)

Cable Diameter Range:
4.8mm to 7mm

Insertion Loss:
≤ 0.35dB typical

Return Loss:
≤ -55dB

Applications

FTTH

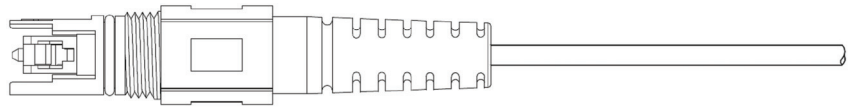
FTTA

Outdoor Areas

Harsh Environment

Industry Compliance

Connectors are mechanically and optically intermateable with industry standard connectors and adapters and conform to TIA/EIA, IEC, and Telcordia specifications



Ordering Information

Part Number	Description
942-98468-10001	PIGTAIL, H-CONNECTOR, SM
942-98522-10001	JUMPER, H-CONN PLUG - SC/APC
942-98597-10050	PIGTAIL, H-CONN, S/M, LM3
942-98635-F0150	PIGTAIL, H-CONNECTOR, SM

*Please call customer service for additional configurations

Node Cables

Amphenol's Node Cable Assemblies link optical transport cable to optical processing equipment. This connection is critical and requires an environmental seal between the cable and the node housing.

Amphenol's Node cables utilize a unique stainless steel feed-thru adapter, featuring a patented anti-twist coupling body that eliminates cable twist on installation.

Standard Node assemblies use either an OFNR-rated OSP cable or an armored OSP cable. Its multiple O-rings ensure a fully sealed cable and node.



Features and Benefits

- Available with LC, SC, FC and ST connectors
- Available with a variety of lengths of pigtails
- > 100 lb. Strain Relief
- Stainless Steel fitting for added strength and environmental protection
- Threaded metal coupling nut for maximum retention
- Threaded style coupling
- Singlemode and Multimode versions

Specifications

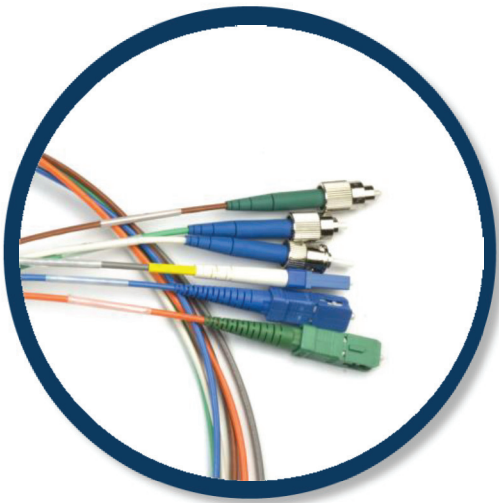
- Insertion Loss:
 - ≤ 0.15dB typical, S/M
 - ≤ 0.25dB typical, M/M
- Return Loss:
 - ≤ -55dB SM Ultra Polish (UPC)
- Operating temperature:
 - 40 to +85
- 2 to 24 fiber/conductor capacity
- Operating Temperature:
 - 40 to +80°C

Applications

- CATV
- Outdoor Areas
- Harsh Environment

Industry Compliance

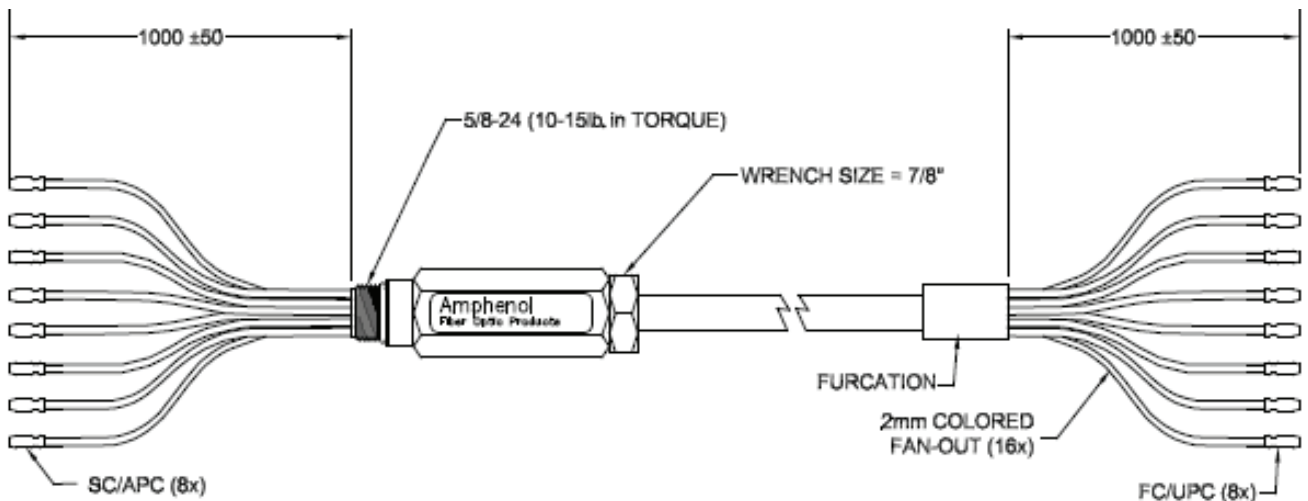
- RoHS compliant



Ordering Information

Part Number	Description
962-11220-01030	PIG, 4F SC/UPC OSP OFNR, 1M, BO 30M
962-11320-01031	PIG, 6F SC/UPC OSP OFNR, 1M BO, 31M
962-12120-63030	PIG, 2F SC/APC OSP OFNR, 63CM BO, 30M

*Please call customer service for additional configurations



OCTIS Cable Assemblies

The versatile OCTIS™ I/O system, using multiple industry standard interfaces, features high speed signal and power, lightning protection, EMI shielding, and ease of installation for outdoor, compact and harsh environments.



Features and Benefits

Transceiver moves outside the box saving board space and providing better thermal management

Lightning protection, EMI shielding features, and a rugged weather proof design makes it ideal for use in harsh environment applications

Blind mate, float mount, color and physical coding features makes it easy to use and avoids mismatching

Use of standard small form factor interfaces enable greater port to port density. This makes it ideal for outdoor applications like small cells, macro cells, smart radios and RRU/RRH

Specifications

OCTIS™ I/O system is suitable for various applications with standard connector interfaces

SFP/SFP+

Signal, PoE (Power over Ethernet)

Power

Hybrid of Signal & Power and RJ45.

Applications

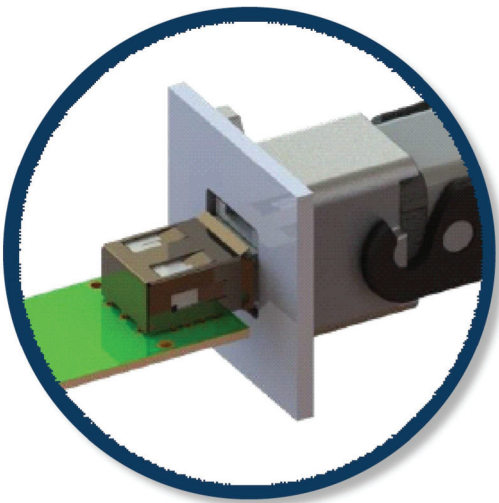
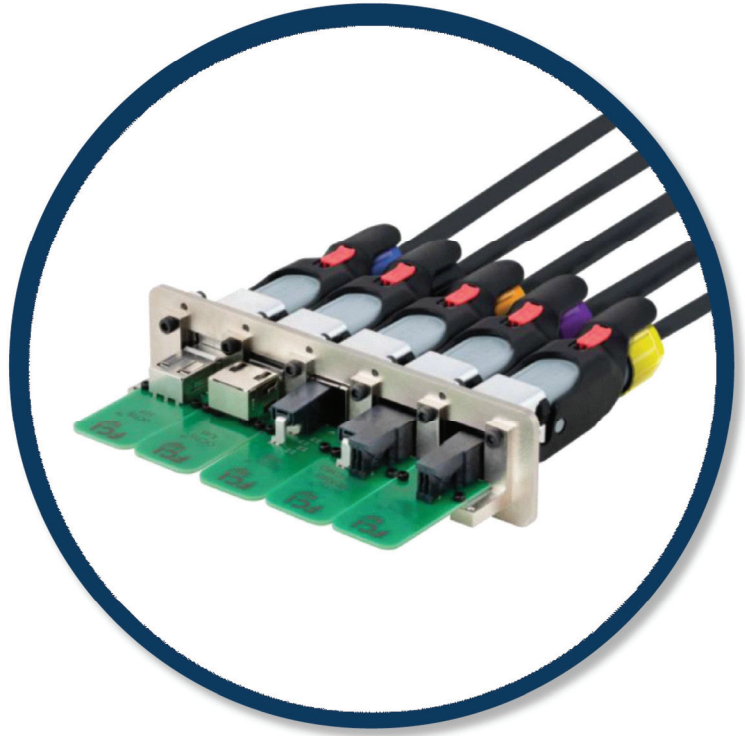
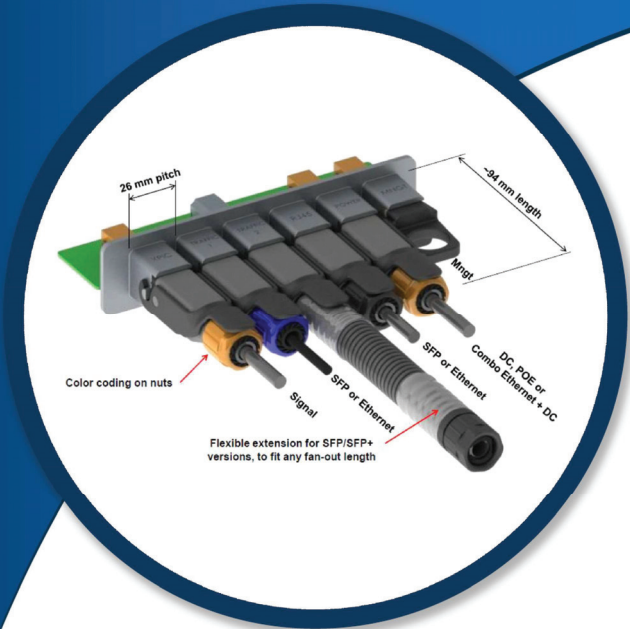
FTTA

Wireless

Small Cells

Industry Compliance

Connectors comply to applicable TIA/EIA and IEC intermateability standards



Ordering Information

Part Number	Description
942-98xxxx-xxxx	CALL AMPHENOL FOR ORDERING INFORMATION

*Please call customer service for additional configurations

RRH Jumpers

Amphenol offers a wide selection of optical jumper cable assemblies for connection to Remote Radio Head (RRH) equipment.

The jumpers are available for multiple sealed optical connectors providing IP67 water and dust protection, and can be terminated at the other end with most industry standard connections, allowing seamless and hassle-free integration with existing hardware.

Amphenol's RRH jumpers are capable of performing in the toughest environments and are exceptionally suited for WiMax, LTE, 3G/4G wireless, and base station applications.



Features and Benefits

- Available in both Singlemode and Multimode fiber types
- Available in various fiber count configurations
- Meets IP67 Specifications
- Easy to Install

Specifications

- Multimode IL:
≤0.35dB Typical;
<0.75dB Max.
- Singlemode IL:
≤0.35dB Typical
<0.75dB Max.
- Return Loss:
≤-45dB
- Operating Temperature:
-40° to 85°C
- Durability:
>50 mating cycles
- Tightening Torque:
6N Maximum
(4N to 5N recommended)
- Cable diameter:
5mm (non-armored)
6mm (armored)
- Rodent-resistant (optional)

Applications

- FTTA
- Wireless

Industry Compliance

Connectors are mechanically and optically intermateable with industry standard connectors and adapters and conform to TIA/EIA, IEC, and Telcordia specifications

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Ordering Information

Part Number	Description
942-XXXXX-XXXXX	CUSTOMER SPECIFIC, CALL FOR DETAILS

*Please call customer service for additional configurations

AARC Plug Assembly

Shown Here: AARC Plug to LC Duplex Assemblies

