

VOLUME 1.1



THE POWER OF BEING CONNECTED.

Fiber Optic Cable and Accessories Catalog

**www.alliancecorporation.ca
1-888-821-4797**

FIBER OPTIC CABLE FOR ALL INDUSTRIES

State of the Art Manufacturing

All cables are manufactured using a process that ensures unsurpassed connector performance, meeting or exceeding industry standards for reflectance and insertion loss.

State of the art test equipment is used to measure back reflection (RL), insertion loss (IL) and the end face geometry, ensuring that every single connector passes quality tests.

Each assembly is 100% tested and each assembly is accompanied by a test report, indicating that it passed quality tests before leaving the factory. A copy of each report is kept on file and can be accessed by serial number to check cable quality in the field.

Custom FIBER OPTIC SOLUTIONS

If the off-the-shelf doesn't work for you, Alliance can provide a custom fiber optic cable solution.

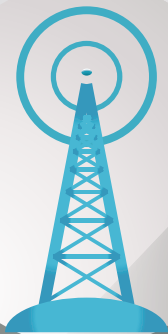
We can engineer and manufacture custom cable solutions for all fiber to the X (FTTx) requirements.

We work closely with you to understand the network requirements and provide you with a fiber optic cable design that meets your needs.

We can engineer and manufacture fiber & power cables of all types:

- Separate Fibre + DC
- Sectorized: Multiple sources – very flexible
- Trunked: Multi-fiber, multi-conductor DC
- Composite / Hybrid

Contact your Account Manager to find out how to start working with us on a custom solution.



FIBER TO THE HOME/ NODE



DATA CENTERS



IN-BUILDING/ STRUCTURED CABLING



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Custom Cable Assemblies

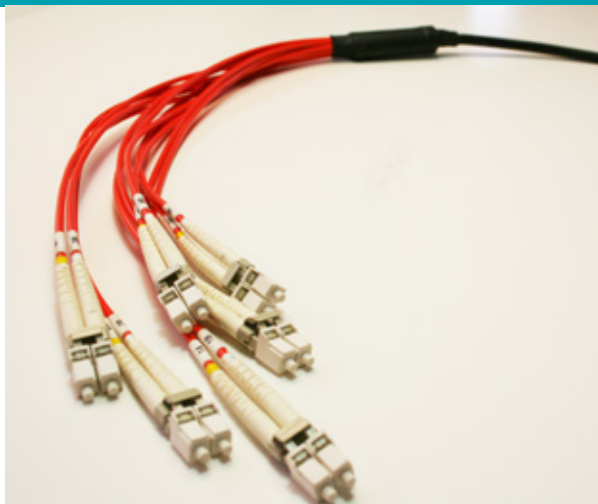
Cable assemblies can be built with any type of cable and any type of connector.



Outdoor MPO-LC Cable Assembly



Harsh Environment Assembly with Fiber & Power



MM-LC Fanout Cable Assembly



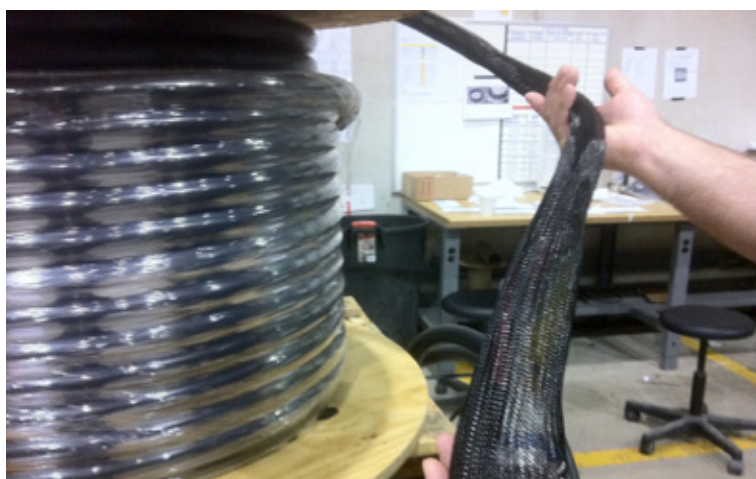
Outdoor Composite Breakout Cable Assembly



Outdoor Composite Breakout Cable Assemblies

Custom Cable -Packaging & Shipping Options

Cable assemblies can be packaged to your requirement.



Protective Sock protects the the breakout



Shipping container space maximised to reduce costs



Site kitting - cables assemblies packaged with other site material, ease of deployment, single source.



Smaller cable assemblies may be packaged in cartons.



Cable assemblies may be packaged on custom reels.



Rugged Reels for redeployment, harsh environments

Source+

We offer a variety of options to support 10/40/100G networks, guaranteeing the most cost-effective and future-proof network available for your particular design.

Consult your Alliance sales representative for products that allow easy migration to 40/100G.

10G, Base-12
12 Fiber MTP®
Cable Assemblies and
Cassettes

40G, Base-8
4 Lanes @10 G/s
8 Fiber MTP®
Cable Assemblies

40G, Base-8
4 Lanes @10 G/s
8 Fiber Backbone
with Cassettes

100G, Base-24
10 Lanes @10 G/s
24 Fiber MTP®
Backbone

10G Ports

LC Jumpers



12F or 24F
MTP®-LC Cassette



MTP® 12F or 24F
Backbone Cable



12F or 24F
MTP®-LC Cassette



LC Jumpers



Active
Equipment

40G Ports

8F MTP®
Patch Cable



MTP®
Adapter Panel



MTP®
Backbone Cable



MTP®
Adapter Panel



8F MTP®
Patch Cable



Active
Equipment

40G Ports

LC Jumpers



BASE-8
MTP®-LC CASSETTES



MTP®
Backbone Cable



BASE-8 MTP®-LC
Cassettes



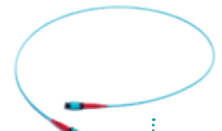
LC Jumpers



Active
Equipment

100G Ports

24F MTP®
Patch Cable



MTP®
Adapter Panel



Backbone
Cable



MTP®
Adapter Panel



24F MTP®
Patch Cable



Active
Equipment

Fiber Optic Patch Cords

Alliance patch cords may be terminated with combination of ST, SC, FC and LC fiber optic connectors.

The fiber optic connector ferrules have a precision machine polish that ensures consistent, reliable performance.

This product is guaranteed to meet or exceed fiber optic industry standards.

Available in lengths including 1, 2, 3, 5 and 10m.



**Custom lengths
available!**

AC PT	Fiber Mode	Cable Rating	Cable Application	-	Cable OD	-	Connector A	Connector B	-	Length	Unit of Measure
	OS-2 Singlemode (Yellow)	RI = OFNR (riser)	I = Indoor		1.6mm		LCD = LC Duplex	LCD = LC Duplex			FT
	OM1 Multimode (Orange)	PI = OFNP (Plenum)	IA = Indoor Armored		2mm		LCS = LC Simplex	LCS = LC Simplex			M
	OM3 Multimode (Aqua)	LZ = LSZH (Low Smoke)			3mm		ALCD = LC/APC Duplex	ALCD = LC/APC Duplex			
	OM4 Multimode (Aqua)						ALCS = LC/APCSimplex	ALCS = LC/APCSimplex			
	OM5 Multimode (Lime green)						SCD = SC Duplex	SCD = SC Duplex			
							ASCD = SC/APC Duplex	ASCD = SC/APC Duplex			
							ASCS = SC/APC Simplex	ASCS = SC/APC Simplex			
							Other	Other			

Pigtails

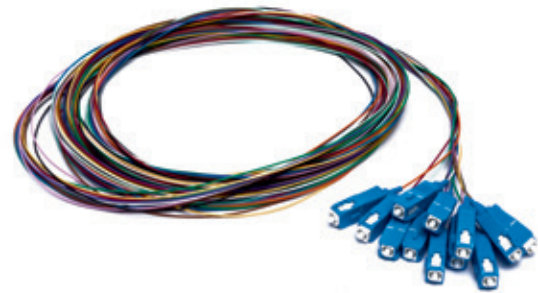
Typically 1 meter to 3 meters in length, pigtails are assemblies that have a factory-terminated connector on one end of a tight buffered fiber and are open on the other end. This open end is to be used for fusion splicing to another piece of fiber.

Pigtails eliminate the need for mechanical splice connectors or any other type of field-termination.



We offer pigtails with a wide variety of options:

- Individual 900 micron 'unjacketed' fiber terminated with any type of connector and in any glass type
- Multi-strand fiber without a jacket, bundled in color-coded groups of 6 or 12
- Multi-strand fiber that remains jacketed, typically with an 18" 900 micron breakout
- 6, 12, 24, 36, 48, 72, 144, and 288-strand fiber counts available



ACFO	Fiber Mode	Cable Rating	Cable Application	Cable OD	Connector A	Connector B	Fiber Count	Length	Unit of Measure
	OS-2 Single-mode (Yellow)	RI = OFNR (riser)	I = Indoor	1.6mm	LCD = LC Duplex	LCD = LC Duplex	1		FT
	OM1 Multimode (Orange)	PI = OFNP (Plenum)	IA = Indoor Armored	2mm	LCS = LC Simplex	LCS = LC Simplex	2		M
	OM3 Multimode (Aqua)	LZ = LSZH (Low Smoke)		3mm	ALCD = LC/APC Duplex	ALCD = LC/APC Duplex	6		
	OM4 Multimode (Aqua)				ALCS = LC/APC-Simplex	ALCS = LC/APC-Simplex	12		
	OM5 Multimode (Lime green)				SCD = SC Duplex	SCD = SC Duplex	24		
					ASCD = SC/APC Duplex	ASCD = SC/APC Duplex	36		
					ASCS = SC/APC Simplex	ASCS = SC/APC Simplex	48		
					Other	Other	72		

This multimode fiber optic cable assembly is terminated with MT-RJ female fiber optic connectors on 1.6 mm fiber optic cable. Other fiber optic patchcord configurations such as Singlemode and 50 µm MT-RJ fiber optic patchcords are available. Our MT-RJ fiber optic patchcords are individually tested and bagged in compliance with industry specifications. These MT-RJ fiber optic patchcords do not have alignment pins installed.

MULTIMODE 62.5µm		
Connectors		Part no.
MTRJ-MTRJ	FEMALE	ACI-OM1D-MTRJ-MTRJ-X
MTRJ-ST	FEMALE	ACI-OM1D-MTRJ-ST-X
MTRJ-SC	FEMALE	ACI-OM1D-MTRJ-SC-X



Specifications - Multimode	
Typical Loss	0.4dB
Back Reflection	-25dB

MPO Trunk Assemblies

SOURCE+ MTP® Trunk, MTP® Patch, and MTP® Conversion assemblies are individual components that make up Alliance's end-to-end solution. The SOURCE+ MTP® trunks are the backbone of the network and interconnect to MTP® cassettes or adapter panels.

The MTP® patch cords cross connect the MTP® trunks directly into a transceiver or into active electronics. The MTP® Conversion assemblies allows users to convert their existing MTP® backbone cables to an MTP® type which matches their active equipment.

These assemblies can support 10/40/100G or simplify migration to 40/100G. When used with SOURCE+ cassettes, enclosures, adapter panels, and patch cords they provide an end-to-end solution backed by our systems solution warranty.



FIBER INSERTION LOSS PERFORMANCE (dB)*

		TYP IL		MAX IL		TYP IL	
		LC/SC	MTP®			LC/SC	MTP®
Multimode cables are tested at both wavelengths 850nm and 1300nm	LC/SC	.20	.25	Singlemode assemblies are tested at both wavelengths 1310nm and 1550nm	LC/SC	.20	.25
	MTP®	.25	.35		MTP®	.50	.60
Minimum Return Loss		LC/SC/MTP® -25dB		Minimum Return Loss		LC/SC -65dB (APC) LC/SC -57dB (UPC) MTP® -60dB	

* Consult sales for low loss values

- 100% factory terminated and tested ensuring reliability and quality
- Standard and low loss versions available to meet loss budget requirements of the network
- 8, 12, and 24F MTP® assemblies can support 10/40/100G and simplified migration to 40/100G
- Custom built to customer specifications including length, breakouts, and labeling
- All assemblies are shipped with test results and labeled with a unique serial number for traceability
- Available on method A, B, or C (12F)
- Available in fiber counts of 8-144 fibers in multimode or singlemode
- Assemblies over 100 feet are shipped on a reel
- Pulling eye available upon request

ACTK	FIBER MODE	CABLE RATING	CABLE APPLICATION	CABLE OD	CONNECTOR A	CONNECTOR B	FIBER COUNT	LENGTH	UNIT OF MEASURE
	OS-2 Singlemode (Yellow)	RI = OFNR (riser)	I = Indoor	1.6mm	LCD = LC Duplex	LCD = LC Duplex	1		FT
	OM1 Multimode (Orange)	PI = OFNP (Plenum)	IA = Indoor Armored	2mm	LCS = LC Simplex	LCS = LC Simplex	2		M
	OM3 Multimode (Aqua)	LZ = LSZH (Low Smoke)		3mm	ALCD = LC/APC Duplex	ALCD = LC/APC Duplex	6		
	OM4 Multimode (Aqua)				ALCS = LC/APC-Simplex	ALCS = LC/APC-Simplex	12		
	OM5 Multimode (Lime green)				SCD = SC Duplex	SCD = SC Duplex	24		
					ASCD = SC/APC Duplex	ASCD = SC/APC Duplex	36		
					ASCS = SC/APC Simplex	ASCS = SC/APC Simplex	48		
					MPO-12 (M)	MPO-12 (M)	72		
					MPO-12 (F)	MPO-12 (F)			
					MPO-24 (M)	MPO-24 (M)			
					MPO-24 (F)	MPO-24 (F)			
					Other	Other			

Fiber SFP, QSFP+ AOC DAC

We offer an extensive range of fiber optic transceivers and active optical cables for Ethernet, InfiniBand, and Fiber Channel+ (FCoE) applications. Our transceivers and AOC support high-end servers over 4/8/10G fiber channel transmissions.

All transceivers are pre-programmed and tested to match your equipment's requirements to ensure compatibility. All products are compliant to MSA and IEEE standards.



SFP+ AND QSFP+ DAC ACTIVE OPTICAL CABLES

- SFP+ 10G data link
- Typical data rate 10.3125G/s Max 10.42 G/s
- Various fiber lengths ranging from 1-100 meters
- Single 3.3V power supply

QSFP+ 4/8/10G FIBER CHANNEL

- Data rate of 10.5 Fb/ss each lane
- Maximum aggregate data rate 42.0 G/s
- Various fiber lengths ranging from 1-100 meters
- Single 3.3V power supply

100G EDR QSFP28

- 4 independent full-duplex channels
- Transmission data rate up to 28G/s per channel
- Reliable VCSEL array technology using multimode fiber
- Available in standard lengths of 3, 5, 10, 15, 20, 30, 50, 100m
- Maximum power consumption 3.5W each terminal
- Operating case temperature 0°C to +70°C
- Single 3.3V power supply
- RoHS 6 compliant
- Hot pluggable QSFP form factor

TRANSCEIVERS

- Consult sales for hot pluggable transceivers in a variety of distance options, data rate, and protocols
- 40G/s QFFP+SR4
- 56G/s QFFP+SR4
- Dual Fiber SFP
- 6-10G SFPT
- 10G DWDM SFP+
- 10G CWDM SFP+

Consumables - Dry Cleaning

PART NUMBER	DESCRIPTION
ACI-FC-F1-6270S	Cletop-S Connector Cleaner (A) with SC, FC, ST, E2000 (F1-0700)
ACI-FC-FCRC	Optipop Fiber Optic Connector Cleaner (25 ft.)
ACI-FC-F1-7020C	FIS Connector Cleaner Universal (400 cleans)
ACI-FC-F1-0700	Cletop-S Tape Cartridge Blue Tape (B) Cletop-S Tape Cartridge White Tape
ACI-FC-F1-0701	Cletop-S Tape Cartridge White Tape



**Optipop
ACI-FC-FCRC**



**CLETOP
ACI-FC-F1-6270S**



ACI-FC-F1-7020C

IBC™ BRAND CLEANING TOOLS SERIES

The US Conec IBC™ Brand Cleaners are mechanical cleaning tools designed to clean connectors residing in an adapter or faceplate and unmated connectors. The IBC™ Brand Cleaning tools use a novel dry cleaning strand to gently sweep and lift away dust and residues from the connector end face.

Features:

- Audible “click” to alert the operator when tool is fully engaged
- Over 525+ engagements per unit
- Dry cleaning strand eliminates the need for solvents to be effective
- Impact resistant to survive drops over 1.5M

Part Number	Description
ACI-FC-9392	IBC™ Cleaner SC (SC,ST, FC and E2000)
ACI-FC-9393	IBC™ Cleaner LC (LC, MU) - pictured
ACI-FC-12910	IBC™ Cleaner H-125 (1.25mm Harsh Environment Connectors)



9392 IBC Cleaner



9393 IBC Cleaner



12910 IBC Cleaner

MTP/MPO IBC™ BRAND CLEANER

The MTP IBC™ (In Bulkhead Cleaner) is the first dry cloth cleaner specifically designed to clean the MTP/MPO while inside of an adapter, face-plate, or bulkhead. The unique design enables cleaning of either male (with pins) or female (without pins) MT ferrules.

EASY PUSH STYLE WITH AUDIBLE CLICK.

Part Number	Description
ACI-FC-7104	MTP/MPO Bulkhead Cleaner



**7104 MTP/MPO Bulkhead
Cleaner**

MTP/MPO IBC™ BRAND CLEANER

The Senko Fiber Optic Cleaners are dry cloth cleaners specially designed to clean connections residing in an adapter, faceplate or bulkhead. The Senko Fiber Optic Cleaners are simple to use and highly effective at removing oil and dust contaminants that can negatively impact optical performance.

Smart Cleaner has replaceable cartridges while Smart Cleaner Mini is disposable. Proven effectiveness at removing Arizona road dust, 70% IPA residue, dryer lint, distilled H2O residue, skin oil and hand lotion, graphite - pre mate, NaCl

residue, graphite - post mate, vegetable oil.

Applications & Features:

- Fiber network panels and assemblies
- Outdoor FTTX applications
- Cable assembly production facility
- Testing laboratories
- Servers, switches, routers and OADMS with SC, FC, ST, MU and LC interface
- Easy pushing motion engages connector and initiates cleaner



SENKO ACI-FC-SCK-SS-125



SENKO ACI-FC-SCK-SS-M-125



SENKO ACI-FC-SCK- SS-MPO

Part Number	Description
ACI-FC-SCK-SS-125	Smart Cleaner 1.25, compatible with MU & LC connectors, PC and APC.
ACI-FC-SCK-SS-125-R	Smart Cleaner 1.25 Replacement Cartridge
ACI-FC-SCK-SS-250	Smart Cleaner 2.50, compatible with SC, FC, ST & E-2000 connectors, PC and APC
ACI-FC-SCK-SS-250-R	Smart Cleaner 2.50 Replacement Cartridge
ACI-FC-SCK-SS-M-125	Smart Cleaner Mini 1.25, compatible with MU & LC connectors, PC and APC.
ACI-FC-SCK-SS-M-250	Smart Cleaner Mini 2.50, compatible with SC & FC connectors, PC and APC.
ACI-FC-SCK-SS-MPO	Smart Cleaner MPO, compatible with MPO connectors, MTP Connectors®

Tools



Greenlee High Leverage Cable Cutters

This is a utility cable cutter for up to 70mm cable. This manual tool is great for standard power, coaxial, and non-armored cables. 727 has PVC-covered, high leverage handles for easier cuts. Heat-treated for long life, made of heavy-duty forged steel, rust-resistant black oxide finish. Part number ACI-CCT-F-727



Greenlee High Leverage Diagonal Cable Cutters

Crafted for heavy-duty wire cutting and made of specially forged alloy steel designed for strength and cutting ability. Part number ACI-DCI-0251-08M



6" Long Nose Side Cutting Pliers

Forged from chrome vanadium steel for greater durability and strength. Cuts both solid and stranded copper wire Serrated jaws and laser-hardened cutting edges. Rugged riveted construction for smooth precise action. Part number ACI-NNT-0351-06M



Miller Scissors/Splicers Kit

Ergonomic snip for linemen and installers. One blade features ergonomically shaped, cushioned palm rest and the other blade has the traditional ring bow. Part number: ACI-MST-925CS-KIT



Greenlee 8" Side Cutting Pliers with Dipped Grip

Double layers vinyl handles for comfort and slip resistance. Reduced handle size allows for easy storage of tools in pouches and tool bags. Part number ACI-DCT-251-06D



Greenlee ProGrip 5 in 1 Fiber Optic Stripper

Precision ground stripping cavities for: 2.0 - 2.4 mm outer jacket, 2.0 - 3.0 mm loose tube, 2.8 - 3.0 mm outer jacket, 900 µm buffer insulation, 900/125 µm and 250/125 µm buffer/acrylate. Dual-durometer grips for improved comfort and control. Part number: ACI-FOST-F11171.



Miller Kevlar Cutter

Lightweight shears ideal for cutting Kevlar® strength members found in fiber optic cable construction. Ergonomic molded handles provide comfort for both right and left handed users. One micro-serrated blade reduces slippage for more positive cutting action. Blades made from high carbon molybdenum and vanadium steel for long life. Part number: ACI-MKC-KS1



FIBER SHEATH STRIPPER & RING TOOL

Used for stripping and butting tight buffer optical fiber cables. Use one blade to butt PVC sheathing and use the second blade to strip the sheathing. Adjustable for .018" or .031" thick plastic, rubber or fabric insulation. Part number: ACI-OST-JIC-4366

SD1 Cassettes

SOURCE+ SD1 cassettes serve as the point of interconnection between the MTP® trunks and MTP® harnesses. The cassettes breakout the MTP® to single fiber connectors and allow easy patching within the network. When used in conjunction with SOURCE+ MTP® trunks, enclosures, adapter panels and patch cords they provide an end-to-end solution backed by our systems solution warranty.



MTP®-MTP® conversion cassettes support 40G and upward migration to 100G. 8, 12, and 24F MTP® ferrules. The conversion cassettes utilize 1x24F MTP® in and 3x8F MTP® out.

Consult sales for more information.

FIBER INSERTION LOSS PERFORMANCE (dB)*

		TYP IL	MAX IL			TYP IL	MAX IL
Multimode cables are tested at both wavelengths 850nm and 1300nm	LC/SC	.20	.25	Singlemode assemblies are tested at both wavelengths 1310nm and 1550nm	LC/SC	.20	.25
	MTP®	.25	.35		MTP®	.50	.60
	Minimum Return Loss LC/SC/MTP® -25dB				Minimum Return Loss LC/SC -65dB (APC) LC/SC -57dB (UPC) MTP® -60dB		

* Consult sales for low loss values

* Consult sales for low loss values

FEATURES & BENEFITS

- Factory terminated and tested ensuring reliability and quality
- Standard and low loss versions available to meet the loss budget requirements of the network

Variety of single fiber interfaces including LC and SC

- 8, 12, and 24F MTP® ferrules
- Cassettes are compatible with the SD1 series accommodating up to 72 fibers in 1RU

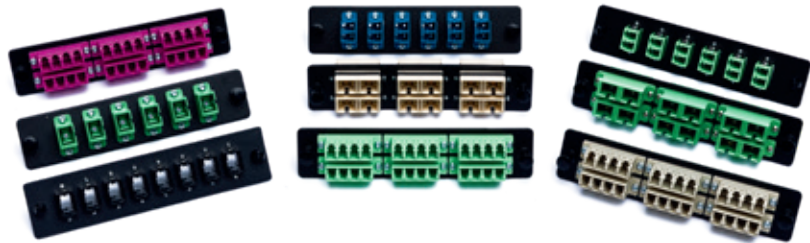
All adapters are secured to the cassettes eliminating possible movement of the mated pair

- LC adapters are available with an internal shutter to prevent exposure to light and excess dust build up for added protection to the eye

ACCAS	-	SERIES	-	FIBER COUNT	-	MPOTYPE	-	CABLETYPE	-	CONNECTOR
		SD1		8		F = 12 Fiber Ferrule		4G = OM4 MM		LA = LC/APC
				12		X = 24 Fiber Ferrule		XG = OM3 MM		LC = LC/UPC
				24				SM = SM		SA = SC/APC
										SC = SC/APC

Adapter Panels

SOURCE+ adapter panels serve as the point of interconnection among MTP® trunks, MTP® harnesses and pre-terminated fiber cable assemblies. The adapter panels are part of Net-Source's end-to-end solution and are backed by a 25-year warranty.



FEATURES AND BENEFITS

- Variety of single fiber adapters including LC, MTP®, SC, and ST
- Adapter housing colors follow TIA/EIA-568-C.3 suggested color scheme
- Adapter panels are available 6 fiber, 8 fiber, 12 fiber, 24 fiber, 72 fiber, and 96 fiber
- All adapters are secured to the panel, eliminating possible movement of the mated pair
- LC adapters available with an internal shutter to prevent exposure to light and excess dust build-up for added protection
- The single fiber adapters come with a ceramic split sleeve
- The MTP® adapter is available in both opposing keyway and aligned keyway

AC PNL	SERIES	FIBER COUNT	ADAPTERS	COLOR
	SD1	8	LC	AQ = Aqua
		12	SC	BL = Blue
		24	ST	GN = Green
		72	MTP	EV = Erica Violet
		96		



**Only available when using MTP®*

SD1 Enclosures

SOURCE+ SD1 enclosures support SD1 cassettes, adapter panels, and MTP® trunks. When used in conjunction with SOURCE+ MTP® trunks, adapter panels, and patch cords they provide an end-to-end solution and are included in our systems solution warranty.

FEATURES AND BENEFITS

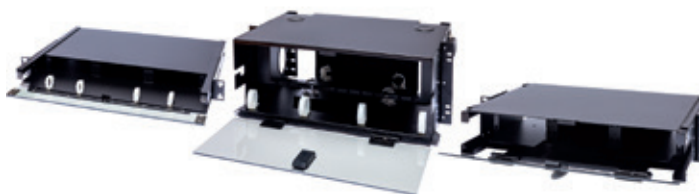
- The enclosures are available in patch, patch and splice, and splice
- The enclosures can be prewired to customer specifications
- Locks available upon request
- Easy access with a slide out drawer front and rear with removable top cover
- Each enclosure can accommodate 72 fibers per rack unit: (3) adapter panels, (3) cassettes and/or (3) splice trays per rack unit
- Available in 1RU, 2RU, and 4RU
- Includes internal fiber management
- Material: 16 Gauge CRS with a black powder coat finish
- Mounts in 19" and 23" racks
- Standard 19" sliding mounting brackets allow up to 5" extension to a flush mount projection

PATCH

SD1-1RU 1.75"x15"x19"
Accepts (3) adapter panels or (3) cassettes

SD1-2RU 3.5"x15"x19"
Accepts (6) adapter panels or (6) cassettes

SD1-4RU 7"x15"x19"
Accepts (12) adapter panels or (12) cassettes



PATCH & SPLICE

SD1-1RU-P/S 1.75"x15"x19"
Accepts (3) adapter panels and (3) splice trays

SD1-2RU-P/S 3.5"x15"x19"
Accepts (6) adapter panels and (6) splice trays

SD1-4RU-P/S 7"x15"x19"
Accepts (12) adapter panels and (12) splice trays

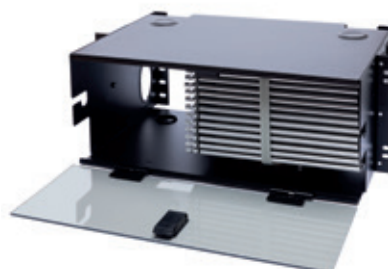


SPLICE

SD1-1RU-S 1.75"x15"x19"
Splice only accepts (3) splice trays

SD1-2RU-S 3.50"x15"x19"
Splice only accepts (6) splice trays

SD1-4RU-S 7"x15"x19"
Splice only accepts (12) splice trays



Wall Mounts

SOURCE+ SD1 wall mount enclosures support the SD1 cassettes and adapter panels in an indoor environment.

FEATURES AND BENEFITS

- The enclosures are available for direct termination from 6-144 fibers with lock or latch
- Material: 16 Gauge CRS with a black powder coat finish*

*Consult sales for patch and splice options.



WALL-SD1-1 7"x7"x1.5"
Patch only accepts (1) adapter panel or (1) cassette
UP TO 24 FIBERS

WALL-SD1-2 13"x9.25"x3.5"
Patch only accepts (2) adapter panels or (2) cassettes
UP TO 48 FIBERS

WALL-SD1-4 13"x11.5"x3.5"
Patch only accepts (4) adapter panels or (4) cassettes
UP TO 96 FIBERS

WALL-SD1-8 17"x12"x5.87" (+inner panel)
Patch only accepts (8) adapter panels or (8) cassettes
UP TO 192 FIBERS

WALL-SD1-12 17"x16"x5.87"
Patch only accepts (12) adapter panels or (12) cassettes
UP TO 192 FIBERS

HD1 Series

SOURCE+ HD1 series can accommodate 25% more fiber in a 1RU than our standard SD1 series.

These components are designed to work with SOURCE+ MTP® cable assemblies and patch cords for a complete high density solution supporting 10/40/100G.

ADAPTER PANELS

- The adapter panels are available in a variety of fiber adapters, including LC and MTP® adapters supporting Base-8, 12, and 24 backbones, as well as multifiber solutions
- All adapter panels are secured to the panels eliminating possible movement of the mated pair
- LC adapters come with an internal shutter to prevent dust

AC PNL	-	SERIES	-	FIBER COUNT	-	ADAPTERS	-	COLOR
		HD1		8		LC		AQ = Aqua
		SD1		12		SC		BL = Blue
				24		ST		GN = Green
				72		MTP		
				96				

CASSETTES

- The HD1 cassettes are available with an LC interface supporting Base-8, 12, and 24 fiber in a variety of fiber types including OM3, OM4, and OS2
- In addition to supporting 10/40/100G the cassettes are also available with an SC or ST interface
- All adapters are secured to the cassette, eliminating possible movement of the mated pair
- The LC adapters are available with an internal shutter to prevent dust
- The cassettes are available in both standard and low loss to support maximum distances required by the 40/100G Ethernet loss budget

FIBER INSERTION LOSS PERFORMANCE (dB)*

		TYP IL	MAX IL			TYP IL	MAX IL
Multimode cables are tested at both wavelengths 850nm and 1300nm	LC/SC	.20	.25	Singlemode assemblies are tested at both wavelengths 1310nm and 1550nm	LC/SC	.20	.25
	MTP®	.25	.35		MTP®	.50	.60
Minimum Return Loss LC/SC/MTP® -25dB				Minimum Return Loss LC/SC -65dB (APC) LC/SC -57dB (UPC) MTP® -60dB			

* Consult sales for low loss values

AC CAS	-	SERIES	-	FIBER COUNT	-	MPO TYPE	-	CABLE TYPE	-	CONNECTOR
		HD1		8		F = 12 Fiber Ferrule		4G = OM4 MM		LA = LC/APC
				12		X = 24 Fiber Ferrule		XG = OM3 MM		LC = LC/UPC
				24				SM = SM		SA = SC/APC
				96						SC = SC/APC

FIBER TRAYS

- HD1 rack mount fiber trays support HD1 cassettes and adapter panels
- Fiber trays are available in both 1RU and 2RU accommodating up to 96 fiber per 1RU
- Each fiber panel comes with a bracket to tie down and route the backbone cable

HD1-1RU-PNL 1.75"x19"x7"
Accepts 4 HD adapter panels or 4 HD cassettes

HD1-2RU-PNL 3.5"x19"x7"
Accepts 8 HD adapter panels or 8 HD cassettes

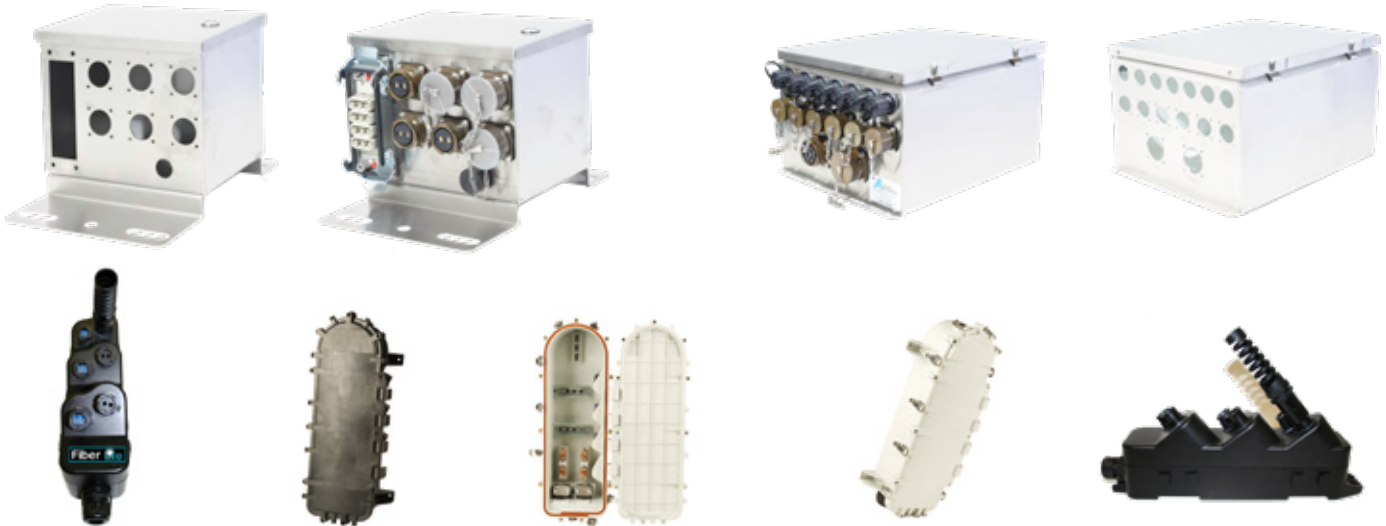


Custom Enclosures

Alliance Custom Distribution Enclosures

Standard enclosures not suitable for your needs? Alliance can design and build custom enclosures.

Alliance fiber/power to the Antenna enclosures with pre-installed components and wiring can support 3 to 6 remote radio heads. Enclosures can be customized with push in terminal blocks, circuit breakers and/or surge protection devices. Pre mounted brackets allow easy installation on walls, poles and towers of any shape.



FIBERLTE™ CLEARHUB-6

The FiberLte™ CLEARHUB-6 provides a solution for all wireless carriers using non-proprietary connections ensuring ease of future additions and network upgrades while providing a robust, watertight and flexible distribution solution.

CLEARHUB-6 has a single inbound MPO connector for the trunk fiber connection instead of a multi-fiber LC breakout, reducing installation time and reduces the potential for damage to the fibers.

This model is factory pre-terminated with individual quick connections for up to 12 runs of fiber, eliminating the need for a contractor to enter the module. Individual single mode jumpers are connected to the Distribution Module then to the OEM radios. Connections to the CLEARHUB distribution terminal are quick and fool-proof with the use of factory ordered fiber connectors outfitted IP67 rated quick connections. Moves, adds or changes are

simple with the addition of only a new jumper (if required). There's no need for contractors to enter the enclosure at any time to move or change jumpers.

Features:

- Watertight IP67 rated distribution module.
- Simple installation.
- Wall, pipe or tower mounted
- Can be customized to any type of connector.
- Multiple back-to-back enclosures can be installed to service any number of sectors or radios required
- Clear cover to allow easy view of connections and extra protection from the elements



Copper Trunks & Bundled Assemblies

COPPER TRUNKS

Alliance pre-terminated end-to-end copper solution is designed to be user friendly, cost-effective, and easy to install. This end-to-end system supports a customized CAT6/6A solution backed by our warranty.



- Reduces labor and installation time
- Less scrap and waste
- Reliability
- Factory terminated and tested ensuring reliability and quality
- Product consistency
- Built to customer specification

BUNDLED ASSEMBLIES

Alliance copper bundles are the backbone of the pre-terminated copper solution. When used in conjunction with patch panels, patch cords, and work stations they provide an end-to-end solution backed by our system warranty.



- Factory terminated and tested ensuring reliability and quality
- Custom built to customer specifications including length, breakouts, and labeling
- Bundles can be terminated to plugs (male) or jacks (female) in groups of 6 to 24 with tie wraps/velcro or under a braided sleeve
- Available in Riser or Plenum in a variety of colors for both the sleeving and the cable

AC BU	-	CABLE COUNT	-	CABLE RATING	-	JACKET RATING	-	CONNECTORS	-	COLOR	-	LENGTH
		6		C6 = Standard CAT6		P = Plenum		M = RJ45 Plug		BL		Length in feet
		12		C6A = CAT6A				F = RJ45 Jack				
		24										

Patch Panels

Source + end-to-end solution is available in both STP and UTP CAT6 and CAT6A.

Features and Benefits

- Flexible installation - install from either front or rear of faceplate
- Quick identification - colored icons provided for port identification
- Easy termination - punch down with standard 110 termination tools
- Universal wiring - T568A and T568B wiring compatible
- Field Configurable Patch Panels allow you to customize your application with snap-in keystone jacks

PATCH PANELS

P/P-12P-C6	12 Port CAT6 110 Patch Panel 1.75"x19"
P/P-24P-C6	24 Port CAT6 110 Patch Panel 1.75"x19"
P/P-48P-C6	48 Port CAT6 110 Patch Panel 3.5"x19"
KJ-PNL-24-1RU	24 Port 1U Blank Keystone Panel 1.75"x19" with Bezel
KJ-PNL-48-1RU	48 Port 2U Blank Keystone Panel 3.5"x19" with Bezel

FIELD CONFIGURABLE PATCH PANELS



JACKS AND ADDITIONAL MODULES

KJ-C6-XX*	CAT6 Keystone Jack
KJ-C6A-XX*	CAT6A Keystone Jack
KJ-C6-SH	CAT6 Shielded Keystone Jack
KJ-BLANK	Blanks Package Of 25
KJ-C5E-FF-XX*	CAT5E Keystone Coupler
KJ-C6-FF-XX*	CAT6 Keystone Coupler
KJ-C5E-FF-SH	CAT5E Shielded Keystone Coupler
KJ-C6-FF-SH	CAT6 Shielded Keystone Coupler Diecast
KJ-FCONN-XX*	F-Connector Keystone Coupler
KJ-BNC-XX*	BNC Keystone Coupler

*XX = Color

Available in:
Blue
Black
Green
Orange
Red
White
Yellow



Workstations

Source + workstation solutions include standard and high density faceplates and surface mount boxes, along with a variety of snap-in hacks and modules to help make installations quick and easy.

FEATURES AND BENEFITS

- Includes all necessary hardware for easy installation
- Durable construction to ensure long life
- Variety of custom configuration options
- Compatible with a wide range of copper and fiber modules

FIBER MODULES

KJ-LC-XX* LC Duplex Keystone White
KJ-SC-XX* SC Simplex Keystone White

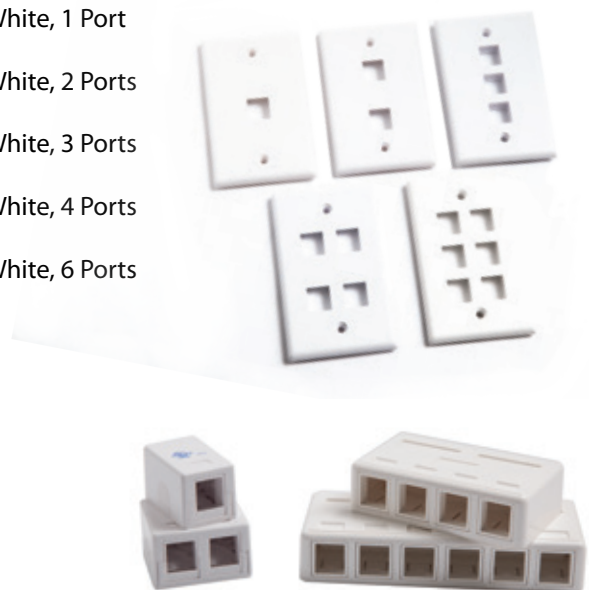
*XX = Color

Available in:
AQ = Aqua
BE = Beige
BL = Blue
EV = Erika Violet
GN = Green
WH = White



FACEPLATES AND SURFACE MOUNT BOXES

KJ-SG-FP-01 Keystone Face Plates, Single Gang, Plastic White, 1 Port
KJ-SG-FP-02 Keystone Face Plates, Single Gang, Plastic White, 2 Ports
KJ-SG-FP-03 Keystone Face Plates, Single Gang, Plastic White, 3 Ports
KJ-SG-FP-04 Keystone Face Plates, Single Gang, Plastic White, 4 Ports
KJ-SG-FP-06 Keystone Face Plates, Single Gang, Plastic White, 6 Ports
KJ-SFB-01 Keystone 1 Port Surface Mount Box White
KJ-SFB-02 Keystone 2 Port Surface Mount Box White
KJ-SFB-04 Keystone 4 Port Surface Mount Box White
KJ-SFB-06 Keystone 6 Port Surface Mount Box White



Copper Patch Cords

Source +copper patch cords support a variety of applications from voice and video to high speed networks and POE. All copper cables are manufactured to your custom requirements and meet or exceed industry standards for NEXT and return loss. Our cords are factory terminated for superior performance guaranteeing consistent reliable results.



FEATURES & BENEFITS

*Not all colors are available in Economy Series

- Available in CAT5E, CAT6, CAT6A, shielded and unshielded, riser, plenum, and LSZH in your choice of length
- Available in U.S. Made and Economy Series
- Industry standard T-568A, T568-B, crossover or custom wiring available
- Options for non-booted or variations of boots (snagless) available

AC PC	-	BOOT OPTION	-	CABLE RATING	-	FIXED NOTE	-	ADDITIONAL OPTIONS	-	COLOR	-	LENGTH
		C = Clear Slimline Boot S = Bubble Boot Blank = No Boot		SE = CAT5E 6 = CAT6 6A = CAT6A		B		MP = Minipatch SH = Shielded Blanks = Standard		AQ = Aqua BK = Black BL = Blue BN = Brown GN = Green GY = Grey LG = Lime Green OR = Orange PK = Pink PR = Purple RD = Red WH = White YL = Yellow		Length in Feet

U.S. MADE CAT5E, CAT6, AND CAT6A PATCH CORDS

When used in conjunction with copper trunks, patch panels and work stations they provide an end-to-end solution backed by a system warranty.

Our U.S. Made copper patch cords are custom built to fit your requirements. Made in the USA with high quality components, these cables are available in CAT5E, CAT6, and CAT6A using 24 AWG stranded patch cable and high quality RJ45 modular plugs.

Patch cords are available in many different colors and can be built using no boots, slide-on boots, or clear slimline boots.

Also available in shielded stranded 26 AWG STP cable.



Copper Patch Cords

CAT6 AND CAT6A (MINI-PATCH) 28 AWG

Source + Snagless Unshielded (UTP) and Shielded (STP) Slim 28 AWG Network Patch Cords are the perfect solution for high density and top of rack data center applications.

The use of 28 AWG reduces the overall foot print, utilizing less space and increasing air flow.

The smaller bend radius facilitates improved cable management in high density layouts.

When used in conjunction with copper trunks, patch panels, and work stations, they provide an end-to-end solution backed by a 25-year warranty.

Overall diameter:
0.15" (standard CAT6
overall diameter: .235")

Manufactured with:
28 AWG, stranded
copper (7x32), four
twisted pairs



ECONOMY SERIES CAT5E, CAT6 AND CAT6A

The economy series are the most cost-effective solution in patch cables.

Cables are imported and stock/availability will vary.

The patch cables are available in standard colors and lengths with and without boots.





THE POWER OF BEING CONNECTED.

**Fiber Optic
Cable & Accessories**

To purchase contact:

**Alliance
1-888-821-4797**