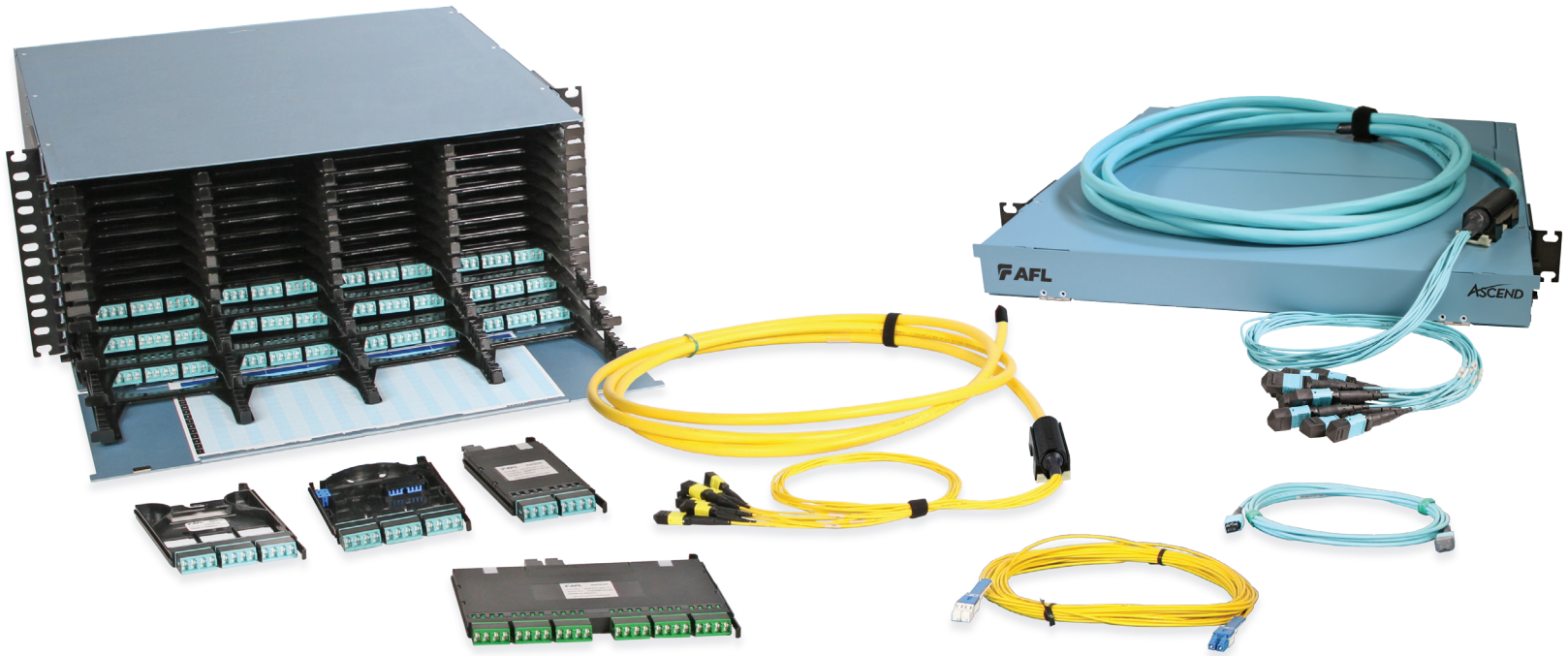
AFL



FIBER MANAGEMENT SYSTEMS

Rack/Wall Mount Units | Optical/xWDM Modules
Connectivity Accessories

ASCEND® Modular Solutions

With increasing bandwidth demands, you must rise above today's standards. AFL's new ASCEND solutions are not just built for what you need today, but what you will need tomorrow. The ASCEND platform is a modular, high-density, rack-mount solution designed for data centers, central offices, headends and structured cabling networks. Whether supporting incremental growth or a full-scale deployment, our ASCEND solutions deliver optimal fiber management in an easy to use, scalable platform.

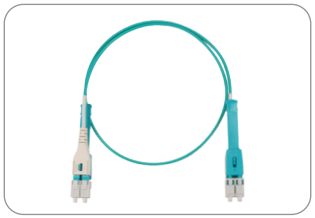
COMPONENTS

The ASCEND platform is comprised of four main pillars:

Fiber Housings


Optical Cassettes


Trunk Cable Assemblies


Patch Cord Assemblies

Each component is specifically engineered to work in conjunction with the other components of the platform resulting in a world-class structured fiber cabling infrastructure.

ASCEND® Housings

ASCEND fiber housings are available in 1RU, 2RU and 4RU sizes with densities of up to 144, 288, and 576 fibers for LC connections, respectively. ASCEND housings are 19" rack-mountable with optional 23" rack-mount kit and constructed using galvannealed steel for an extended service life. The front and rear doors are both hinged on the bottom, while the rear section of the housing cover is removable on the 1RU and 2RU for unobstructed access to all connector interfaces. Integrated routing rings at the front of the trays enable secure and organized routing of patch cords which facilitates efficient Moves, Adds and Changes (MACs). ASCEND housings are compatible with a wide variety of ASCEND optical cassettes which can be mixed and matched within the same enclosure to offer plug-and-play versatility. Cassettes can be independently installed from the front or rear of the housing onto a sliding tray system.

FEATURES

- High Density: 1RU/144F, 2RU/288F and 4RU/576F
- 19" rack-mountable (separate kit required for 23")
- Galvannealed steel construction
- Hinged front and rear doors and removable rear top cover on 1RU and 2RU
- BASE-8, BASE-12 and BASE-24 compatibility
- Interchangeable cassette options for multiple applications
- Cassettes install independently from front or rear of housing
- Trunk cable management area
- Compatible with all ASCEND Cassettes

APPLICATIONS

- Data Centers
- Central Offices
- Headends
- Structured Cabling Systems
- Wavelength Division Multiplexing (WDM)

DENSITIES

ASCEND fiber housings provide highly-manageable densities for LC and MPO connectors (see table at right):

	LC			MPO		
	BASE-12	BASE-8	BASE-24	BASE-12	BASE-8	BASE-24
1RU	144	144	144	864	576	864
2RU	288	288	288	1,728	1,152	1,728
4RU	576	576	576	3,456	2,304	3,456

ASCEND® Housings

ORDERING INFORMATION

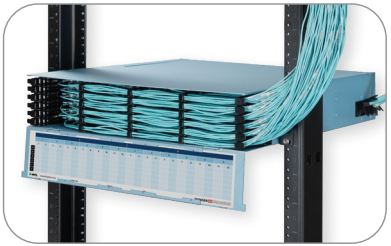
ASCEND – 1RU – 12 – RT

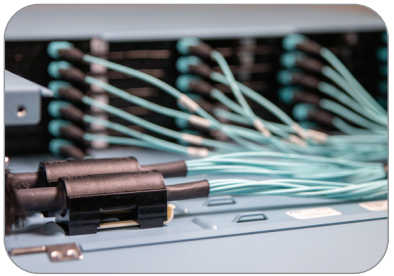
Rack Units
1RU
2RU
4RU

Trays
8 = BASE-8
12 = BASE-12
24 = BASE-12

PANEL TYPE	DESCRIPTION	AFL NO.
BASE-8	ASCEND HOUSING, 1RU, BASE-8 TRAYS	ASCEND-1RU-8-RT
	ASCEND HOUSING, 2RU, BASE-8 TRAYS	ASCEND-2RU-8-RT
	ASCEND HOUSING, 4RU, BASE-8 TRAYS	ASCEND-4RU-8-RT
BASE-12	ASCEND HOUSING, 1RU, BASE-12 TRAYS	ASCEND-1RU-12-RT
	ASCEND HOUSING, 2RU, BASE-12 TRAYS	ASCEND-2RU-12-RT
	ASCEND HOUSING, 4RU, BASE-12 TRAYS	ASCEND-4RU-12-RT
BASE-24	ASCEND HOUSING, 1RU, BASE-24 TRAYS	ASCEND-1RU-24-RT
	ASCEND HOUSING, 2RU, BASE-24 TRAYS	ASCEND-2RU-24-RT
	ASCEND HOUSING, 4RU, BASE-24 TRAYS	ASCEND-4RU-24-RT

ASCEND 1RU front


ASCEND 2RU front


ASCEND 2RU rear

ASCEND® Fanout Cassettes

ASCEND Fanout Cassettes are pre-terminated plug-and-play breakout modules designed to transition a trunk cable into individual connector ports. Available in single-mode and multimode fiber types, Fanout Cassettes feature low-loss MPO connectors and VFL-compatible shuttered LC adapters. All cassettes are offered in BASE-8, BASE-12 and BASE-24 configurations. Fanout Cassettes are compatible with all standard ASCEND housings and can be independently installed from the front or rear onto a sliding tray system. This allows access to individual connections while minimizing disruption to other fiber connections.

FEATURES

- Plug and Play
- BASE-8, BASE-12 or BASE-24 configurations
- SM, MM (OM3) and MM (OM4)
- VFL-compatible shuttered Quad LC adapters
- Low loss MPO connectors
- Compatible with all ASCEND housings
- Install independently from front or rear of housing

APPLICATIONS

- Data Centers
- Central Offices
- Headends
- Structured Cabling Systems

ORDERING INFORMATION (BASE-8 AND BASE-12)

A8 – FC – M1 – LU

Cassette Size
A8 = ASCEND BASE-8
A12 = ASCEND BASE-12

Fanout Cassette

Rear Adapter
M1 = MPO (pinned)

Front Adapters
LU = LC/UPC (SM)
LA = LC/APC (SM)
L3 = LC/PC (OM3)
L4 = LC/PC (OM4)

ORDERING INFORMATION (BASE-24)

A24 – FC – M1 – LU

Cassette Size
A24 = ASCEND BASE-24

Fanout Cassette

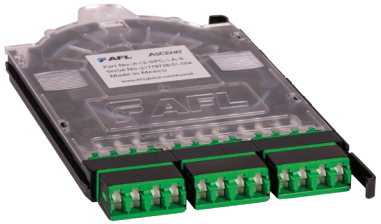
Rear Adapter
M1 = 24F MPO (pinned) x 1
M2 = 12F MPO (pinned) x 2
M3 = 8F MPO (pinned) x 3

Front Adapters
LU = LC/UPC (SM)
LA = LC/APC (SM)
L3 = LC/PC (OM3)
L4 = LC/PC (OM4)

ASCEND® Splice Cassettes

ASCEND Splice Cassettes include 250 micron preterminated single fiber pigtails, or one SpiderWeb Ribbon® (SWR®) pigtail, that are loaded within the cassette and can be spliced directly to loose (or ribbon) fiber cable. All Splice Cassettes feature VFL-compatible shuttered LC adapters with up to 12-fiber capacity. Available in single-mode and multimode fiber types, cassettes leverage a snap-in splice sleeve cradle to securely manage both single and ribbon fiber arrangements. A clear, removable cover allows for easy fiber viewing and access.

Splice Cassettes are compatible with all BASE-12 ASCEND housings and can be independently installed easily from the front or rear onto a sliding tray system. This allows access to individual connections while minimizing disruption to other fiber connections.



FEATURES

- Up to 12-fiber interconnection capacity
- SM, MM (OM3) and MM (OM4)
- 250 µm color-coded single fibers or SWR options
- VFL-compatible shuttered Quad LC adapters
- Clear, removable cover for viewing and access
- Inventive splice sleeve cradle
- Organized fiber routing
- BASE-12 configurations only
- Install independently from front or rear of housing

APPLICATIONS

- Data Centers
- Central Offices
- Headends
- Structured Cabling Networks

ORDERING INFORMATION

A12	–	SPC	–	LU	–	S
Cassette Size		**Splice Cassette**		**Adapter**		**Fiber Arrangement**
A12 = ASCEND BASE-12				LU = LC/UPC (SM) LA = LC/APC (SM) L3 = LC/PC (OM3) L4 = LC/PC (OM4)		S = Stranded Pigtail R = SWR Pigtail

ASCEND® Patch Cassettes

ASCEND Patch Cassettes are pre-loaded with MPO adapters or VFL-compatible shuttered LC adapters. Available in BASE-8 and BASE-12 configurations, Patch Cassettes install easily from the front or rear of any standard ASCEND housing. Each cassette independently mounts onto a sliding tray which allows access to individual connections while minimizing disruption to other fiber connections.

MPO patch cassettes are most frequently used when mating MPO trunk cables to extender trunks or to trunk harnesses, and when connecting MPO trunk cables to MPO jumpers when using QSFP (Quad Small Form-factor Pluggable) transceivers.

LC patch cassettes are used to connect one duplex LC cable assembly to another. When you need to introduce a low number of fibers to the network at various times, this is a convenient plug-and-play solution.

FEATURES

- Plug and Play
- BASE-8 and BASE-12 configurations
- Install independently from front or rear of housing
- Compatible with all ASCEND housings
- Standard Duplex MPO or VFL-compatible shuttered Quad LC adapters

APPLICATIONS

- Data Centers
- Central Offices
- Headends
- Structured Cabling Networks

ORDERING INFORMATION

A8 – **PC** – **LU**

Cassette Size

A8 = ASCEND BASE-8
A12 = ASCEND BASE-12

Patch Cassette

Adapters

LU = LC/UPC (SM)
LA = LC/APC (SM)
L3 = LC/PC (OM3)
L4 = LC/PC (OM4)
M1 = MPO

ASCEND® Conversion Cassettes

BASE-24 to BASE-8 Cassette

BASE-12 to BASE-8 Cassette (Single Circuit)

AFL's Conversion Cassettes provide an effective solution to transition from one BASE platform to another. The cassettes fully utilize each fiber in a BASE-12 or BASE-24 array by breaking out the MTP/MPO adapters at the rear of the cassette into a corresponding number of BASE-8 adapters at the front.

FEATURES

- Accommodates 12 or 24 fiber MTP/MPO connections at the rear of the cassette and effectively transitions to 8 fiber MTP/MPO connections at the front of the cassette
- Compatible with all ASCEND Housings and installed easily from the front or rear of a corresponding BASE-8 or BASE-12 tray

APPLICATIONS

- Data Centers
- Central Offices
- Headends
- Structured Cabling Networks

ORDERING INFORMATION

CATEGORY	DESCRIPTION	AFL NO.
BASE–24 TO BASE-8 CONVERSION CASSETTE OPTIONS		
BASE-8	ASCEND-8 CONVERSION CASSETTE, BASE-8, 24X1 MPO REAR, 8X3 MPO FRONT, 1 CIRCUIT, SM	A8-CC-24X1-8X3-1-1
	ASCEND-8 CONVERSION CASSETTE, BASE-8, 24x1 MPO REAR, 8X3 MPO FRONT, 1 CIRCUIT, OM3	A8-CC-24X1-8X3-1-3
	ASCEND-8 CONVERSION CASSETTE, BASE-8, 24X1 MPO REAR, 8X3 MPO FRONT, 1 CIRCUIT, OM4	A8-CC-24X1-8X3-1-4
BASE-12 TO BASE-8 CONVERSION CASSETTE OPTIONS		
BASE-12	ASCEND-12 CONVERSION CASSETTE, BASE-12, 12X2 MPO REAR, 8X3 MPO FRONT, 1 CIRCUIT, SM	A12-CC-12X2-8X3-1-1
	ASCEND-12 CONVERSION CASSETTE, BASE-12, 12X2 MPO REAR, 8X3 MPO FRONT, 1 CIRCUIT, OM3	A12-CC-12X2-8X3-1-3
	ASCEND-12 CONVERSION CASSETTE, BASE-12, 12X2 MPO REAR, 8X3 MPO FRONT, 1 CIRCUIT, OM4	A12-CC-12X2-8X3-1-4
	ASCEND-12 CONVERSION CASSETTE, BASE-12, 12X2 MPO REAR, 8X3 MPO FRONT, 2 CIRCUIT, SM	A12-CC-12X2-8X3-2-1
	ASCEND-12 CONVERSION CASSETTE, BASE-12,12X2 MPO REAR, 8X3 MPO FRONT, 2 CIRCUIT, OM3	A12-CC-12X2-8X3-2-3
	ASCEND-12 CONVERSION CASSETTE, BASE-12, 12X2 MPO REAR, 8X3 MPO FRONT, 2 CIRCUIT, OM4	A12-CC-12X2-8X3-2-4

ASCEND® Tap Cassettes

BASE-8 Tap Cassette – Front and Rear Access
MPO Rear Input
LC Input/Output/Tap

BASE-12 Tap Cassette – Total Front Access
LC Input/Output/Tap

BASE-12 Tap Cassette – Front and Rear Access
MPO Rear Input/Output Front LC Tap ports

AFL's Tap Cassettes enable access points for monitoring live traffic signals in any fiber optic network. Available with a variety of options to accommodate different split ratios for tap/pass thru and input/output configurations, it is quick and easy to tap and route network signals for any application.

FEATURES

- Elite MPO connectors and adapters
- LC Shuttered Adapters
- Available with 50/50 and 30/70 Split Ratios to accommodate various Tap/Pass Thru requirements
- Installs into all ASCEND Housings from the front or rears

APPLICATIONS

- Data Centers
- Central Offices
- Headends
- Structured Cabling Networks

ASCEND® Tap Cassettes

ORDERING INFORMATION

CATEGORY	DESCRIPTION	AFL NO.
50/50 (TAP/PASS THRU) SPLIT RATIO CONFIGURATIONS		
BASE-8	ASCEND TAP CASSETTE, BASE-8, SM, MTP FRONT, MTP REAR, 50% TAP SPLIT, SINGLE	A8-TC-1-1-XXX-50-1
	ASCEND TAP CASSETTE, BASE-8, SM, LC/UPC FRONT, MTP REAR, 50% TAP SPLIT, SINGLE	A8-TC-1-2-ULC-50-1
	ASCEND TAP CASSETTE, BASE-8, SM, LC/APC FRONT, MTP REAR, 50% TAP SPLIT, SINGLE	A8-TC-1-2-ALC-50-1
	ASCEND TAP CASSETTE, BASE-8, SM, LC/UPC FRONT, 50% TAP SPLIT, SINGLE	A8-TC-1-3-ULC-50-1
	ASCEND TAP CASSETTE, BASE-8, SM, LC/APC FRONT, 50% TAP SPLIT, SINGLE	A8-TC-1-3-ALC-50-1
	ASCEND TAP CASSETTE, BASE-8, MM, MTP FRONT, MTP REAR, 50% TAP SPLIT, SINGLE	A8-TC-4-1-XXX-50-1
	ASCEND TAP CASSETTE, BASE-8, MM, LC/PC FRONT, MTP REAR, 50% TAP SPLIT, SINGLE	A8-TC-4-2-PLC-50-1
	ASCEND TAP CASSETTE, BASE-8, MM, LC/PC FRONT, 50% TAP SPLIT, SINGLE	A8-TC-4-3-PLC-50-1
BASE-12	ASCEND TAP CASSETTE, BASE-12, SM, MTP FRONT, MTP REAR, 50% TAP SPLIT, SINGLE	A12-TC-1-1-XXX-50-1
	ASCEND TAP CASSETTE, BASE-12, SM, LC/UPC FRONT, MTP REAR, 50% TAP SPLIT, SINGLE	A12-TC-1-2-ULC-50-1
	ASCEND TAP CASSETTE, BASE-12, SM, LC/APC FRONT, MTP REAR, 50% TAP SPLIT, SINGLE	A12-TC-1-2-ALC-50-1
	ASCEND TAP CASSETTE, BASE-12, SM, LC/UPC FRONT, 50% TAP SPLIT, SINGLE	A12-TC-1-3-ULC-50-1
	ASCEND TAP CASSETTE, BASE-12, SM, LC/APC FRONT, 50% TAP SPLIT, SINGLE	A12-TC-1-3-ALC-50-1
	ASCEND TAP CASSETTE, BASE-12, MM, MTP FRONT, MTP REAR, 50% TAP SPLIT, SINGLE	A12-TC-4-1-XXX-50-1
	ASCEND TAP CASSETTE, BASE-12, MM, LC/PC FRONT, MTP REAR, 50% TAP SPLIT, SINGLE	A12-TC-4-2-PLC-50-1
	ASCEND TAP CASSETTE, BASE-12, MM, LC/PC FRONT, 50% TAP SPLIT, SINGLE	A12-TC-4-3-PLC-50-1

ASCEND® Tap Cassettes

ORDERING INFORMATION

CATEGORY	DESCRIPTION	AFL NO.
30/70 (TAP/PASS THRU) SPLIT RATIO CONFIGURATIONS		
BASE-8	ASCEND TAP CASSETTE, BASE-8, SM, MTP FRONT, MTP REAR, 30% TAP SPLIT, SINGLE	A8-TC-1-1-XXX-30-1
	ASCEND TAP CASSETTE, BASE-8, SM, LC/UPC FRONT, MTP REAR, 30% TAP SPLIT, SINGLE	A8-TC-1-2-ULC-30-1
	ASCEND TAP CASSETTE, BASE-8, SM, LC/APC FRONT, MTP REAR, 30% TAP SPLIT, SINGLE	A8-TC-1-2-ALC-30-1
	ASCEND TAP CASSETTE, BASE-8, SM, LC/UPC FRONT, 30% TAP SPLIT, SINGLE	A8-TC-1-3-ULC-30-1
	ASCEND TAP CASSETTE, BASE-8, SM, LC/APC FRONT, 30% TAP SPLIT, SINGLE	A8-TC-1-3-ALC-30-1
	ASCEND TAP CASSETTE, BASE-8, MM, MTP FRONT, MTP REAR, 30% TAP SPLIT, SINGLE	A8-TC-4-1-XXX-30-1
	ASCEND TAP CASSETTE, BASE-8, MM, LC/PC FRONT, MTP REAR, 30% TAP SPLIT, SINGLE	A8-TC-4-2-PLC-30-1
	ASCEND TAP CASSETTE, BASE-8, MM, LC/PC FRONT, 30% TAP SPLIT, SINGLE	A8-TC-4-3-PLC-30-1
BASE-12	ASCEND TAP CASSETTE, BASE-12,SM, MTP FRONT, MTP REAR, 30% TAP SPLIT, SINGLE	A12-TC-1-1-XXX-30-1
	ASCEND TAP CASSETTE, BASE-12, SM, LC/UPC FRONT, MTP REAR, 30% TAP SPLIT, SINGLE	A12-TC-1-2-ULC-30-1
	ASCEND TAP CASSETTE, BASE-12, SM, LC/APC FRONT, MTP REAR, 30% TAP SPLIT, SINGLE	A12-TC-1-2-ALC-30-1
	ASCEND TAP CASSETTE, BASE-12, SM, LC/UPC FRONT, 30% TAP SPLIT, SINGLE	A12-TC-1-3-ULC-30-1
	ASCEND TAP CASSETTE, BASE-12, SM, LC/APC FRONT, 30% TAP SPLIT, SINGLE	A12-TC-1-3-ALC-30-1
	ASCEND TAP CASSETTE, BASE-12, MM, MTP FRONT, MTP REAR, 30% TAP SPLIT, SINGLE	A12-TC-4-1-XXX-30-1
	ASCEND TAP CASSETTE, BASE-12, MM, LC/PC FRONT, MTP REAR, 30% TAP SPLIT, SINGLE	A12-TC-4-2-PLC-30-1
	ASCEND TAP CASSETTE, BASE-12, MM, LC/PC FRONT, 30% TAP SPLIT, SINGLE	A12-TC-4-3-PLC-30-1

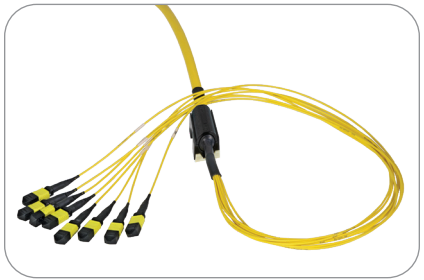
ASCEND® Trunk Cable Assemblies

ASCEND trunk cable assemblies provide a high performance plug-and-play solution for premise installations where space is a premium.

The small-diameter MicroCore® cable construction provides industry leading fiber density and offers the installer many advantages over traditional cable options – higher tolerance to bends during and after installation; requires less space in cable trays, raceways, ducts and conduits; and enables more efficient airflow in congested, high density cabling applications.

ASCEND trunk cable assemblies feature the MTP® PRO* connector which allows for field-reversible polarity and gender with no housing removal, exposed fibers, or loose pins. All Trunk cable assemblies have a predefined breakout length which eliminates guesswork and guarantees a clean and well-organized installation.

ASCEND trunk cable assemblies also include an integrated cable mounting clip, or "Outback Clip (OBC)", which mates directly with the trunk cable management area in the rear of all ASCEND housings. There are two Outback Clip options: the "Rock and Lock" which mates to the housing using a lever, and the "Hook and Loop" which mates to the housing using velcro. These clips eliminate the need for additional cable clamps and securely position the incoming cable while eliminating unwanted stress during installation.



FEATURES

- 12-288 fibers in BASE-8 and BASE-12 configurations
- SM, MM (OM3) and MM (OM4)
- Bend-insensitive fiber (G.657.A1)
- Reduced-diameter MicroCore® cable with 2.0 mm subunits (up to 144)
- Plenum or LSZH options available
- Low loss MTP® PRO* connectors with field-reversible polarity and gender
- Single-mode terminations provided with Elite performance
- Integrated cable mounting clip eliminates the requirement for external clamps for all ASCEND housings
- Pulling eye option available

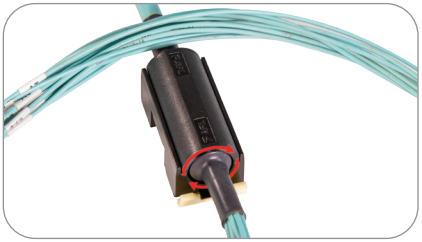
APPLICATIONS

- Data Centers
- Central Offices
- Headends
- Structured Cabling Networks

* MTP® PRO connectors are a trademark of US Conec (For MM connectors only)

ASCEND® Trunk Cable Assemblies

Integrated mounting clip



Cable assembly rotates freely within the mounting clip eliminating the stress associated with standard fixed mounting brackets

ORDERING INFORMATION

CONNECTOR END A		CONNECTOR END B		CABLE TYPE		FIBER COUNT		FIBER TYPE		CABLE LENGTH		PULLING EYE		POLARITY		OBC		BASE SELECTION		PLATFORM
ETF	–	ETF	–	PL	–	012	–	Q	–	0001	–	PE	–	MF	–	RS	–	12	–	ASCEND

CONNECTOR END A / CONNECTOR END B

EEF = MPO-SM Elite, 8 fiber, Female

EEM = MPO-SM Elite, 8 fiber, Male

PFEF = MTP PRO-MM, 8 fiber, Female

PFEM = MTP PRO-MM, 8 fiber, Male

ETF = MPO-SM Elite, 12 fiber, Female

ETM = MPO-SM Elite, 12 fiber, Male

PFTF = MTP PRO-MM, 12 fiber, Female

PFTM = MTP PRO-MM, 12 fiber, Male

XXX = No Connector (Pigtail)
*For connector End B only

CABLE TYPE

Options for Trunk & Pigtail Assemblies:

PL = Plenum MicroCore (250 µm)

GE = LSZH MicroCore (250 µm)

Options for Pigtail Assemblies Only:

GQS = 2.0 mm Plenum MicroCore (SWR)

GES = 2.0 mm LSZH MicroCore (SWR)

FIBER COUNT

008 = 8
012 = 12
024 = 24
048 = 48
072 = 72
096 = 96
144 = 144
288 = 288

FIBER TYPE

Q = Single-mode G.657A BIF
L = Multimode OM3
C = Multimode OM4

CABLE LENGTH

XXXX = Meters
XXXXFT = Feet

PULLING EYE

Blank = No Pulling Eye
PE = Pulling Eye (One End Only)

POLARITY

MF = Method F
MA = Method A

OBC

HM = Hook & Loop OBC, Mixed
HS = Hook & Loop OBC, Small
HL = Hook & Loop OBC, Large
RS = Rock & Lock*, Small
NC = Spool Only
Blank = Standard OBC

*** NOTE –** The "Rock and Lock" mounting clip is only available for trunk cable diameters up to 13 mm and will come standard on trunk cables with fiber counts up to 288. The "Hook and Loop" mounting clip is available by request only.

BASE SELECTION

08 = BASE-8
12 = BASE-12

PLATFORM

ASCEND

ASCEND® Patch Cord Assemblies

ASCEND patch cord assemblies are constructed with AFL's Micro Dual-Link cable and terminated with a field-reversible LC Uniboot connector.

This round cable design, coupled with the Uniboot LC connector, minimizes the front-side cabling footprint and reduces the impact on airflow up and down the rack, and between racks.

In addition to being field-reversible, the Uniboot LC connector also features an extended push-pull latching mechanism to improve finger access in high density applications.

FEATURES

- Uniboot LC connector comes pre-terminated with A to B polarity and is field-reversible
- No tools required
- Extended push-pull latching mechanism
- Round 2.0 mm plenum-rated jacket
- SM, MM (OM3) and MM (OM4)
- Bend insensitive fiber (G.657.A1)

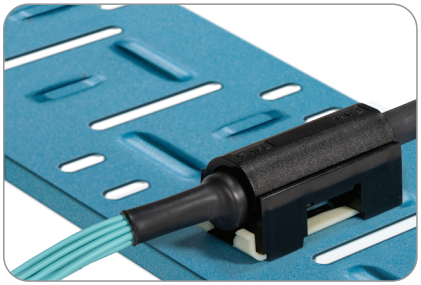
APPLICATIONS

- Data Centers
- Central Offices
- Headends
- Structured Cabling Networks

ORDERING INFORMATION

CONNECTOR END A		CONNECTOR END B		CABLE TYPE		FIBER COUNT		FIBER TYPE		CABLE LENGTH (METERS)
ULS	–	ULS	–	P20D	–	002	–	Q	–	0000
ULS = Single-mode LC Uniboot, Push/ Pull Tab PLS = Multimode LC Uniboot, Push/ Pull Tab		ULS = Single-mode LC Uniboot, Push/ Pull Tab PLS = Multimode LC Uniboot, Push/ Pull Tab		P20D = 2.0 mm Dual Link Plenum		002 = 2		Q = Single-mode G.657.A1 L = Multimode OM3 C = Multimode OM4		XXXX = Meters XXXXFT = Feet

ASCEND® Outback Clip Management (OCM) Bracket



Integrated Mounting of "Outback Clip" on ASCEND trunk cable assemblies provide simple snap and push release tabs

ASCEND trunk cable assemblies provide a high performance plug-and-play solution and come equipped with an integrated mounting clip or "Outback Clip." There are two Outback Clip options: the "Rock and Lock" which mates to the housing using a lever, and the "Hook and Loop" which mates to the housing using velcro. These clips eliminate the need for additional cable clamps and securely position the incoming cable while eliminating unwanted stress during installation.

Trunk cables with Outback Clips are typically mounted directly in the rear of ASCEND Housings. However for applications that require cable mounting on the rack itself, the ASCEND OCM Bracket is designed to efficiently accommodate up to 12 ASCEND trunk cable assemblies.

FEATURES

- Accommodates up to 12 Outback Clips/Trunk Cables
- Rugged steel construction
- Includes rack tap screws

APPLICATIONS

- Data Centers
- Central Offices
- Headends
- Structured Cabling Networks

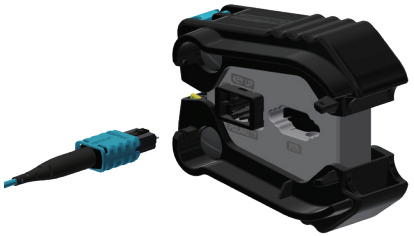
ORDERING INFORMATION

CATEGORY	DESCRIPTION	AFL NO.
ASCEND Accessories	ASCEND, Outback Mounting Clip Bracket, 12 Positions	OCM-12

MTP® PRO Field Tool for Polarity/Pin Change

The unique MTP PRO design is focused on simplicity and reliability to ensure a quick and effective method for pin configuration without the need to remove the housing or handle loose pins. A mated MPO connector pair by definition requires one side to be 'pinned' while the other side is 'unpinned'.

While the MPO format is the standardized multi-fiber optical interconnect in data center structured cabling applications, there are no normative requirements for when cables are to be pinned or unpinned. The rule of thumb informative guidance is that the connector side most likely to remain stationary behind a panel or within an enclosure should be pinned when possible.



FEATURES

- Robust tool for easy pin change process
- Factory color designated pin clamp for easy identification
- Reusable color designated pin exchanger for safe handling of pins
- Field friendly configuration with no risk for damage
- Reliable pin retention force exceeding IEC requirement of 19.6N
- No handling of loose pins
- No housing removal necessary
- Compatible and recommended for use with ASCEND® Trunk Cable Jumper and Pigtail Assemblies whenever gender/ polarity changes are required in the field

ORDERING INFORMATION

DESCRIPTION	AFL NO.
Field Tool, Polarity/Pin, MTP PRO (18814)	CS014748
Pin Exchanger, MTP Pro, Multimode, Female, Aqua, 10 pack (18256)	CS016089
Pin Exchanger, MTP Pro, Single-mode, Female, Yellow, 10 pack (18841)	CS016090
Pin Exchanger, MTP Pro, Multimode, Male, Aqua, 10 pack (18842)	CS016091
Pin Exchanger, MTP Pro, Single-mode, Male, Yellow, 10 pack (18843)	CS016092

SST Fanout Kit

Fanout Kit (Rigid)

Fanout Kit (Flexible)

The SST Fanout Kits are used on cables with 24 to 1,728 fiber counts. These products are intended to directly terminate cables with FUSEConnect® MPO connectors or splicing with cassettes. The furcation tubes allow for 12 fiber (3.0 mm furcation) or 24 fiber (3.8 mm) tails. The SST Fanout kits allows the dense cable technology of the Wrapping Tube Cable to be combined with the ASCEND Splice Cassette to splice fibers with ease and efficiency creating a powerful solution of fiber flexibility and high-density adaptability.

FEATURES

- Designed to easily work with high-density cables
- Transitions trunk cable directly to furcation tubes with 12 or 24 fibers per tube
- Fast installation
- Reduced epoxy
- Small footprint for breakout
- Housing cap organizes furcation tubes
- Mounts directly to frame with proper attachment accessories

ORDERING INFORMATION

PART NUMBER BASE*	FIBER COUNT	TRUNK DIAMETER	FURCATION TUBING DIAMETER	FURCATION LENGTH
SSTS002636XN-24F-040	24	5.0-7.3 mm	3.0 mm	40"
SSTS00463EX#-48F-040	48	4.0-8.0 mm	3.0 mm	
SSTS005637X#-72F-040	72	6.0-12.0 mm	3.0 mm	
SSTS003757X#-72F-040	72	6.0-12.0 mm	3.8 mm	
SSTS006637X#-96F-040	96	6.0-12.0 mm	3.0 mm	
SSTS008637X#-144F-040	144	6.0-12.0 mm	3.0 mm	
SSTS005757X#-144F-040	144	6.0-12.0 mm	3.8 mm	
SSTS00C639X#-288F-040	288	10.0-14.0 mm	3.0 mm	
SSTS008759X#-288F-040	288	10.0-14.0 mm	3.8 mm	
SSTS00E639X#-432F-040	432	10.0-14.0 mm	3.0 mm	
SSTS00G63BX#-864F-040	864	16.0-21.0 mm	3.0 mm	
SSTS00K63CX#-1728F-040	1728	23.0-32.0 mm	3.0 mm	

* (X) needs to be replaced with furcation color option from table at right
(#) needs to be replaced with fitting option from table at right

FIBER COLOR OPTIONS (X)	
Y = Yellow	Single-mode
A = Aqua	OM3/4

FITTING OPTIONS (#)	
R	Rigid
F1	12" Flexible
F2	24" Flexible

Xpress Fiber Management® (XFM®) Patch Panels

The Xpress Fiber Management (XFM) 1RU and 2RU patch panels are a rack mountable interconnect point specifically designed to manage dense fiber applications. Based on the LGX® intermateability platform, the panel is fully compatible with AFL's XFM Optical Cassette, Passive Optical Coupler Modules and Poli-MOD® solutions. This panel offers enhanced management of densities up to 144 fibers using MTP-LC XFM Optical Cassettes (24 fibers).

The XFM 4RU patch panel is fully compatible with AFL's XFM Optical Cassette, Poli-MOD and WDM solutions, offering enhanced management of densities up to 288 fibers using MTP/MPO, single fiber, or patch and splice methodologies. Routing rings on the top and bottom of the front panel provide enhanced cable routing allowing cable assemblies to exit comfortably. This panel can be provisioned with a key lock at the time of order for secure environments.

XFM-4U

FEATURES

- Available in 1RU, 2RU and 4RU sizes
- Aluminum construction
- Textured black powder coat finish
- Universal WECO/TIA 19"/23" rack compatibility
- (12) LGX 118 adapter plate/module mounting positions
- Mounting depth adjustable from flush to 8" in 1" increments

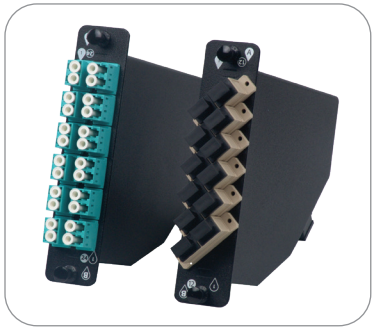
APPLICATIONS

- Data Centers
- Enterprise Networks
- Telecommunications Closets
- Central Offices/Headends

ORDERING INFORMATION

DESCRIPTION	AFL NO.
Xpress Fiber Management 1U Patch Panel, Black, Empty	FM002711-BE
Xpress Fiber Management 2U Patch Panel, Black, Empty	FM002712-BE
Xpress Fiber Management 4U Patch Panel, Black, Empty	FM001090-B
Xpress Fiber Management 4U Patch Panel, Black, Empty, Key Lock	FM001218-B
Kit, Lock, for CON/CNS Panels	FM001318

Xpress Fiber Management® (XFM®) Optical Cassettes



XFM Cassettes

AFL's Xpress Fiber Management Optical Cassette product line is a family of pre-terminated fanout modules that streamline the deployment of optical network infrastructure. The primary function of these products is to break out multi-fiber ribbon connectors to simplex or duplex style connectors for connection to adjacent network elements. The Xpress Fiber Management Optical Cassette solution features low-loss MPO style trunk cable assemblies. These cassettes are available in the industry standard LGX® footprint as well as a selection of Corning Cable Systems™ footprints to support embedded base installations. All modules feature a durable powder coat finish, and are compatible with all 1U-4U XFM platforms.

FEATURES

- 12- and 24- port configurations
- ANSI/TIA/EIA-568-B.3 compliant
- Single-slot LGX packages
- Compatible with LANSystem and WME hardware
- Available in black with rear MPO connection(s)
- SMF, 62.5 µm MMF and 50 µm MMF supported
- SC- and LC-MPO standard configurations
- ST- and FC-MPO configurations available on special order

APPLICATIONS

- Data centers
- LAN, WAN and SAN
- Interoffice cross-connects
- Campus environments

ORDERING INFORMATION—MPO OPTICAL CASSETTES

FIBER COUNT, CONNECTOR OPTION	SINGLE-MODE		MULTIMODE	
	UPC - MPO (MALE, APC)	APC - MPO (MALE, APC)	50 µm LOMMF OM4 PC - MPO (MALE, PC)	62.5 µm OM1 PC - MPO (MALE, PC)
12F, LC	FM000090-B	FM001477-B	FM000273-B	FM000092-B
24F, LC	FM000691-B	FM001653-B	FM000692-B	FM000663-B
12F, SC	FM000087-B	FM001465-B	FM000272-B	FM000089-B
12F, ST	FM000093-B	N/A	FM000274-B	FM000095-B

MPO OPTICAL CASSETTE ACCESSORIES

DESCRIPTION	AFL NO.
145 mm Adapter Bracket	FM001636
Kit DIN mount,LGX 118	FM003394
LGX 118 Wall Mount Bracket	FM000948-B

Xpress Fiber Management® (XFM®) Patch Panels

AFL's XFM-28 Dual Access Module Panel is designed to maximize module capacity via both front and rear access in just four rack units.

In applications where additional rack space is unavailable, the XFM-28 doubles the capacity of traditional 14 slot, front-access only 4RU panels, offering a total of 28 slots to accommodate modules (14 front /14 rear). The panel is lightweight yet robust, with efficient cable management features for routing flexibility.

Front View—Door Open

FEATURES

- Dual access via front and rear panel doors
- Aluminum construction
- Universal WECO/TIA 19"/23" rack compatibility
- (28) LGX® 118 module mounting positions (14 front/14 rear)
- Cable management features include side cable ports and full pass-thru underneath the main bulkhead compartment to allow cable routing from front to back within the panel without eliminating any module positions

APPLICATIONS

- Fiber Connectivity - LGX 118 footprint modules

ORDERING INFORMATION

DESCRIPTION	AFL NO.
XFM-28 Enclosure, 4RU, 19/23"	FM004268

CGM® *PLUS*

The CGM *PLUS* is a high-density rack-mount panel designed for Wavelength Division Multiplexing (WDM) applications. The CGM *PLUS* can hold LGX® and CGM devices interchangeably. The panel features a hinged tray system that extends from the front of the panel and conveniently folds out of the way for unobstructed access to installed modules. Routing rings on the front of the tray provide enhanced fiber management, allowing cable assemblies to enter and exit comfortably.

CGM PLUS

FEATURES

- Galvannealed Steel construction
- Textured white powder coat finish
- 4RU panel height
- Universal 19"/23" rack compatibility
- Hinged tray system for increased access to modules
- Compatible with CGM (Card Guide Module) and LGX products
- Adjustable mounting depth

APPLICATIONS

- Wavelength Division Multiplexing (WDM)
- Headends/Central Offices
- Service Provider
- Telecommunications
- Data Centers

CGM PLUS Open

ORDERING INFORMATION

DESCRIPTION	CAPACITY (LGX)*	CAPACITY (CGM)*	AFL NO.
CGM PLUS, 4RU, Empty, White, Front Access	12	24	FM004158

Coarse WDM (CWDM) Module

AFL's Coarse WDM modules are designed using proven thin-film filter technology providing high isolation, 20nm channel separation and a high level of thermal stability. CWDM modules are available in 2, 4, 8, and 16 channel configurations and are factory assembled in a thin cassette or rugged LGX® cassette with industry standard connector options to meet varying system requirements. An optional 1310 nm Mux/Demux Upgrade Port is available to allow seamless integration of legacy voice, video, and data services.

FEATURES

- 20 nm channel spacing
- 2, 4, 8, and 16 channel configurations
- Most industry standard connectors
- Low insertion loss
- High isolation

APPLICATIONS

- CATV Systems
- Sensor Systems
- 10G Ethernet Systems
- Metro Optical Networks
- Metro Access Networks

ORDERING INFORMATION

C – A – S08 – L01 – ALC0 – Cxx – F – F

Model
C = CWDM

Specification
A = AFL Standard

Channel Count
S04 = Single Circuit, 4 Channels
S08 = Single Circuit, 8 Channels
S12 = Single Circuit, 12 Channels
S16 = Single Circuit, 16 Channels
D04 = Dual Circuit, 4 Channels
D08 = Dual Circuit, 8 Channels

Package Style & Size
L00 = Half Width LGX Module
L01 = Single Wide LGX Module
L02 = Double Wide LGX Module
L03 = Triple Wide LGX Module

Connectors
ALC0 = LC/APC Bulkhead
ASC0 = SC/APC Bulkhead
ULC0 = LC/UPC Bulkhead
USC0 = SC/UPC Bulkhead

Channel
27 = 1271 nm
29 = 1291 nm
31 = 1311 nm
33 = 1331 nm
35 = 1351 nm
37 = 1371 nm
39 = 1391 nm
41 = 1411 nm
43 = 1431 nm
45 = 1451 nm
47 = 1471 nm
49 = 1491 nm
51 = 1511 nm
53 = 1531 nm
55 = 1551 nm
57 = 1571 nm
59 = 1591 nm
61 = 1611 nm

C-Band Excluded Channels
EX = No Exclusions
EA = Excl. 1531
EB = Excl. 1551
EC = Excl. 1571
ED = Excl. 1531 & 1551
EE = Excl. 1551 & 1571
EF = Excl. 1531, 1551 & 1571

Network & Test Options
0 = No Options
1 = Express Port
2 = 1310 Upgrade Port
3 = Express & 1310 Upgrade Ports
C = Dual Test Ports
D = Express & Dual Test Ports
F = Express, 1310 Upgrade & Dual Test Ports

Dense Wave Division Multiplexing (DWDM) LGX Modules

AFL's DWDM LGX modules provide scalable wavelength management for new deployments and network upgrades, providing increased bandwidth over a single common fiber. Passive circuit design utilizes proven thin-film filter technology featuring low insertion loss, high isolation, and superior environmental stability. Modules can be installed in standard LGX chassis and are available with LC bulkheads in select configurations from 4 to 40 channels, including both single and dual circuit package designs. SC bulkhead modules are available in single circuit packages from 4 to 20 channels.

Features

- 50 GHz and 100 GHz ITU-T channel spacing
- Low insertion loss/high isolation
- Epoxy-free optical path
- Express, upgrade and Tx/Rx test ports

Applications

- CATV Systems
- Carrier Infrastructure
- Access Networks
- Small Cell

ORDERING INFORMATION

D – **C** – **1** – **S08** – **L01** – **ALC0** – **Cxx** – **F**

Model
D = Dense WDM

Specification
C = Commercial
A = AFL Standard

ITU Channel Plan
5 = 50 GHz
1 = 100 GHz

Channel Count
S04 = Single Circuit, 4 Channels
D04 = Dual Circuit, 4 Channels
S08 = Single Circuit, 8 Channels
D08 = Dual Circuit, 8 Channels
S10 = Single Circuit, 10 Channels
D10 = Dual Circuit, 10 Channels
S12 = Single Circuit, 12 Channels
D12 = Dual Circuit, 12 Channels
S16 = Single Circuit, 16 Channels
D16 = Dual Circuit, 16 Channels
S20 = Single Circuit, 20 Channels
D20 = Dual Circuit, 20 Channels
S40 = Single Circuit, 40 Channels
D40 = Dual Circuit, 40 Channels

Package Size
L01 = Single Wide LGX Module
L02 = Double Wide LGX Module
L03 = Triple Wide LGX Module
L04 = Quad Wide LGX Module

Connectors
ALC0 = LC/APC Bulkhead
ULC0 = LC/UPC Bulkhead
ASC0 = SC/APC Bulkhead *
USC0 = SC/UPC Bulkhead *

Channel
Replace **xx** with Channel Number listed in DWDM ITU Channels table on last page of spec sheet.

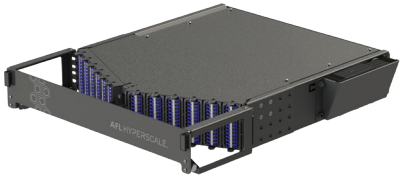
C19 = Channel 19 with 191, 900 GHz and 1562.23 nm center wavelength

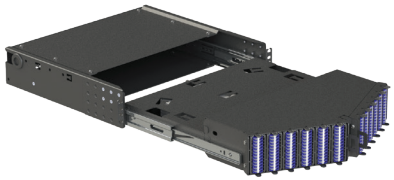
Network and Test Options*
0 = No Options
1 = Express
2 = Upgrade
3 = Express & Upgrade
D = Express & Dual Test
F = Express, Upgrade, & Dual Test

U-Series Front Access V-Panel (FVP)

The U-Series 2RU Front-Access V-Panel (FVP) facilitates rapid, cold-aisle, front-access splicing and patching of up to 288 fibers utilizing SpiderWeb Ribbon® (SWR®) Technology to pre-loaded, high-performance SWR LC pigtails.

The rack-mountable unit is lightweight and sturdy and easy for one person to install. A slide-out modular drawer is dismounted from the panel so splicing can take place on a workbench at a safe working height. Its V-shaped design provides easy finger access and LC quad shuttered adapters help prevent the ingress of dust or debris while additionally providing laser eye safety.





FEATURES

- Slide-out drawer pre-loaded with 24F 200 µm SpiderWeb Ribbon LC Pigtails
- 2RU 19" rack-mount panels are stackable with the possibility of feeding in cable from the left or right side
- Integrated mounting points
- Accommodates 288F within the slide-out drawer, containing 12 x 24F FVP LC Cassettes
- LC quad shuttered adapters help prevent the ingress of dust or debris while also providing laser eye safety
- 288F or 2 x 144F SWR cable mounted from the left or right side
- 6RU option available for the splicing and patching of 864 fibers

APPLICATIONS

- Hyperscale
- Colocation
- Data Halls
- Main Distribution Areas (MDAs)
- Fiber Entrance Facilities

ORDERING INFORMATION

DESCRIPTION	AFL NO.
U-Series 2RU Front Access V Panel Splice Patch BK Premium LC G.657A1 288F (250 µm-pitch Pigtail)	F7HAADBPAX-10AM
U-Series FVP Splice Cassette BK Premium LC SM G.657A1 24F Stub OFNP SWR 250 µm-Pitch MC 4M	A7UD24BPAX-14JF-M4
U-Series 2RU Front Access V Panel Splice Patch BK Premium LC G.657A1 288F (200 µm-pitch Pigtail)	F7HAADBPAX-15AM
U-Series FVP Splice Cassette BK Premium LC SM G.657A1 24F Stub OFNP SWR 200 µm-Pitch MC 4M	A7UD24BPAX-14JW-M4

Fusion Splice Wall Cabinet

This innovative mass-fusion splice wall cabinet is designed for applications in a building entrance facility providing an enclosure to splice outside plant (OSP) cables to inside plant (ISP) cables with a maximum fiber count of 1152 fibers. It features 12 leaf-style trays which allow 24 single-fiber splices per tray and a raceway manifold system which ensures the fiber is protected at all times. The cabinet accommodates a variety of cables from ISP (12 x 24F) to OSP (1 x 288F or 2 x 144F). It can also be used for standard ribbon splicing with 12 x 72F splice trays providing a total fiber count of 864 fibers. When used with SpiderWeb Ribbon® (SWR) cable, splicing is possible with 12 x 96F splice trays providing a total fiber count of 1152 fibers.

FEATURES

- Maximum of up to 288 fibers for single-fiber, 864 fibers for standard ribbon and 1152 fibers for SWR fiber cables
- Single-fiber splice holders are easily interchangeable with ribbon fiber splice holders
- Mounted on wall or installed in a 19" frame
- 14RU cabinet designed to fit a max of 3 units in a 45RU frame
- Fixed cable tie-off features allow for up to O.D. 24 mm for entry/exit cables
- Easy-lift-off cover to access the Splice Tray Modular Backboard
- Security padlock holes secure cover to Splice Tray Modular Backboard
- Cabinet pass-through space allow cable management with multiple splice cabinets

APPLICATIONS

- Building Entrance Facility
- Colocation
- Data Center
- Hyperscale
- Telecommunications

ORDERING INFORMATION

DESCRIPTION	AFL NO.
High Capacity Wall Box 288F Single Splice/864F Standard Ribbon/1152F SWR (12x Splice Trays for 2x12 single fiber splice holder per tray, Rack Mounting Bracket, wall plugs and mounting)	FXHCXXBXXX-02ZZ
ACCESSORIES	
Splice Tray and Splice Holder for Standard Ribbon (cable up to 864F) and SWR (cable up to 1152F), (Pack of 12x Splice Trays for ribbon fiber)	SPT17-12

Dense Wave Division Multiplexing (DWDM) Card Guide Modules (CGM®)

AFL's DWDM CGM modules provide scalable wavelength management for new deployments and network upgrades, providing increased bandwidth over a single common fiber. Passive circuit design utilizes proven thin-film filter technology featuring low insertion loss, high isolation, and superior environmental stability. Modules can be installed in AFL's CGM *Plus* chassis and are available with LC bulkheads in select configurations from 4 to 40 channels. The CGM module space efficient design allows for installation quantity of 24 modules in a single 4RU CGM Plus chassis.

Features

- 50 GHz and 100 GHz ITU-T channel spacing
- Low insertion loss/high isolation
- Epoxy-free optical path
- Express, upgrade and Tx/Rx test ports

Applications

- CATV Systems
- Carrier Infrastructure
- Access Networks
- Small Cell

ORDERING INFORMATION

D	–	C	–	1	–	S08	–	C02	–	ALC0	–	Cxx	–	F
Model		**Specification**		**ITU Channel Plan**		**Channel Count**		**Package Size**		**Connectors**		**Channel**		**Network and Test Options***
D = Dense WDM		C = Commercial A = AFL Standard		5 = 50 GHz 1 = 100 GHz		S04 = Single Circuit, 4 Channels S08 = Single Circuit, 8 Channels S12 = Single Circuit, 12 Channels S16 = Single Circuit, 16 Channels S20 = Single Circuit, 20 Channels S40 = Single Circuit, 40 Channels		C01 = Single Wide CGM C02 = Double Wide CGM C03 = Triple Wide CGM C04 = Quad Wide CGM		ALC0 = LC/APC Bulkhead ULC0 = LC/UPC Bulkhead		Replace **xx** with Channel Number listed in DWDM ITU Channels table on last page of spec sheet. C19 = Channel 19 with 191, 900 GHz and 1562.23 nm center wavelength		0 = No Options 1 = Express 2 = Upgrade 3 = Express & Upgrade D = Express & Dual Test F = Express, Upgrade, & Dual Test

LS Series Patch and Splice Panels

The AFL Fiber Termination Patch and Splice Panels are designed for use as a rack mount interconnect point where termination and connectivity of up to 288 fibers is desired. The panel design is based on a 1, 2, 4 or 5 or rack unit height and is provisioned with up to 12 LGX® compatible mounting positions that can accommodate adapter plates. Standard Fiber Termination Patch Panels are available empty for complete field configuration, half loaded with adapter plates, or stubbed with a factory installed circular premise cable (CPC) or loose tube cable assembly. Standard Fiber Patch and Splice Panels are available empty for complete field configuration, half loaded with adapter plates and splice trays, or loaded with pigtails, adapter plates and splice trays.

4RU Fiber Termination Patch and Splice Panel

FEATURES

- Fits comfortably into new and existing interconnect, cross-connect, customer premise and co-location environments
- Most common connector styles and types available
- Compatible with industry standard equipment frames
- LGX compatible master plate and footprint (118 or 170 mm)
- Modular design
- Provides maximum protection of optical components

APPLICATIONS

- Telecommunications closets
- Data Centers
- Customer Premise
- LAN/WAN Networks
- Central Offices/Headends
- Hubs / Cabinets/Remote Terminals
- FTTH/FTTB Networks

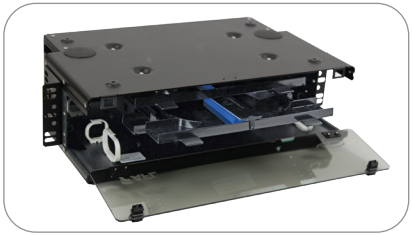
DIMENSIONS

DEPTH (IN)	WIDTH (IN)	HEIGHT (IN)	RACK UNITS	FIBER CAPACITY
13.51	17.00	1.75	1	18/36
13.51	17.00	3.50	2	36/72*
11.00	17.00	7.00	4	72/96/144
11.00	17.00	8.75	5	144/288

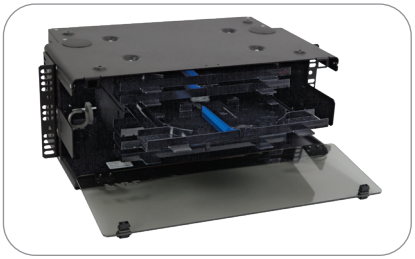
*72 fiber capacity not available in Patch and Splice configuration.

LS Series Optical Splice Shelf

The LightLink LANSystem Optical Splice Shelf is designed to provide a convenient in-rack splicing and interconnection point for Outside Plant (OSP) cable entering a Central Office (CO), Controlled Environmental Vault (CEV), Headend (HE) or customer location. Units are available with three or six STF-48 Telescoping Splice Drawers. Each drawer is capable of handling up to 48 individual single-fused or up to 144 mass-fused fibers, with minimum bend radius routing and protection.



SPL3RU



SPL5RU

FEATURES

- Fits comfortably into new and existing interconnect, cross-connect, customer premise, and co-location environments
- Compatible with industry standard equipment frames
- For in-rack splicing of outside plant cable to connectorized pigtails or riser cable
- Drawers handle up to 48 single-fused or 144 mass-fused fibers
- Cable entry/exit grommet seals
- Durable and scratch resistant power coated antique white finish
- Hinged plexiglass front and rear door
- Spring loaded latches

APPLICATIONS

- Telecommunications closets
- Data Centers
- Customer Premise
- LAN/WAN Networks
- Central Offices/Headends
- Hubs / Cabinets/Remote Terminals
- FTTH/FTTB Networks

DIMENSIONS

MODEL	NO. OF TRAYS	DEPTH (IN)	WIDTH (IN)	HEIGHT (IN)	RACK UNITS	SPLICE CAPACITY
SPL3RU	3	11.00	17.00	5.25	3	144 single, 432 mass
SPL5RU	6	11.00	17.00	8.75	5	288 single, 864 mass

LS Series Ordering Information

PATCH/SPLICE AND FIBER TERMINATION PATCH PANELS

DESCRIPTION	AFL NO.
1RU FIBER TERMINATION PATCH/SPLICE PANEL	
Patch Panel, 1RU, 3-Position LGX®, Black, Empty	FM001038-BE
Splice Tray Kit: Single Fusion 12F, 1RU Patch Panels, Standard Density (1 Splice Tray)	FM002826-1
Splice Tray Kit: Single Fusion 12F, 1RU Patch Panels,High Density (2 Splice Tray)	FM002826-2
Splice Tray Kit: Mass Fusion 12F, 1RU Patch Panels, Standard Density, Ribbon (1 Splice Tray)	FM002826-1R
Splice Tray Kit: Mass Fusion 12F, 1RU Patch Panels, High Density, Ribbon (2 Splice Tray)	FM002826-2R
2RU FIBER TERMINATION PATCH/SPLICE PANEL	
Patch Panel, 2RU, 6-Position LGX, Black, Empty	FM001029-BE
Splice Tray Kit: Single Fusion 12F, 2RU, WME02, WME04, 2 Splice Tray (1 Splice Tray)	FM002826-1
Splice Tray Kit: Single Fusion 12F, 2RU, WME02, WME04, 2 Splice Tray (2 Splice Tray)	FM002826-2
Splice Tray Kit: Single Fusion 12F, 2RU, WME02, WME04, 2 Splice Tray (3 Splice Tray)	FM002826-3
Splice Tray Kit: Single Fusion 12F, 2RU, WME02, WME04, 2 Splice Tray (4 Splice Tray)	FM002826-4
Splice Tray Kit: Mass Fusion 12F, 2RU, WME02, WME04, 2 Splice Tray, Ribbon (1 Splice Tray)	FM002826-1R
Splice Tray Kit: Mass Fusion 12F, 2RU, WME02, WME04, 2 Splice Tray, Ribbon (2 Splice Tray)	FM002826-2R
Splice Tray Kit: Mass Fusion 12F, 2RU, WME02, WME04, 2 Splice Tray, Ribbon (3 Splice Tray)	FM002826-3R
Splice Tray Kit: Mass Fusion 12F, 2RU, WME02, WME04, 2 Splice Tray, Ribbon (4 Splice Tray)	FM002826-4R
4RU FIBER TERMINATION PATCH PANEL	
Patch Panel, 4RU, 12-Position LGX, Black Empty	C211372-BE
4RU FIBER TERMINATION PATCH/SPLICE PANEL	
Patch & Splice Panel, 7RU (4RU+3RU Splice), 12-Position LGX, 3x 48F Splice Tray Position, Black, Empty	C211615-BE
Telescoping Splice Drawer	911442-00-00

OPTICAL SPLICE SHELVES

DESCRIPTION	AFL NO.
SPL3RU	
White, 3RU Optical Splice Shelf—EMPTY	C211777 - W
Black, 3RU Optical Splice Shelf—EMPTY	C211777 - B
White, 3RU Optical Splice Shelf—with 3 telescoping splice drawers	C211781 - W
Black, 3RU Optical Splice Shelf—with 3 telescoping splice drawers	C211781 - B
SPL5RU	
White, 5RU Optical Splice Shelf—EMPTY	C211795 - W
Black, 5RU Optical Splice Shelf—EMPTY	C211795 - B
White, 5RU Optical Splice Shelf—with 6 telescoping splice drawers	C211799 - W
Black, 5RU Optical Splice Shelf—with 6 telescoping splice drawers	C211799 - B
OPTICAL SPLICE SHELF ACCESSORIES	
STF-48 Telescoping Splice Drawer, up to 48 single fused or 144 mass fused splices	911442-00-00
1x8 Universal Core Tube Fiber Routing Kit	FC000008
1x6 Universal Ribbon or Loose Tube Fiber Routing Kit	FC000070

Wall Mount Enclosures (WME)

AFL's wall mount enclosures provide a convenient convergence point for interconnecting and/or splicing in wall mount applications. Provisioned for up to two or four LGX®-compatible adapter plates or optical modules, the enclosure features a well-engineered solution for fiber and cable management on both the ingress and egress openings of the enclosure. Robust steel construction ensures the highest level of protection for sensitive components while integrated roll-formed hinges eliminate possible fiber pinch points while deploying or servicing components within. All WME series enclosures feature discrete access doors for provider and customer access which are independently lockable with a common pad-lock or tube-style keyed lock.

WME-01

FEATURES

- Fits comfortably into new and existing interconnect, cross-connect and co-location environments
- U-shaped cable entry eliminates the need to feed pre-connectorized cables through an inconvenient access port
- Modular design fully compatible with Poli-MOD® products and XFM optical cassettes
- Dual doors with separate locking options for flexibility and security
- Available empty, with adapters, or with adapters, splice trays and pigtails pre-installed
- LGX 118 compatible
- Optional splice tray and holder (ordered separately)
- All major connector types are supported

WME-04 shown empty

ORDERING INFORMATION

Empty shown; consult specification sheet for loaded part numbers

DESCRIPTION	FIBER DENSITY	AFL NO.
Wall Mount Enclosure (WME) with one (1) LGX mounting position	12 to 24	WME01E
Wall Mount Enclosure (WME) with two (2) LGX mounting positions	12 to 24	WME02E
Wall Mount Enclosure (WME) with four (4) LGX mounting positions	24 to 48	WME04E
Wall Mount Enclosure (WME) with twelve (12) LGX mounting positions	24 to 288	WME12E

Optical Entrance Enclosures

The Optical Entrance Enclosures (OEE) are designed to provide a convenient splicing and interconnection location for outside plant cabling entering a Central Office (CO), Controlled Environmental Vault (CEV) or customer location. Each unit is designed to allow the entrance and management of up to 60 cables for splicing and interconnecting. Cables from termination locations and the outside plant are easily installed and managed. Access to individual fiber splices and fiber bundles are made easy by splice tray and fiber management designs.

Optical Entrance Enclosure shown empty

FEATURES

- Manages multiple cable enter and exit facilities
- Each splice tray handles up to 48 single fusion or 144 mass fusion splices
- Enclosures for indoor or outdoor NEMA 3 applications
- Internal ground bar and pass through ground lugs Rated NEMA Type 3

ORDERING INFORMATION

DESCRIPTION	MODEL NO.	AFL NO.
OPTICAL ENTRANCE ENCLOSURE 576 Single Fusion or 1728 Mass Fused Splice Capacity, up to 60 Cable Entry Ports	OEE-288/576	911309-00-05
OPTICAL ENTRANCE ENCLOSURE 720 Single Fusion or 4320 Mass Fused Splice Capacity, up to 60 Cable Entry Ports	OEE-720/1440	911275-00-05

Mini DIN Rail Mounted Enclosure

24 Port ST Loaded Mini DIN Enclosure

FDE-24LC1-P
24F LC Mini DIN enclosure for patching

The Mini DIN Rail Mounted Enclosure's compact design gives it the ideal form factor for installation into densely populated industrial cabinets.

FEATURES

- Small size making it very versatile
- Accommodates up to 12 or 24 x SC, ST or LC duplex adapters
- Ideal for housing pre-terminated loose tube and tight buffered cables
- Top and bottom cable entry to suit installation environment

APPLICATIONS

- Process automation and control
- Intelligent transport system
- Rail signaling and control networks
- Power systems and control
- MTP pre-terminated cabling solutions

ORDERING INFORMATION

FDE	–	12	SC	1	–	S
Fiber DIN Enclosure		**Fiber Count**	**Adapter Type**	**Fiber Type**		**Enclosure Function**
		06[1] 12 24[2]	SC SCA[5] (SM only) LC LCA[5] (SM only) ST	1 – 9/125 µm SM OS1 3 – 50/125 µm MM OM3 4 – 50/125 µm MM OM4 6 – 62.5/125 µm MM OM1		S[3] – Splicing M[2,4] – MTP pre-terminated enclosure P – Patching pre-terminated or direct terminated cables only

NOTES

1. Uses 12 port plates, empty ports are filled with blanking plugs.
2. 24 fiber option for patch (P) and MTP pre-terminated (M) enclosures only.
3. Splicing enclosures include splice tray, protectors and pigtails for 06 and 12 fiber configurations.
4. LC OM3, OM4 and OS1/2 only.
5. SCA and LCA options stand for APC adapter types.

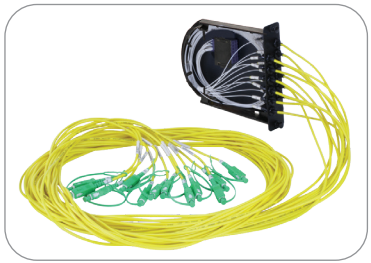
ACCESSORIES

Contact AFL for ordering information on additional accessories to be used with the FDE product line such as pigtails, splicing consumables, termination consumables and pre-tailed fiber optic cable assemblies.

Poli-MOD® Patch and Splice Module

AFL's Poli-MOD is an innovative patch and splice module, which offers an inventive and effective means to accommodate up to 24 fiber interconnections in an industry-standard, single-slot LGX®118 footprint. The new Poli-MOD offers a unique and robust way to secure cable without the need for time-wasting, tie-wrap alternatives. Additionally, the module leverages a creative snap-in splice sleeve cradle to securely manage both single and ribbon fiber arrangements. These features provide the capacity to outfit a standard 4RU rack-mount panel with up to 288-fiber interconnections.

24-Fiber LC/UPC Configuration



DAS Poli-MOD

FEATURES

- 24-fiber interconnection capacity
- LGX 118 compatibility (single-slot module)
- Effective and time-saving cable mounting mechanism (no tie-wraps necessary)
- Inventive splice sleeve cradle
- Available in SC, LC, ST and FC connector arrangements
- Shuttered LC connectors for increased dust protection
- Organized fiber routing
- Fixed solution, no moving parts
- Multi-directional cable entry access
- DIN rail mountable (with DIN Mount Kit)

APPLICATIONS

- Telecommunications Closets
- Data Centers
- Customer Premise
- Local Area Networks
- Wide Area Networks
- Central Offices
- Hub Sites
- Cabinets
- Remote Terminals
- Distributed Antenna Systems (DAS)

Poli-MOD Patch and Splice Module

ORDERING INFORMATION

Example: PM-L-12-ASC-0-S-01

PM	–	L	–	12	–	ASC	–	0	–	S	–	01
		Configuration		**Fiber/Connector Count**		**Connector Type[3]**		**Fiber Type**		**Fiber Arrangement**		**Packaging**
		E = Empty (Splicing Only) H = Half Loaded (Adapter Plate only) L = Loaded (Adapter Plate & Pigtails) D = DAS Poli-MOD[1]		06 = 6 Fibers/Connectors 12 = 12 Fibers/Connectors 24 = 24 Fibers/Connectors[2] XX = Empty		ASC = Angle-Polished SC USC = Ultra-Polished SC PSC = Multimode SC ALC = Angle-Polished LC ULC = Ultra-Polished LC PLC = Multimode LC UST = Ultra-Polished ST PST = Multimode ST AFC = Angle-Polished FC UFC = Ultra-Polished FC PFC = Multimode FC XXX = Empty		0 = Single-mode (G.657.A1 BIF) 1 = 62.5 µm (OM1) 2 = 50 µm (OM2) 3 = 50 µm (OM3) 4 = 50 µm (OM4) X = Empty		S = Single/Standard R = Ribbon 3 = 3 mm, 3 meter DAS W = SpiderWeb Ribbon® (SWR®) X = No Fiber (Half Loaded or Empty)		01 = 1 Poli-MOD per box* 06 = 6 Poli-MODs per box 12 = 12 Poli-MODs per box

1. DAS Poli-MOD requires specialty packaging and is packaged as "1 Poli-MOD per box" ONLY.
2. 24 Fibers/Connectors are only available in a LC Duplex configuration.
3. Angle and Ultra-Polished connector types are only available with single-mode fiber configurations.

CONNECTOR COLOR CODES

CONNECTOR	COLOR
APC (Angled Polish Connector)	Green
UPC (Ultra Polish Connector)	Blue
PC-OM1	Beige
PC-OM2	Black
PC-OM3 / PC-OM4	Aqua

POLI-MOD KITS/ACCESSORIES

DESCRIPTION	AFL NO.
Poli-MOD Cable Mounting Clip Kit	FM003053
Poli-MOD Spiral Wrap Kit	FM003280
Poli-MOD Splice Chip Kit with 24 Splice Sleeves	FM003711
Fusion Splice Sleeve, FP-03, 40 mm	S000206
Adapter Bracket for Mounting Single Poli-MOD, angled	FM000948-B
Adapter Bracket for Mounting Single Poli-MOD, flat	FM003589-B
Corning CCH and PCH 145 mm Adapter Bracket	FM001636
DIN Mount Kit, LGX® 118	FM003394

Connectivity Accessories – Adapter Plates

LightLink Adapter Plates add versatility to the AFL's panel product line. Adapter plates are compatible with industry standard platforms allowing for easy upgrades of existing panels. Adapter Plates come preloaded and are available in 6, 8 and 12 pack versions.

LC ST FC SC

FEATURES

- Metal Plate with Nylatches
- Polyurethane powder coated (CO white or Black)
- LGX® compatible

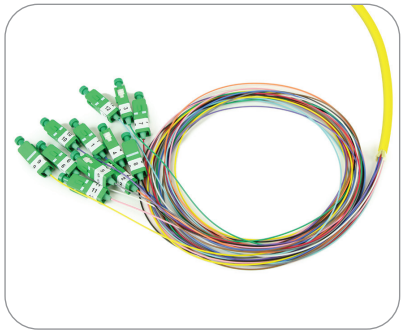
ORDERING INFORMATION—TRUNK CABLE ASSEMBLIES

CAPACITY	ADAPTER COLOR	PLATE COLOR	AFL NO.
LC Adapter Plates			
12F (6 duplex)	Blue (SM, UPC)	Black	FM003465
	Green (SM, APC)	Black	FM003108
	Beige (MM, PC)	Black	FM003110
	Aqua (MM 10G, PC)	Black	FM003112
24F (12 duplex)	Blue (SM, UPC)	Black	FM003208
	Aqua (MM 10G, PC)	Black	FM003206
SC Adapter Plates			
6F (6 simplex)	Blue (SM, UPC)	Black	FM003100
	Green (SM, APC)	Black	FM003094
	Beige (MM, PC)	Black	FM003096
12F (6 duplex)	Blue (SM, UPC)	Black	FM003122
	Green (SM, APC)	Black	FM002633
	Beige (MM, PC)	Black	FM003293
	Aqua (MM 10G, PC)	Black	FM003295

CAPACITY	ADAPTER COLOR	PLATE COLOR	AFL NO.
FC Adapter Plates			
6F (6 simplex)	Chrome (SM/MM, ZR)	Black	FM003420
12F (12 simplex)	Chrome (SM/MM, ZR)	Black	FM000284
ST Adapter Plates			
6F (6 simplex)	Chrome (SM ZR)	Black	FM003104
12F (12 simplex)	Chrome (SM, ZR)	Black	FM003126

Connectivity Accessories – Pigtail Assemblies for Patch/Splice Panels

AFL's pigtail assemblies help eliminate labor-intensive field termination, yet guarantee reliable performance. Featuring a unified construction allowing for easy fiber identification and rapid installation, these assemblies are built to exceed all TIA and Telcordia requirements.



SPLICER CONNECTOR SPECIFICATIONS

PARAMETER	VALUE
Cable Type	250 µm, 900 µm
Insertion Loss	< 0.15 dB
Return Loss	> 40 dB
Operating Temperature (900 µm Fiber Coating)	
PVC Nylon TPEE	-40°C to 75°C 0°C to 75°C -25°C to 75°C

JUMPER SPECIFICATIONS

PARAMETER		VALUE						
		LC	SC	ST	FC	LC-APC	SC-APC	MT
Insertion Loss								
SM	max	0.3	0.3	0.5	0.3	0.3	0.5	0.75
MM	max	0.5	0.5	0.5	0.5			0.6
Return Loss								
SM	max	-55.0 dB	-55.0 dB	-55.0 dB	-55.0 dB	-65.0 dB	-65.0 dB	-55.0 dB
MM	max	-20.0 dB						-20.0 dB
Cable Bend Radius								
Standard	min	<30 mm						
Bend Insensitive	min	<15 mm						
Durability		200 cycles						500 cycles
Operating Temperature		-40°C to +85°C						
Storage Temperature		-40°C to +85°C						

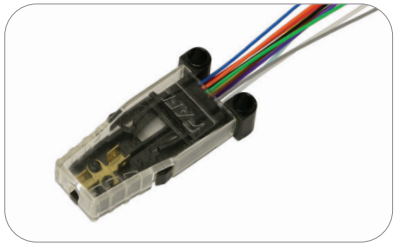
Connectivity Accessories – Pigtail Assemblies for Patch/Splice Panels

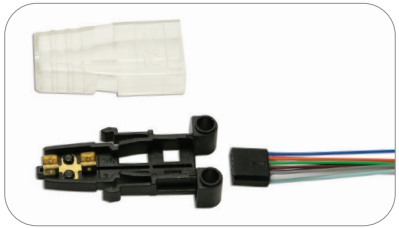
ORDERING INFORMATION

POLISH	FIBER TYPE	CONNECTOR INTERFACE AFL NO.		
		SC	ST	LC
CPC Pigtail Kits, 3 Meter, 12-Fiber				
APC	SMF	C152906-0003	—	CS007719-0003
UPC	SMF	C165943-0003	C152671-0003	C223369-0003
PC	62.5 µm	C165463-0003	C223366-0003	C223373-0003
PC	50 µm	CS007672-0003	CS007674-0003	CS007676-0003
PC	50 µm LO	CS007673-0003	CS007675-0003	CS007677-0003
900 µm Tight-Buffered Pigtail Kits, 3 Meter, 12-Fiber				
APC	SMF	C223312-0003	—	CS003981-0003
UPC	SMF	C223492-0003	CS003979-0003	CS001037-0003
PC	62.5 µm	CS000386-0003	CS002150-0003	CS002067-0003
PC	50 µm	CS001373-0003	CS002136-0003	CS002081-0003
PC	50 µm LO	CS003056-0003	CS003980-0003	CS003058-0003

Connectivity Accessories – Optical Fanout Kit

Fanout kits route 250 µm fibers into 900 µm buffer tubes ready for termination. Easily installed in minutes, these kits require no special tools, and accommodate input cables from 2.0-3.8 mm in diameter. Fanout kits feature a clear, removable cover which is VFL-compatible and does not require epoxy. Color-coded 900 µm buffer tubes allow for easy identification of individual fiber channels.





FEATURES

- Accepts 2.0-3.8 mm input cable
- Epoxy-free installation
- Clear, removable cover works with Visual Fault Locators (VFL)
- Protects sensitive 250 µm fibers
- Compatible with FUSEConnect® and FASTConnect® field-installable connectors

ORDERING INFORMATION

Empty shown; consult specification sheet for loaded part numbers

DESCRIPTION	AFL NO.
Fanout kit, 1 position base, 900 µm, 12 tubes, A, 1M	FAN1-9-012-A-01

Keeping You Connected

FASTConnect®

- Provide some of the fastest terminations in the industry
- Does not require a crimp or special assembly tools
- Mechanical, true no epoxy/no polish (NENP) connectors

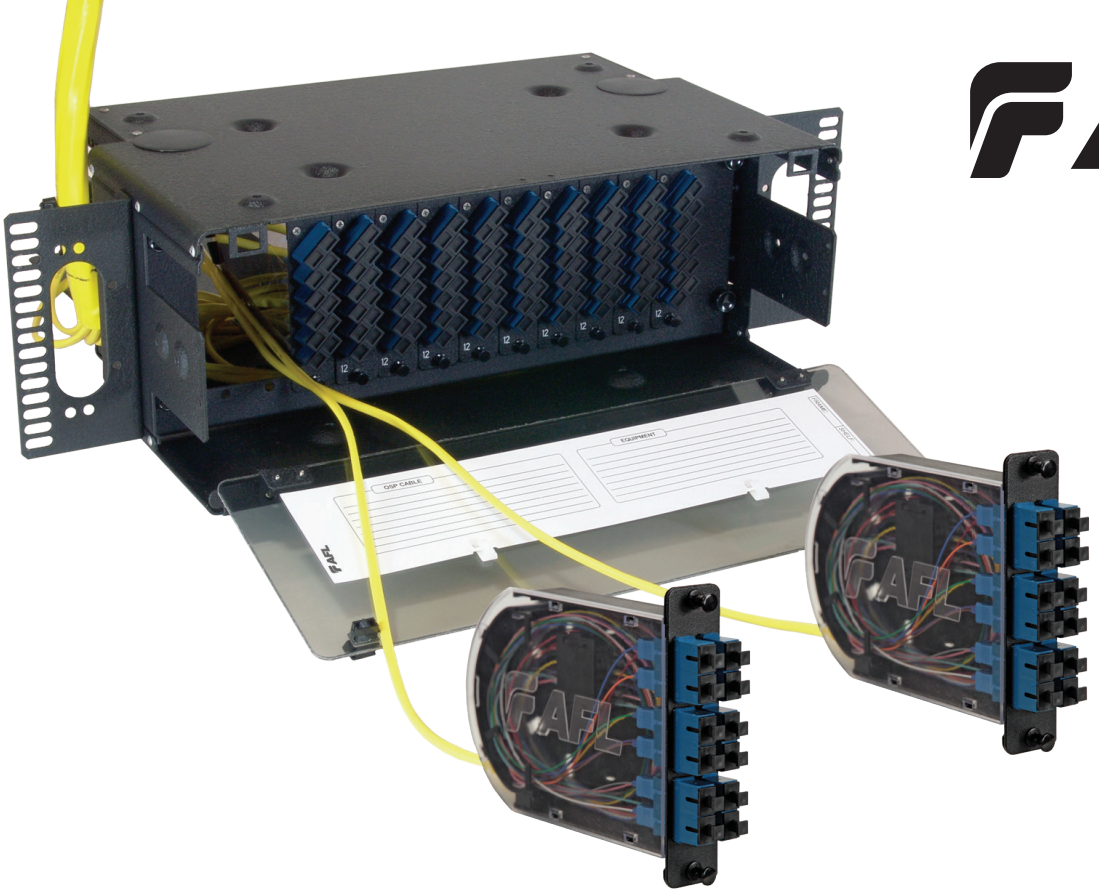
FUSEConnect®

- Installed with a fusion splicer
- Mechanically, environmentally and optically equivalent to factory termination

FEATURES BY METHOD

FEATURE	FASTCONNECT	FUSECONNECT
Fiber Type	Single-mode, Multimode	Single-mode, Multimode
Fiber Alignment	Pre-stubbed Factory Polished Ferrule	Factory Pre-polished Ferrule
Connector Types	SC, ST and LC	SC, FC, ST, LC and MPO/MTP
Boot Type	2.0 mm, 3.0 mm or 900 µm	2.0 mm, 3.0 mm or 900 µm
Connection Style	Index Matching Gel	Fusion Spliced
Inspection	Visual Fault Identifier (VFI)	Fusion Splicer

For ordering information, refer to Connector Solutions ordering guide.



FIBER MANAGEMENT SYSTEMS

Rack/Wall Mount Units | Optical/xWDM Modules
Connectivity Accessories

www.AFLglobal.com or (800) 235-3423

LC-11012 Rev. 15, 12.7.2023