

## FiberExpress Connectors

### Optimax® Field Installable Connectors and Installation Tool Kits

AX101982 Optimax LC Connector



AX100029 with AX101794 Optimax SC Connector



A0408835 with AX101793 Optimax ST Compatible Connector



AX100947 Optimax Tool Kit



#### Optimax Field Installable Connector

The **Optimax Connectors** are reliable field installable optical fiber connectors that are easy to install. They do not require epoxy, curing or polishing. Their unique design incorporates a factory polished fiber stub in a splice mechanism which provides a fast, secure, and reliable termination on optical fiber cables. All critical steps are performed in the factory, ensuring a superior-quality connection every time. Only simple tools are required for installation, making Optimax a cost effective field termination.

Optimax Connectors are high-quality LC, SC and ST Compatible connectors that use a ceramic ferrule with a physical contact (PC) polish for Multimode and super physical contact (SPC) polish for Single-mode that ensures the best possible mating of optical fibers. Connectors are available for 62.5 or 50/125 μm Multimode fiber and Single-mode fiber installations.

#### Optimax Installation Tool Kit

The **Optimax Installation Tool Kit** is packaged in a small convenient carrying case and includes an Optimax LC, SC and ST Compatible installation and training video, installation instructions and all the tools required to terminate 900 μm buffered optical fiber and jacketed optical fiber.

The Optimax Installation Tool Kit has all the tools and supplies required to install both the Optimax LC, SC or ST Compatible Multimode and Single-mode connectors. Certain tool kit items can be purchased separately to accommodate installers already possessing basic optical fiber installation tools.

Description	Belden Part Number
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#### FiberExpress Connectors

Optimax Field Installable Connector	
LC 62.5 μm, Multimode*	AX101981
LC 50 μm, Multimode*	AX101982
LC Single-mode*	AX101983
SC 62.5 μm, Multimode*	AX100029
SC 50 μm, Multimode*	AX101077
SC Single-mode*	AX101792
ST Compatible 62.5 μm, Multimode*	A0408835
ST Compatible 50 μm, Multimode*	AX101075
ST Compatible Single-mode*	AX101791
LC Accessory Kit for jacketed fiber (2 mm boot and a crimp sleeve)	AX101984
SC Accessory Kit for jacketed fiber (3 mm boot, crimp sleeves, cord adapter)	AX101794
ST Accessory Kit for jacketed fiber (3 mm boot, crimp sleeves)	AX101793

Optimax Installation Tool Kit	
LC/SC/ST Compatible (includes installation tools, fiber cleaver, crimping tool, instruction manual, microscope, tweezers, alcohol wipes, marker, scissors, waste bottle, fiber stripper, cable stripper and Training Video)	AX100947
Basic (excludes fiber stripper & cleaver)	AX100949
Optimax LC Tool Kit Upgrade (includes LC installation tool, instructions manual, foam for the case)	AX102061

Optimax Individual Components	
Fiber Cleaver	A0408829
Installation Tool LC (does not include tool-clamp)	AX102062
Installation Tools ST Compatible and SC (includes tool-clamp)	A0403634
Microscope	AX100910
Refurbishing Materials (80 alcohol wipes and a black felt tip marker)	AX100951
Installation Instruction Manual, LC	AX102063
Installation Instruction Manual, SC	PX101318
Installation Instruction Manual, ST Compatible	PX101317
Installation & Training Video, CD (see literature ordering form on the web)	NOT0651
Crimp Tool complete with die	A0403641

These products are in the process of being assessed for RoHS compliance. Please check our Web Site for the most current RoHS status.

\*For 900 μm buffered fiber only. For Optimax Single-mode termination on jacketed fiber, please use the appropriate Accessory Kit.

# FiberExpress Connectors

## Epoxy Field Installable Connectors

A0390851 Optical Fiber Field Installable Epoxy Connector, ST Compatible



### Epoxy Field Installable Connector

**Epoxy Field Installable Connectors** are available as Multimode and Single-mode ST Compatible and SC field installable connectors. They require heat-cured epoxy and polishing.

Both types have a ceramic ferrule. Each connector comes complete with all the parts necessary for termination of tight buffered fibers as well as jacketed fibers. Parts include crimp sleeves, boots, cord adapter and dust cap.

Description	Belden Part Number	
	Multimode	Single-mode

### FiberExpress Connectors

Epoxy Field Installable Connector		
ST Compatible	<b>A0390851</b>	<b>AX101412</b>
SC Simplex	<b>AX100919</b>	<b>AX101411</b>
SC Duplex	<b>AX100929</b>	

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## Pre-Connectorized Assemblies

### FiberExpress Patch Cords

AX200057 Patch Cord Multimode SC Duplex (568SC)



#### FiberExpress Patch Cords

**FiberExpress Duplex Patch Cord Assemblies** are of the highest quality available. They are assembled and 100% optically tested in our factory prior to shipment. All patch cords are built with high-quality connectors and cables which guarantees superior performance and excellent reliability.

Description	Belden Part Number			
	Multimode, FX300, 62.5 μm	Multimode, FX600, 50 μm	Multimode, FX2000, 50 μm	Single-mode SPC

#### FiberExpress Pre-Connectorized Assemblies

Duplex Patch Cord				
ST-ST, 2 m (6 ft.)	70102419	AX200341	AX200799	AX200090
ST-ST, 3 m (10 ft.)	70102420	AX200459	AX200795	AX200091
ST-ST, 5 m (16 ft.)	70102447	AX200413	AX200800	AX200092
568SC-568SC, 2 m (6 ft.)	AX200056	AX200084	AX200603	AX200094
568SC-568SC, 3 m (10 ft.)	AX200057	AX200082	AX200589	AX200095
568SC-568SC, 5 m (16 ft.)	AX200058	AX200280	AX200624	AX200096
LC duplex-LC duplex, 2 m (6 ft.)	AX200517	AX200527	AX200664	AX200507
LC duplex-LC duplex, 3 m (10 ft.)	AX200518	AX200528	AX200665	AX200508
LC duplex-LC duplex, 5 m (16 ft.)	AX200519	AX200529	AX200666	AX200509
MTRJ-MTRJ, 2 m (6 ft.)	AX101122	AX101139	AX200801	AX101157
MTRJ-MTRJ, 3 m (10 ft.)	AX101123	AX101138	AX200802	AX101156
MTRJ-MTRJ, 5 m (16 ft.)	AX101125	AX101137	AX200803	AX101155
Hybrid Patch Cord				
568SC-ST, 3 m (10 ft.)	AX200060	AX200196	AX200900	AX200421
LC duplex-ST, 3 m (10 ft.)	AX200699	AX200695	AX200809	AX200698
LC duplex-568SC, 3 m (10 ft.)	AX200580	AX200581	AX200668	AX200667
MTRJ-ST, 3 m (10 ft.)	AX101133	AX101151	AX200810	AX101166
MTRJ-568SC, 3 m (10 ft.)	AX101128	AX101143	AX200797	AX101161
Single-ended (pigtailed)				
ST-open, 2 m (6 ft.)	70100390	AX200458	AX200811	AX200097
SC-open, 2 m (6 ft.)	70101714	AX200192	AX200653	AX200098
LC-open, 2 m (6 ft.)	AX200657	AX200658	AX200660	AX200659
MTRJ(m)-open, 3 m (10 ft.)	AX101366	AX101367	AX200812	AX101368

Also available as Simplex Patch Cords or custom assemblies, please contact Customer Service for more details.

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# FiberExpress Pre-Connectorized Assemblies

## Cable Assemblies

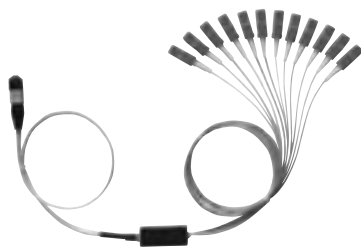
AX250105 MPO Cable Assembly



Multi-fiber Cable Assembly



900 µm Fan-out Assembly



### MPO Cable Assembly

**MPO Cable Assemblies** are multi-fiber cables using single MPO connectors 6, 8 and 12-fiber that are used to interconnect pre-terminated devices such as FiberExpress Pre-terminated Modules and FiberExpress Bars. Depending on the application, MPO Cable Assemblies can use Ribbon Cables or Loose Tube cables. MPO cables are available in lengths of up to 500 meters with a pulling-eye for ease of deployment.

### Multi-fiber Cable Assembly

**Multi-fiber Cable Assemblies** are factory-terminated fiber cables of various constructions (distribution, breakout or ribbon) using simplex, duplex or multi-fiber connectors. They are available in configurations from 2-fiber up to 144-fiber with various kinds of fan-out constructions, lengths and geometry to suit virtually any application.

Description	Belden Part Number	
	Multimode, FX300, 62.5 µm	Multimode, FX600, 50 µm

### FiberExpress Pre-Connectorized Assemblies

MPO Cable Assembly, FOMC, MPO(f)-MPO(f)		
1 pulling eye, OFNP, 12 fibers, 10 m (33 ft.)	AX250021	AX250345
1 pulling eye, OFNP, 12 fibers, 20 m (66 ft.)	AX250105	AX250376
1 pulling eye, OFNP, 12 fibers, 50 m (164 ft.)	AX250349	AX250065
1 pulling eye, OFNP, 12 fibers, 75 m (246 ft.)	AX250060	AX250066
1 pulling eye, OFNP, 12 fibers, 100 m (328 ft.)	AX250061	AX250067
		Multimode, FX2000, 50 µm
1 pulling eye, OFNP, 12 fibers, 10 m (33 ft.)	AX250457	AX250224
1 pulling eye, OFNP, 12 fibers, 20 m (66 ft.)	AX250412	AX250106
1 pulling eye, OFNP, 12 fibers, 50 m (164 ft.)	AX250387	AX250071
1 pulling eye, OFNP, 12 fibers, 75 m (246 ft.)	AX250413	AX250072
1 pulling eye, OFNP, 12 fibers, 100 m (328 ft.)	AX250458	AX250073

Also available in 6 or 8-fiber MPO Cable Assemblies, please contact Customer Service for more details.

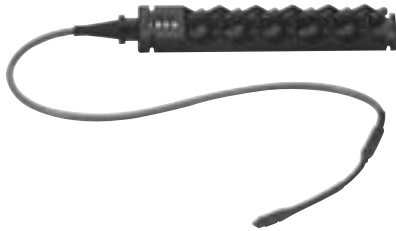
Multi-fiber Cable Assembly, MPO(m)-ST	
Multimode FX300, 62.5 µm, 12 fibers	NXC-RPML-PGPNNN-STPFBN-N-01.5
Multimode FX600, 50 µm, 12 fibers	NXC-RPNL-PGPNNN-STPFBN-N-01.5
Multimode FX2000, 50 µm, 12 fibers	NXC-RPFL-PGPNNN-STPFBN-N-01.5
Single-mode, 12 fibers	NXC-RPSL-PGANNN-STSFBN-N-01.5
Multi-fiber Cable Assembly, MPO(m)-SC	
Multimode FX300, 62.5 µm, 12 fibers	NXC-RPML-PGPNNN-SCPFBN-N-01.5
Multimode FX600, 50 µm, 12 fibers	NXC-RPNL-PGPNNN-SCPFBN-N-01.5
Multimode FX2000, 50 µm, 12 fibers	NXC-RPFL-PGPNNN-SCPFBN-N-01.5
Single-mode, 12 fibers	NXC-RPSL-PGANNN-SCSFBN-N-01.5
Multi-fiber Cable Assembly, MPO(m)-LC	
Multimode, FX300, 62.5 µm, 12 fibers	NXC-RPML-PGPNNN-LCPFBN-N-01.5
Multimode FX600, 50 µm, 12 fibers	NXC-RPNL-PGPNNN-LCPFBN-N-01.5
Multimode FX2000, 50 µm, 12 fibers	NXC-RPFL-PGPNNN-LCPFBN-N-01.5
Single-mode, 12 fibers	NXC-RPSL-PGANNN-LCSFBN-N-01.5
Multi-fiber Cable Assembly, MPO(m)-MTRJ(m)	
Multimode FX300, 62.5 µm, 12 fibers	NXC-RPML-PGPNNN-JBPFBN-N-01.5
Multimode FX600, 50 µm, 12 fibers	NXC-RPNL-PGPNNN-JBPFBN-N-01.5
Multimode FX2000, 50 µm, 12 fibers	NXC-RPFL-PGPNNN-JBPFBN-N-01.5
Single-mode, 12 fibers	NXC-RPSL-PGANNN-JBSFBN-N-01.5

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# FiberExpress Pre-Connectorized Assemblies

## FiberExpress Bar

AX250001 FiberExpress Bar 12ST



MX100154 FiberExpress MPO Adapter



### FiberExpress Bar

The **FiberExpress Bar** consists of a custom length fiber cable with, at one end, a factory pre-terminated rugged mini patch panel and, at the other end, a factory installed multi-fiber MPO connector. The very compact fiber patch panel contains 6 or 12 factory-terminated and tested connectors in a variety of styles. The ruggedness of the FiberExpress Bar makes it an ideal candidate for disaster recovery, industrial applications and other fiber deployment in harsh environment.

### FiberExpress Bar Accessories

The **MPO Adapter** is the sleeve that provides primary alignment and locking when connecting the two MPO connectors (male to female). It has a flange and a metal clip for panel mounting and it is included with each FiberExpress Bar (1m with male connector).

The **19 in. Rack Mount Housing** is a 1U metal panel that holds 1 FiberExpress Bar. It has a live hinge on the left-hand side and swings out giving access to the MPO connection and facilitate cable management and slack storage when used with the Slack Storage Tray.

The **Front Cover** is a smoked Plexiglas cover that protects the fiber cords connected to the FiberExpress Bar. It has 2 push rivets for positive locking and easy handling.

The **Slack Storage Tray** attaches to the back of the 19 in. Rack Mount Housing to facilitate cable management and slack storage. It has a storage capacity of 5 meters of 12-fiber ribbon cable.

The **Wall Mount Enclosure** can contain one FiberExpress Bar. It is made of heavy gauge steel and has a locking cover.

Description	Belden Part Number	
	Multimode, FX300, 62.5 μm	Multimode, FX600, 50 μm

### FiberExpress Pre-Connectorized Assemblies

FiberExpress Bar		
12 ST type, MPO (m), 1 m	AX250001	AX250052
6 SC duplex, MPO (m), 12 fibers, 1 m	AX250005	AX250054
6 MT-RJ, MPO (m), 12 fibers, 1 m	AX250178	AX250179
12 LC, MPO (m), 1 m	AX250539	AX250540
	Multimode, FX2000, 50 μm	Single-mode
12 ST type, MPO (m), 1 m	AX250459	AX250009
6 SC duplex, MPO (m), 12 fibers, 1 m	AX250460	AX250011
6 MT-RJ, MPO (m), 12 fibers, 1 m	AX250461	AX250180
12 LC, MPO (m), 1 m	AX250541	AX250542

Also available for 6 fibers, please contact Customer Service for more details.

FiberExpress Bar Accessories	
MPO Adapter (6 or 12 fibers) included with each FiberExpress Bar (1 m - Male)	MX100154
19 in. Rack Mount Housing for FiberExpress Bar, Gray	AX100331
19 in. Rack Mount Housing for FiberExpress Bar, Black	AX100330
Front Cover for FiberExpress rack mount housing	AX100332
Slack Storage Tray for FiberExpress Bar, (capacity: 5 meters) including top cover, Gray	AX100329
Slack Storage Tray for FiberExpress Bar, (capacity: 5 meters) including top cover, Black	AX100328
Wall Mount Enclosure, can contain one bar, Black	AC200004

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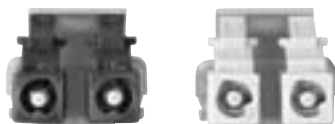
# FiberExpress Secure/Keyed LC System

## Optimax Field Installable Connectors and Patch Cords & Pigtails

AX102197 Secure/Keyed LC Optimax



Secure/Keyed LC System



### FiberExpress Secure/Keyed LC System

The **FiberExpress Secure/Keyed LC System** allows for physical segregation of networks segments in secure fiber cabling infrastructures. All Secure/Keyed LC products are available with 6 different keying options each carrying a different color to facilitate network administration. The keying detail inside the connector is totally tamper-resistant and cannot be re-produced inside a standard LC connector to violate the network security. All products comply with the FOCIS 10 standard and optical performance exceeds all industry standards for SFF connectors.

The **Secure/Keyed LC Optimax field installable connectors** are available in Multimode 50 µm laser-optimized and 62.5 µm fiber versions. They are high-quality connectors that use a ceramic ferrule with a physical contact (PC) polish for Multimode connectors.

The **Secure/Keyed LC Patch Cords and Pigtails** are offered in Multimode 62.5 µm (FX300), 50/125 µm (FX600) and laser-optimized 50/125 µm (FX2000) for the most demanding network performance.

Description	Belden Part Number					
	K1, Red	K2, Green	K3, Yellow	K4, Black	K5, Orange	K6, Blue

### FiberExpress Secure/Keyed LC System

Secure/Keyed LC Optimax*						
Multimode 62.5 µm**	AX102203	AX102204	AX102205	AX102206	AX102207	AX102208
Multimode 50 µm**	AX102197	AX102198	AX102199	AX102200	AX102201	AX102202

\*\*For 900 µm buffered fiber only. The same accessory kit (AX101984) is used for 2 mm jacketed cable connector termination as for our regular Optimax LC offering.

Secure/Keyed LC Duplex Patch Cord, KEYx-KEYx*						
2 m (6 ft.), Multimode FX300, 62.5 µm	AX201365	AX201366	AX201367	AX201368	AX201369	AX201370
2 m (6 ft.), Multimode FX600, 50 µm	AX201383	AX201384	AX201385	AX201386	AX201387	AX201388
2 m (6 ft.), Multimode FX2000, 50 µm	AX201401	AX201402	AX201403	AX201404	AX201405	AX201406
3 m (10 ft.), Multimode FX300, 62.5 µm	AX201371	AX201372	AX201373	AX201374	AX201375	AX201376
3 m (10 ft.), Multimode FX600, 50 µm	AX201389	AX201390	AX201391	AX201392	AX201393	AX201394
3 m (10 ft.), Multimode FX2000, 50 µm	AX201407	AX201408	AX201409	AX201410	AX201411	AX201412
5 m (16 ft.), Multimode FX300, 62.5 µm	AX201377	AX201378	AX201379	AX201380	AX201381	AX201382
5 m (16 ft.), Multimode FX600, 50 µm	AX201395	AX201396	AX201397	AX201398	AX201399	AX201400
5 m (16 ft.), Multimode FX2000, 50 µm	AX201413	AX201414	AX201415	AX201416	AX201417	AX201418

Secure/Keyed LC Duplex Hybrid Patch Cord, KEYx-LCD*						
2 m (6 ft.), Multimode FX300, 62.5 µm	AX201419	AX201420	AX201421	AX201422	AX201423	AX201424
2 m (6 ft.), Multimode FX600, 50 µm	AX201437	AX201438	AX201439	AX201440	AX201441	AX201442
2 m (6 ft.), Multimode FX2000, 50 µm	AX201455	AX201456	AX201457	AX201458	AX201459	AX201460
3 m (10 ft.), Multimode FX300, 62.5 µm	AX201425	AX201426	AX201427	AX201428	AX201429	AX201430
3 m (10 ft.), Multimode FX600, 50 µm	AX201443	AX201444	AX201445	AX201446	AX201447	AX201448
3 m (10 ft.), Multimode FX2000, 50 µm	AX201461	AX201462	AX201463	AX201464	AX201465	AX201466
5 m (16 ft.), Multimode FX300, 62.5 µm	AX201431	AX201432	AX201433	AX201434	AX201435	AX201436
5 m (16 ft.), Multimode FX600, 50 µm	AX201449	AX201450	AX201451	AX201452	AX201453	AX201454
5 m (16 ft.), Multimode FX2000, 50 µm	AX201467	AX201468	AX201469	AX201470	AX201471	AX201472

Secure/Keyed LC Duplex Hybrid Patch Cord, KEYx-SCD*						
2 m (6 ft.), Multimode FX300, 62.5 µm	AX201473	AX201474	AX201475	AX201476	AX201477	AX201478
2 m (6 ft.), Multimode FX600, 50 µm	AX201491	AX201492	AX201493	AX201494	AX201495	AX201496
2 m (6 ft.), Multimode FX2000, 50 µm	AX201509	AX201510	AX201511	AX201512	AX201513	AX201514
3 m (10 ft.), Multimode FX300, 62.5 µm	AX201479	AX201480	AX201481	AX201482	AX201483	AX201484
3 m (10 ft.), Multimode FX600, 50 µm	AX201497	AX201498	AX201499	AX201500	AX201501	AX201502
3 m (10 ft.), Multimode FX2000, 50 µm	AX201515	AX201516	AX201517	AX201518	AX201519	AX201520
5 m (16 ft.), Multimode FX300, 62.5 µm	AX201485	AX201486	AX201487	AX201488	AX201489	AX201490
5 m (16 ft.), Multimode FX600, 50 µm	AX201503	AX201504	AX201505	AX201506	AX201507	AX201508
5 m (16 ft.), Multimode FX2000, 50 µm	AX201521	AX201522	AX201523	AX201524	AX201525	AX201526

Secure/Keyed LC Pigtail, KEYx-open*						
2 m (6 ft.), Multimode FX300, 62.5 µm	AX201527	AX201528	AX201529	AX201530	AX201531	AX201532
2 m (6 ft.), Multimode FX600, 50 µm	AX201533	AX201534	AX201535	AX201536	AX201537	AX201538
2 m (6 ft.), Multimode FX2000, 50 µm	AX201539	AX201540	AX201541	AX201542	AX201543	AX201544

Other Patch Cord lengths and configurations may be available, please contact Customer Service for more details.

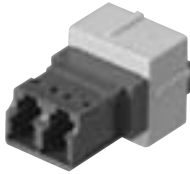
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# FiberExpress Secure/Keyed LC System

## Adapter Modules, Adapter Strips and FiberExpress Manager Modules

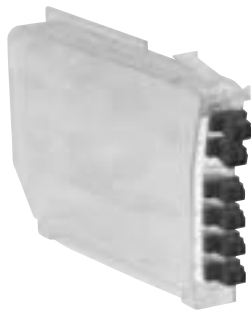
AX102098 Secure/Keyed LC Adapter Module



AX102124 Secure/Keyed LC Adapter Strip



AX102114 Secure/Keyed LC FiberExpress Manager Module



### FiberExpress Secure/Keyed LC System

The **FiberExpress Secure/Keyed LC System** allows for physical segregation of networks segments in secure fiber cabling infrastructures. All Secure/Keyed LC products are available with 6 different keying options each carrying a different color to facilitate network administration. The keying detail inside the connector is totally tamper-resistant and cannot be re-produced inside a standard LC connector to violate the network security. All products comply with the FOCIS 10 standard and optical performance exceeds all industry standards for SFF connectors.

The **Secure/Keyed LC Adapter Modules and Adapter Strips** can be used in all mounting hardware for workstation area, Consolidation Point or Telecom Room applications.

The **Secure/Keyed LC FiberExpress Manager Modules** can be used in 19 and 23 inch *FiberExpress* Manager Shelves to provide a high-density management system of up to 1920 terminated fibers per rack.

Description	Belden Part Number					
	K1, Red	K2, Green	K3, Yellow	K4, Black	K5, Orange	K6, Blue
<b>FiberExpress Secure/Keyed LC System</b>						
<b>Secure/Keyed LC Adapter Module*</b>						
Gray holder	AX102089	AX102090	AX102091	AX102092	AX102093	AX102094
Almond holder	AX102095	AX102096	AX102097	AX102098	AX102099	AX102100
White holder	AX102101	AX102102	AX102103	AX102104	AX102105	AX102106
Black holder	AX102107	AX102108	AX102109	AX102110	AX102111	AX102112
<b>Secure/Keyed LC FiberExpress Adapter Strip*</b>						
12 fibers	AX102119	AX102120	AX102121	AX102122	AX102123	AX102124
24 fibers	AX102125	AX102126	AX102127	AX102128	AX102129	AX102130
<b>Secure/Keyed LC FiberExpress Manager Module*</b>						
12 fibers	AX102113	AX102114	AX102115	AX102116	AX102117	AX102118
24 fibers	AX102310	AX102311	AX102312	AX102313	AX102314	AX102315

\* Patent Pending.

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# FiberExpress Manager

## Rack Components and Modules

AX100934 FiberExpress Manager Shelf



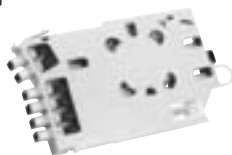
AX101943 FiberExpress Manager 1U Rack Mount Patch Panel



AX102032 FiberExpress Manager 1U Cable Management Accessory



AX101525 Connector Module Pre-terminated MPO-MT-RJ



### FiberExpress Manager Shelf

**FiberExpress modules** are rack-mounted using FiberExpress Manager Shelves. The shelves provide the total system with extra high connection density while facilitating cable routing and patch cord management. For 19- or 23-inch rack: 19 in. shelf holds up to 12 modules; 23 in. shelf holds up to 16 modules.

### FiberExpress Manager 1U

The **FiberExpress Manager 1U Rack Mount Patch Panel** is a low-cost, compact assembly designed for interconnection or splicing of optical fiber cables, using up to three FiberExpress Manager Modules. The low-profile design minimizes rack space to only 45 mm (1.75 in.). An optional FiberExpress Manager 1U Cable Management Accessory is also available.

### FiberExpress Manager Connector Module

The **Connector Module** is the basic building block of the FiberExpress Manager. It is designed with a unique release mechanism that allows it to slide from the shelf like a PC card, easing management of patch cords.

Description	Belden Part Number	
	Gray	Black
<b>FiberExpress Manager</b>		
<b>FiberExpress Manager</b>		
Shelf, 23 in., 10.9 kg (24 lb)	<b>AX100934</b>	<b>AX100935</b>
Shelf, 19 in., 8.2 kg (18 lb)	<b>AX101084</b>	<b>AX101085</b>
1U, Rack Mount Patch Panel, 19 in., 5 kg (11 lb)	<b>AX101944</b>	<b>AX101943</b>
1U, Cable Management Accessory, 19 in., 1 kg (2 lb)	<b>AX102033</b>	<b>AX102032</b>

Description	Belden Part Number					
	ST Type	SC Simplex	SC Duplex	SC Duplex (ST in)	LC	FC
<b>FiberExpress Manager</b>						
<b>FiberExpress Manager Connector Module</b>						
Metal Sleeve, Multimode, 6 fibers	<b>AX101089</b>		<b>AX101092</b>			
Zirconia Ceramic, Single-mode, 6 fibers	<b>AX100936</b>	<b>AX100943</b>	<b>AX100944</b>			
Metal Sleeve, Multimode, 12 fibers	<b>AX101187</b>		<b>AX101714</b>	<b>AX101120</b>	<b>AX101528</b>	
Zirconia Ceramic, Single-mode, 12 fibers	<b>AX101186</b>		<b>AX101713</b>	<b>AX101119</b>	<b>AX101527</b>	
Zirconia Ceramic, Single-mode, 12 UPC pigtails			<b>AX101715</b>			
Metal Sleeve, Multimode, 24 fibers					<b>AX102306</b>	
Zirconia Ceramic, Single-mode, 24 fibers					<b>AX102305</b>	
Zirconia Ceramic, Single-mode/Multimode, 6 fibers						<b>AX100937</b>
		<b>Multimode 62.5 µm</b>	<b>Multimode 50 µm</b>	<b>Single-mode</b>		
MPO(m)-ST type, 12 pre-terminated	<b>AX101189</b>		<b>AX101190</b>	<b>AX101188</b>		
MPO(m)-SC Duplex, 12 pre-terminated	<b>AX101091</b>		<b>AX101114</b>	<b>AX101090</b>		
MPO(m)-MT-RJ(m), 12 pre-terminated	<b>AX101525</b>		<b>AX101526</b>	<b>AX101524</b>		
MPO(m)-LC, 12 pre-terminated	<b>AX101530</b>		<b>AX101531</b>	<b>AX101529</b>		
MPO(m)-LC, 24 pre-terminated	<b>AX102309</b>		<b>AX102308</b>	<b>AX102307</b>		
MT-RJ, Beige, Multimode, 12 fibers						<b>AX101096</b>
MT-RJ, Blue, Single-mode, 12 fibers						<b>AX101581</b>

These products are in the process of being assessed for RoHS compliance. Please check our Web Site for the most current RoHS status.



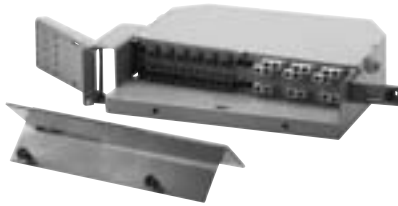
## FiberExpress Patch Panels

### Rack Mount Patch Panels

AX100041 FiberExpress, 12/24 Port (1U)  
Rack Mount Patch Panel



AX100069 FiberExpress, 24/48 Port (2U)  
Rack Mount Patch Panel



AX100078 FiberExpress (3U) Rack Mount Patch Panel



AX100115 FiberExpress, 48/96 Port (4U) Rack Mount  
Patch Panel



#### FiberExpress Rack Mount Patch Panel 1U and 2U

The **FiberExpress 1U and 2U Rack Mount Patch Panels** are equipped with a special hinge that allows easy access to the rear of the patch panel without disturbing the optical fiber cable. A specially designed front panel allows connector protection and easy routing of optical fiber patch cords. The **FiberExpress** Rack Mount Patch Panels are also compatible with our 203 mm (8 in.) Splice Organizer Trays. This allows the optical fiber cable to be either terminated with fiber single-ended patch cords or field-installable connectors. The patch panels can be used with ST Compatible, SC, 568SC, FC, LC or MT-RJ adapters strips (ordered separately).

The **FiberExpress 1U Rack Mount Patch Panel** is a low-cost, compact assembly designed for interconnection or splicing of optical fiber cables, from 12 up to 48 fibers if MT-RJ or LC double density adapter strips are used. The low-profile design minimizes rack space to only 45 mm (1.75 in.). An optional smoked Plexiglass front cover is also available.

The **FiberExpress 2U Rack Mount Patch Panel** offers a high fiber capacity, 96 fibers if using double density MT-RJ or LC adapter strips. The **FiberExpress 2U** comes equipped with a smoked Plexiglass front cover that protects fiber connections while allowing for quick visual inspection.

#### FiberExpress Rack Mount Patch Panel 3U

The **FiberExpress 3U Rack Mount Patch Panel** can accommodate up to 96 optical fiber connections using MT-RJ or LC connectors. The connector panel is mounted on a sliding drawer for easy access to the back side (cable side) of the panel. The **FiberExpress 3U Rack Mount Patch Panel** can be used with either optical fiber single-ended patch cords or field-installable connectors. If optical single-ended patch cords are to be used, organizer trays are easily accessible via the removable front access pull-out drawer. (Trays must be ordered separately.)

The **FiberExpress 3U Rack Mount Patch Panel** is a compact cross-connect assembly for the termination of optical fiber cables. The low-profile design minimizes required rack space to 127 mm (5 in.). It is compatible with ST Compatible, SC, 568SC, MT-RJ, LC and FC adapters strips (ordered separately).

#### FiberExpress Rack Mount Patch Panel 4U

The **FiberExpress 4U Rack Mount Patch Panel** is an economical solution for the protection of optical fiber terminations and splices, up to 192 optical fibers if using MT-RJ or LC connectors. The connector panel, accepting the Universal Adapter Strips, is located inside the enclosure and swings out (left or right) to give easy access to the cable and splices.

The **FiberExpress 4U Rack Mount Patch Panel** is a compact Cross-Connect enclosure for the cross-connection, interconnection or splicing of optical fiber cables. The low-profile design minimizes required rack space to 178 mm (7 in.). It can be used with ST Compatible, SC, 568SC, MT-RJ, LC and FC adapters strips (ordered separately).

Description	Belden Part Number
<b>FiberExpress Patch Panels</b>	
<b>FiberExpress Rack Mount Patch Panel 1U*</b>	
Gray	AX100042
Black	AX100041
<b>FiberExpress Rack Mount Patch Panel 2U*</b>	
Gray	AX100069
Black	AX100068
<b>FiberExpress Rack Mount Patch Panel 3U</b>	
Gray	AX100078
Black	AX100077
<b>FiberExpress Rack Mount Patch Panel 4U</b>	
Gray	AX100115
Black	AX100116

If Single-ended patch cords are to be spliced to the fiber cable, don't forget to order Splice Organizer Trays or Kits. Both these, and the Universal Adapter Strips can be ordered in the **FiberExpress Accessories** section.

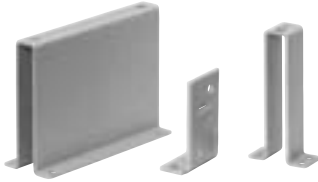
\*IMPORTANT: The **FiberExpress 1U** accepts two (2) 203 mm (8 in.) splice trays.  
The **2U** accepts four (4) 203 mm (8 in.) splice trays.

These products are in the process of being assessed for RoHS compliance. Please check our Web Site for the most current RoHS status.

# FiberExpress Patch Panels

## Rack Mount Accessories and Wall Mount Patch Panels

AX101800 127 mm (5 in.) Universal Offset Bracket Kit, for 19 in. and 23 in. Racks 1U



AX101802 23 in. Rack Universal Extension Bracket for 1U and 2U



AX100047 Right Side Cable Entry Bracket for 1U



AX100045 Front Cover for 1U



AX100543 Large Wall Mount



### FiberExpress Rack Mount Patch Panels 1U and 2U Accessories

The accessories provide additional panel mounting flexibility for racks, cabinets and cable entry.

Description	Belden Part Number
<b>FiberExpress Patch Panels</b>	
<b>Rack Mount Accessories (1U and 2U)</b>	
127 mm (5 in.) Universal Offset Bracket Kit:	
for 19 in. and 23 in. racks (1U), Black	AX101799
for 19 in. and 23 in. racks (1U), Gray	AX101800
for 19 in. and 23 in. racks (2U), Black	AX101797
for 19 in. and 23 in. racks (2U), Gray	AX101798
23 in. Universal extension bracket, Black	AX101801
23 in. Universal extension bracket, Gray	AX101802
Right side cable entry bracket (1U), Black	AX100046
Right side cable entry bracket (1U), Gray	AX100047
Right side cable entry bracket (2U), Black	AX100073
Right side cable entry bracket (2U), Gray	AX100074
Front Cover (1U), Smoked Plexiglass	AX100045

### FiberExpress Wall Mount Patch Panel

The FiberExpress Wall Mount Patch Panel Series is an economical solution for the protection of optical fiber terminations and splices in hostile environments.

Using the FiberExpress Universal Adapter Strips (ordered separately), the Wall Mount Patch Panels allow for flexible and customized patch panel design. They are compatible with most industry standard connections: ST Compatible, SC, 568SC, MT-RJ, LC and FC.

Available in gray and black, the FiberExpress Wall Mount Patch Panels have an ergonomic design, rugged construction and compact assemblies to effectively protect your optical fiber terminations and splices.

Description	Belden Part Number
<b>FiberExpress Patch Panels</b>	
<b>Wall Mount</b>	
Small, Gray	AX100496
Small, Black	AX100495
Medium, Gray	AX100541
Medium, Black	AX100540
Large, Gray	AX100543
Large, Black	AX100542

If optical Single-ended patch cords are to be spliced to the fiber cable, don't forget to order Splice Organizer Trays or Kits in FiberExpress Accessories section. Universal Adapter Strips can be ordered in FiberExpress Patch Panels section.

These products are in the process of being assessed for RoHS compliance. Please check our Web Site for the most current RoHS status.

AX100541 Medium Wall Mount



AX100495 Small Wall Mount



# FiberExpress Patch Panels Accessories

## Universal Optical Fiber Adapter Strips and Accessories

AX101729 Adapters loaded with 6 LC Duplex



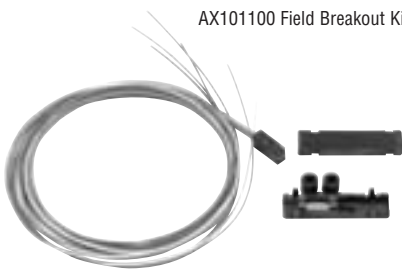
AX100094 Adapters loaded with 3 SC Duplex



AX100066 Blank Strip



AX101100 Field Breakout Kit



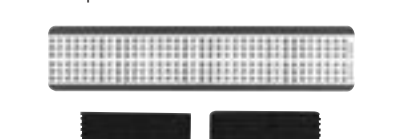
A0649869 Optical Fiber Splice Organizer Kits and Trays



AX100945 Flex Kit



AX101098 Splice Holder Kit



### Optical Fiber Adapter Strips

**Universal Optical Fiber Adapter Strips** are pre-loaded with six (single density) or 12 (double density) adapter sleeves. Two types of adapter sleeves are available: Phosphor Bronze and Zirconia Ceramic. Adapter sleeves are used as the connecting interface between two optical fiber connectors.

A **Blank adapter strip** is also available and can be used with any FiberExpress Patch Panel to fill in unused adapter strip openings.

### Optical Fiber Accessories

**The Field Breakout Kit** is designed to attach to one tube of a loose-tube cable. Each kit has either six or twelve 900 µm tubes that hold each of the coated fibers. For each end of the cable, one kit is needed for every tube. For example, a 12-fiber 62.5 µm cable contains two 6-fiber tubes. This cable would require four kits, two for each end.

**Optical Fiber Splice Organizer Kits** provide the accessories necessary for installing the FiberExpress Fiber Patch Panels, as well as other fiber terminals that accommodate the standard Belden organizer tray.

**The Flex Kit** contains tubes and manifolds designed to split cables into individual fiber strands, and is suitable for 6 fibers up to 12 fibers. It is necessary for use with loose tube cables or when the fiber cable count does not match the number of connections in the FiberExpress Manager Connector Module. The Flex Kit tubes help to maintain proper fiber bend radius. One kit is required per 12 modules (one 19 in. shelf).

A **Splice Holder Kit** can be used to hold fusion or mechanical splices. Each splice holder can handle up to 6 splices.

Description	Belden Part Number	
	Phosphor Bronze, Multimode	Zirconia Ceramic, Single-mode

### FiberExpress Optical Fiber Adapter Strips

Single Density, Black		
Loaded with 6 ST Compatible Adapters	AX100088	AX100534
Loaded with 3 SC Duplex Adapters	AX100094	AX101407
Loaded with 6 SC Simplex Adapters	AX100092	AX100538
Loaded with 6 FC Adapters	AX100090	AX100536
Loaded with 6 LC Duplex Adapters	AX101729	AX101731
MT-RJ, loaded with 6 MT-RJ, Multimode/Single-mode	AX101115	
Double Density, Black		
Loaded with 12 ST Compatible Adapters	AX100080	AX100528
Loaded with 6 SC Duplex Adapters	AX100098	AX101409
Loaded with 12 SC Simplex Adapters	AX100084	AX100532
Loaded with 12 FC Adapters	AX100082	AX100530
Loaded with 12 LC Duplex Adapters	AX101741	AX101743
MT-RJ, loaded with 12 MT-RJ, Multimode/Single-mode	AX101117	
Blank Strip		
Black	AX100066	

### FiberExpress Accessories

Optical Fiber Field Breakout Kit	
6 fibers, 1/pack	AX101100
12 fibers, 1/pack	AX101101
Optical Fiber Splice Organizer Kit	
Splice kit, tray, 203 mm (8 in.)	A0649869
Splice kit, tray, 305 mm (12 in.)	A0318904
Optical Fiber Splice Tray	
Fusion, 203 mm (8 in.)	A0335015
Fusion, 305 mm (12 in.)	A0316446
Universal (mechanical or fusion), 203 mm (8 in.)	AX100079
Universal (mechanical or fusion), 305 mm (12 in.)	A0394328
Tray cover, 203 mm (8 in.)	A0394331
Tray cover, 305 mm (12 in.)	A0394330
Flex Kit	AX100945
Splice Holder Kit	AX101098

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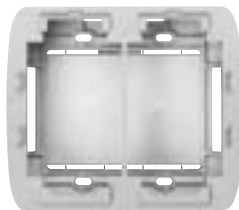
# FiberExpress Outlets

## MediaFlex Plates and Inserts

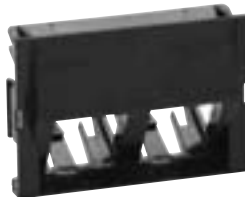
AX101869 MediaFlex Plate, Double Gang



AX101874 MediaFlex Adapter Box, Double Gang



AX101756 MediaFlex MDVO (style) Insert, 2-port, Angled



AX101937 MediaFlex SC Duplex Insert, Angled



### MediaFlex Plate

**MediaFlex Plates** are one part of the comprehensive line of plates and inserts that snap together to create a full line of modular workstation outlets.

MediaFlex Plates can be mounted over standard NEMA type outlet boxes and rings to provide support for a variety of MediaFlex Adapters and Inserts. The fully modular construction combined with the front access design provides extensive configuration flexibility for current and future network needs. MediaFlex Plates are available in Single Gang and Double Gang configurations.

The Double Gang faceplate comes with a stand-off ring included in the package. This ring allows for easy mounting with virtually any industry electrical box or mud/adaptor rings, therefore providing added installation flexibility.

Each plate has the capacity of up to 6 ports per Single Gang and 12 ports per Double Gang.

### MediaFlex Adapter Box

**MediaFlex Surface Adapter Boxes** are one part of the comprehensive line of plates and inserts that snap together to create a full line of modular workstation outlets.

MediaFlex Surface Adapter Boxes can be mounted over standard NEMA type outlet boxes and rings to provide support for the MediaFlex plates. The MediaFlex Surface Adapter Boxes are available as a Double Gang configuration. The Double Gang box allows more room for cable management and bend radius control.

### MediaFlex MDVO (style) Insert

**MediaFlex MDVO-style Inserts** are available in a 2-port configuration in both Flush and Angled versions. They are compatible with all GigaFlex and MDVO Modules (EZ-MDVO and Multimedia). The inserts are two units high for the flush version and three units high for the angled version. Therefore three flush inserts or two angled inserts are required to fully populate a Single Gang MediaFlex Plate.

### MediaFlex Multimedia Insert

**MediaFlex Multimedia Inserts** provide optimum flexibility in configuring multimedia workstation outlets that respond to any present or future network needs. MediaFlex Multimedia Inserts along with other MediaFlex Inserts allow for easy configuration of outlets. All inserts are front loaded and easily snapped in and out of the MediaFlex Plates for easy installation and maintenance.

MediaFlex Multimedia Inserts are available in Angled versions only in order to allow for proper management of cable bend radius. The inserts are three units high, therefore two inserts are required to fully populate a Single Gang faceplate and four inserts will fully populate a Double Gang faceplate.

Description	Belden Part Number					
	Gray	Almond	Elec. White	Black	White	Ivory
<b>FiberExpress Outlets</b>						
<b>MediaFlex Plate</b>						
Single Gang	AX101745	AX101746	AX101747	AX101748	AX102608	AX102569
Double Gang	AX101869	AX101870	AX101871	AX101872	AX102609	AX102570
<b>MediaFlex Adapter Box</b>						
Single Gang	AX102480	AX102481	AX102482	AX102483	AX102484	AX102485
Double Gang	AX101873	AX101874	AX101875	AX101876	AX102610	AX102571
<b>MediaFlex MDVO (style) Insert</b>						
2-port, Flush, bag of 10 units	AX101749	AX101750	AX101751	AX101752	AX102612	AX102572
2-port, Angled, bag of 10 units	AX101753	AX101754	AX101755	AX101756	AX102613	AX102573
<b>MediaFlex SC Duplex</b>						
SC Duplex Single-mode	AX101935	AX101936	AX101937	AX101938	AX102619	AX102649
SC Duplex Multimode	AX101939	AX101940	AX101941	AX101942	AX102620	AX102650

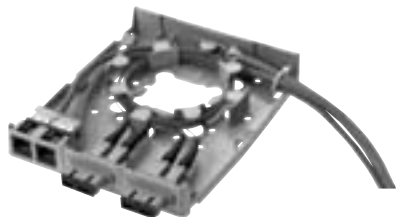
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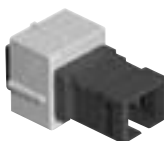
## FiberExpress Outlets

### MDVO Multimedia Outlet Boxes & Modules and Multi-User Outlet Boxes

A0643205 MDVO Multimedia Outlet Box, shown here as terminated



A0407005 MDVO SC Fiber Module



A0649254 SC Duplex Adapter



A0407010 MDVO ST Compatible Fiber Module



AX101467 MDVO MT-RJ Fiber Module



AX100222 Multi-User Outlet Box, shown here with modules



#### MDVO Multimedia Outlet Box

The **MDVO Multimedia Outlet Box** brings unique versatility for multimedia work area installations. The box design provides cable management and helps maintain cable bend radius. The outlet box's low profile design and side-entry offers better protection for patch cords. The outlet box can accept up to six EZ-MDVO, GigaFlex or MDVO Multimedia Modules or three SC Duplex adapters.

The MDVO Multimedia Outlet Box can be mounted directly on the wall or attached to standard electrical boxes. Included with the MDVO Multimedia box are three SC Duplex Mounting bezels and three MDVO Adapters.

#### MDVO Multimedia Modules

**MDVO Multimedia Modules** address audio/video and fiber applications. Fiber modules are available for LC Duplex, SC Simplex, ST Compatible multimode and MT-RJ multimode & single-mode connections. The SC Duplex Adapter is a fiber adapter sleeve with flanges that mounts into the SC Duplex mounting bezel (included in the MDVO Multimedia Outlet box). Audio/video modules are available for SVHS, RCA, BNC and Video F connections.

#### Multi-User Outlet Box

The **Multi-User Outlet Box** is a versatile box that can be used in many different applications. The outlet box can accommodate up to 24 connections of any type, UTP, fiber or coax. The outlet box is ideal for use as a multi-user telecommunications assembly, or simply as a high-density multimedia telecommunications outlet. The Multi-User Outlet Box can also be used as a wall mounted patch panel in confined areas, such as shallow rooms and cabinets.

Description	Belden Part Number			
	Gray	Almond	White	Black

#### FiberExpress Outlets

MDVO Multimedia Outlet Box				
6-port	A0643205	A0643206	A0643207	A0643208
Please note that SC Duplex adapters must be ordered separately (A0649254).				
MDVO Multimedia Module				
LC Duplex Multimode	AX102209	AX102210	AX102211	AX102212
LC Duplex Single-mode	AX102213	AX102214	AX102215	AX102216
SC Simplex, Multimode, Blue insert	A0407003	A0407004	A0407005	A0407006
SC Duplex Adapter, Multimode	A0649254			
ST Compatible, Multimode	A0407007	A0407008	A0407009	A0407010
MT-RJ, Multimode	AX101467			
MT-RJ, Single-mode, Blue	AX101466			

Custom multimedia connectors are also available, please contact Customer Service for more details.

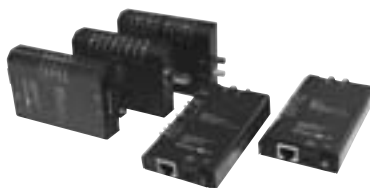
Multi-User Outlet Box				
24-port	AX100219	AX100220	AX100221	AX100222

These products are in the process of being assessed for RoHS compliance. Please check our Web Site for the most current RoHS status.

## Network Connectivity Products

### Media Converters, Transceivers & Hubs and Network Tester

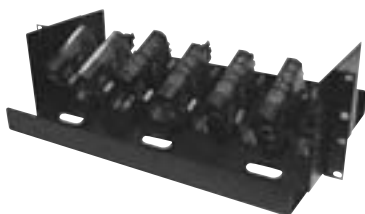
Media Converters



#### Media Converters for Ethernet and Fast Ethernet

**Media Converters** enable the connection of dissimilar network cabling types, while maintaining the same network speed. A legacy Thinnet segment can be connected to a 10Base-T Hub or switch port with an AX-200 Converter or, link two different 10Base-T networks together over a multimode fiber optic link with a pair of AX-270s. Connect a legacy Thinnet segment over fiber with the AX-280 converter. The AX-5270 can be used for interbuilding links or attached to a fiber backbone.

AX-1912 Media Converter Rack

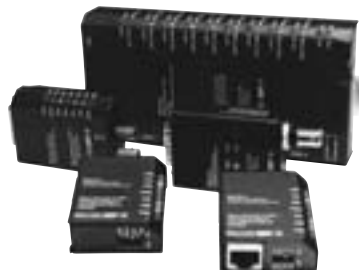


#### Transceivers and Ethernet Hubs

**The AX-50, 70 and 80 Transceivers** enable the connection of a legacy AUI port to 10Base-T, Thinnet, or Fiber Optic media. The transceiver is powered from the host and requires no external power supply.

**The AX-509 Ethernet Hub** has an AUI port which accepts UTP, Fiber Optic or BNC transceivers. Specified for use by many U.S. Government Agencies. Includes a 110v/12v power supply.

AX050, 70 and 80 Transceivers and AX-509 Ethernet Hub



#### Realtime 10/100 Base-TX Ethernet Network Test Unit

**The AX-110BT Realtime 10/100 Base-TX Ethernet Network Test Unit** is a cost effective way to quickly determine a network's operating condition. Plug the unit's patch cord into the tester, then into any open RJ-45 jack in an office, cubicle or conference room. Immediately see if the jack is a live network node capable of either 100 Mb/s or 10 Mb/s. Next check patch cord continuity and polarity. Connect the downlink to a PC to check NIC card link, speed and full or half duplex capabilities. Connect the uplink to a hub or switch port to verify link and speed.

AX-110BT Realtime 10/100 Base-TX Ethernet Network Test Unit



Description	Belden Part Number
<b>Network Connectivity Products</b>	
<b>Media Converter</b>	
10Base-T/10Base2, RJ-45 to BNC	<b>AX-200</b>
10Base-T/10Base-FL, RJ-45 to ST-Compatible fiber connectors	<b>AX-270</b>
10Base2/10Base-FL, BNC to ST-Compatible fiber connectors	<b>AX-280</b>
100Base-TX/100Base-FX, SC-Compatible fiber connectors	<b>AX-5270SC</b>
100Base-TX/100Base-FX, ST-Compatible fiber connectors	<b>AX-5270ST</b>
<b>Media Converter Rack</b>	
Holds up to 12 converters and multi lead power supplies, 19 in. rack-mount ready	<b>AX-1912-MCR</b>
Power Supply, 4-lead 110v/12v, powers up to 4 converters	<b>AX-270P4U</b>
Power Supply, 8-lead 110v/12v, powers up to 8 converters	<b>AX-270P8U</b>
<b>Transceivers and Ethernet Hubs</b>	
UTP Transceiver, 10Base-T, AUI to RJ-45, side port	<b>AX-50</b>
UTP Transceiver, 10Base-T, AUI to RJ-45, rear port	<b>AX-50R</b>
Fiber Transceiver, 10Base-FL, AUI to ST-Compatible	<b>AX-70</b>
Thinnet Transceiver, 10Base2, AUI to BNC	<b>AX-80</b>
Ethernet Hub with 8 RJ-45 10Base-T ports and 1 AUI port	<b>AX-509</b>
<b>Network Tester</b>	
Realtime 10/100 Base-TX Ethernet Network Test Unit	<b>AX-110BT</b>

These products are in the process of being assessed for RoHS compliance. Please check our Web Site for the most current RoHS status.