Fiber*Express* 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 termi-nate 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
Fiber*Express* 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 website 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 instal-lable 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	A0390851	AX101412
SC Simplex	AX100919	AX101411
SC Duplex	AX100929	–

These products are in the process of being assessed for RoHS compliance.
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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, 50.0 µm	Multimode, FX2000, 50.0 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 (pigtails)				
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.
These products are in the process of being assessed for RoHS compliance. Please check our website for the most current RoHS status.
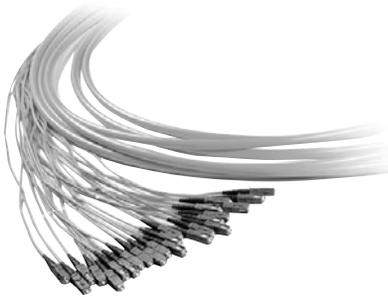
Fiber*Express* Pre-Connectorized Assemblies
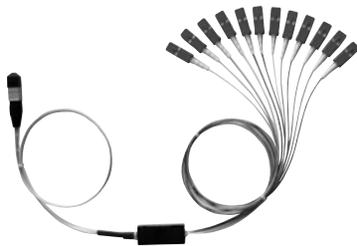## Cable Assemblies

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 Fiber*Express* pre-terminated modules and Fiber*Express* 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	**Single-Mode**
Fiber*Express* 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	**Single-Mode**
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.

Description	Belden Part Number
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

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

MX100154 FiberExpress MPO Adapter

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″ (0.48 m) rack mount housing is a 1U metal panel that holds one 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″ (0.48 m) 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 gage steel and has a locking cover.

Description	Belden Part Number	
	Multimode, FX300, 62.5 µm	Multimode, FX600, 50.0 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, 50.0 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.

Description	Belden Part Number
FiberExpress Bar Accessories	
MPO Adapter (6 or 12 fibers) included with each FiberExpress Bar (1 m - male)	MX100154
19″ (0.48 m) Rack Mount Housing for FiberExpress Bar, Grey	AX100331
19″ (0.48 m) 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, Grey	AX100329
Slack Storage Tray for FiberExpress Bar, (capacity: 5 meters) including top cover, Black	AX100328
Wall Mount Enclosure, can contain one bar, Black	AC200004

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

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Fiber*Express* Secure/Keyed LC System
Optimax® Field Installable Connectors and Patch Cords & Pigtails

AX102197 Secure/keyed LC Optimax®

Secure/keyed LC System

Fiber*Express* Secure/Keyed LC System

The Fiber*Express* secure/keyed LC system allows for physical segregation of network 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
Fiber*Express* 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
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

These products are in the process of being assessed for RoHS compliance. Please check our website for the most current RoHS status.
* Patent pending. • ** 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.

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Fiber*Express* Secure / Keyed LC System

Adapter Modules, Adapter Strips and Fiber*Express* Manager Modules

AX102098 Secure/keyed LC Adapter Module

Fiber*Express* Secure / Keyed LC System

The Fiber*Express* secure / keyed LC System allows for physical segregation of network 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 Fiber*Express* manager modules can be used in 19″ (0.48 m) and 23″ (0.58 m) Fiber*Express* manager shelves to provide a high-density management system of up to 1920 terminated fibers per rack.

AX102124 Secure/keyed LC Adapter Strip

AX102114 Secure/keyed LC Fiber*Express* Manager Module

Description	Belden Part Number					
	K1, Red	K2, Green	K3, Yellow	K4, Black	K5, Orange	K6, Blue
Fiber*Express* Secure / Keyed LC System						
Secure / Keyed LC Adapter Module*						
Grey 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
Secure / Keyed LC Fiber*Express* Adapter Strip*						
12 fibers	AX102119	AX102120	AX102121	AX102122	AX102123	AX102124
24 fibers	AX102125	AX102126	AX102127	AX102128	AX102129	AX102130
Secure / Keyed LC Fiber*Express* Manager Module*						
12 fibers	AX102113	AX102114	AX102115	AX102116	AX102117	AX102118
24 fibers	AX102310	AX102311	AX102312	AX102313	AX102314	AX102315

* Patent pending.
These products are in the process of being assessed for RoHS compliance. Please check our website for the most current RoHS status.

FiberExpress Manager
Rack Components and Modules

AX100934
FiberExpress
Manager Shelf

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″ (0.48 m) or 23″ (0.58 m) h rack: 19″ (0.48 m) shelf holds up to 12 modules; 23″ (0.58 m) shelf holds up to 16 modules.
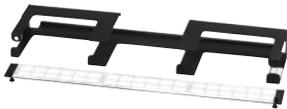
AX101943 FiberExpress
Manager 1U Rack Mount
Patch Panel

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″). An optional FiberExpress manager 1U cable management accessory is also available.
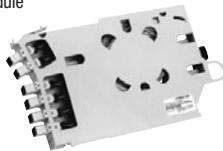
AX102032 FiberExpress
Manager 1U Cable
Management
Accessory

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.

AX101525 Connector Module
Pre-terminated
MPO-MT-RJ

Description	Belden Part Number	
	Grey	Black

FiberExpress Manager

FiberExpress Manager		
Shelf, 23″ (0.58 m), 10.9 kg (24 lbs.)	AX100934	AX100935
Shelf, 19″ (0.48 m), 8.2 kg (18 lbs.)	AX101084	AX101085
1U, Rack Mount Patch Panel, 19″ (0.48 m), 5 kg (11 lbs.)	AX101944	AX101943
1U, Cable Management Accessory, 19″ (0.48 m), 1 kg (2 lbs.)	AX102033	AX102032

Description	Belden Part Number					
	ST Type	SC Simplex	SC Duplex	SC Duplex (ST in)	LC	FC

FiberExpress Manager

FiberExpress Manager Connector Module						
Metal Sleeve, Multimode, 6 fibers	AX101089	–	AX101092	–	–	–
Zirconia Ceramic, Single-mode, 6 fibers	AX100936	AX100943	AX100944	–	–	–
Metal Sleeve, Multimode, 12 fibers	AX101187	–	AX101714	AX101120	AX101528	–
Zirconia Ceramic, Single-mode, 12 fibers	AX101186	–	AX101713	AX101119	AX101527	–
Zirconia Ceramic, Single-mode, 12 UPC pigtails	–	–	AX101715	–	–	–
Metal Sleeve, Multimode, 24 fibers	–	–	–	–	AX102306	–
Zirconia Ceramic, Single-mode, 24 fibers	–	–	–	–	AX102305	–
Zirconia Ceramic, Single-mode/Multimode, 6 fibers	–	–	–	–	–	AX100937

Description	Belden Part Number			
	Multimode 62.5 μm	Multimode 50.0 μm	Single-Mode	–
MPO(m)-ST type, 12 pre-terminated	AX101189	AX101190	AX101188	–
MPO(m)-SC Duplex, 12 pre-terminated	AX101091	AX101114	AX101090	–
MPO(m)-MT-RJ(m), 12 pre-terminated	AX101525	AX101526	AX101524	–
MPO(m)-LC, 12 pre-terminated	AX101530	AX101531	AX101529	–
MPO(m)-LC, 24 pre-terminated	AX102309	AX102308	AX102307	–
MT-RJ, Beige, Multimode, 12 fibers	–	–	–	AX101096
MT-RJ, Blue, Single-mode, 12 fibers	–	–	–	AX101581

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

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Fiber*Express* Patch Panels
Rack Mount Patch Panels

AX100041 Fiber*Express*, 12/24 Port (1U)
Rack Mount Patch Panel

AX100069 Fiber*Express*, 24/48 Port (2U)
Rack Mount Patch Panel

AX100078 Fiber*Express* (3U) Rack Mount Patch Panel

AX100115 Fiber*Express*, 48/96 Port (4U) Rack Mount Patch Panel

Fiber*Express* Rack Mount Patch Panel 1U and 2U

The Fiber*Express* 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 Fiber*Express* rack mount patch panels are also compatible with our 203 mm (8″) 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 Fiber*Express* 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″). An optional smoked plexiglass front cover is also available.

The Fiber*Express* 2U rack mount patch panel offers a high fiber capacity, 96 fibers if using double density MT-RJ or LC adapter strips. The Fiber*Express* 2U comes equipped with a smoked plexiglass front cover that protects fiber connections while allowing for quick visual inspection.

Fiber*Express* Rack Mount Patch Panel 3U

The Fiber*Express* 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 Fiber*Express* 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 Fiber*Express* 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″). It is compatible with ST compatible, SC, 568SC, MT-RJ, LC and FC adapters strips (ordered separately).

Fiber*Express* Rack Mount Patch Panel 4U

The Fiber*Express* 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 Fiber*Express* 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″). It can be used with ST Compatible, SC, 568SC, MT-RJ, LC and FC adapters strips (ordered separately).

Description	Belden Part Number
Fiber*Express* Patch Panels	
Fiber*Express* Rack Mount Patch Panel 1U*	
Grey	**AX100042**
Black	**AX100041**
Fiber*Express* Rack Mount Patch Panel 2U*	
Grey	**AX100069**
Black	**AX100068**
Fiber*Express* Rack Mount Patch Panel 3U	
Grey	**AX100078**
Black	**AX100077**
Fiber*Express* Rack Mount Patch Panel 4U	
Grey	**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 Fiber*Express* accessories section.

* IMPORTANT: The Fiber*Express* 1U accepts two (2) 203 mm (8″) splice trays. The 2U accepts four (4) 203 mm (8″) splice trays.

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

Fiber*Express* Patch Panels

Rack Mount Accessories and Wall Mount Patch Panels

AX101800 127 mm (5″) Universal Offset Bracket Kit, for 19″ (0.48 m) and 23″ (0.58 m) Racks 1U

AX101802 23″ (0.58 m) 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

Fiber*Express* 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
Fiber*Express* Patch Panels	
Rack Mount Accessories (1U and 2U)	
127 mm (5″) Universal Offset Bracket Kit:	
for 19″ (0.48 m) and 23″ (0.58 m) racks (1U), Black	**AX101799**
for 19″ (0.48 m) and 23″ (0.58 m) racks (1U), Grey	**AX101800**
for 19″ (0.48 m) and 23″ (0.58 m) racks (2U), Black	**AX101797**
for 19″ (0.48 m) and 23″ (0.58 m) racks (2U), Grey	**AX101798**
23″ (0.58 m) Universal extension bracket, Black	**AX101801**
23″ (0.58 m) Universal extension bracket, Grey	**AX101802**
Right side cable entry bracket (1U), Black	**AX100046**
Right side cable entry bracket (1U), Grey	**AX100047**
Right side cable entry bracket (2U), Black	**AX100073**
Right side cable entry bracket (2U), Grey	**AX100074**
Front Cover (1U), Smoked Plexiglass	**AX100045**

Fiber*Express* Wall Mount Patch Panel

The Fiber*Express* wall mount patch panel series is an economical solution for the protection of optical fiber terminations and splices in hostile environments. Using the Fiber*Express* 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 grey and black, the Fiber*Express* 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
Fiber*Express* Patch Panels	
Wall Mount	
Small, Grey	**AX100496**
Small, Black	**AX100495**
Medium, Grey	**AX100541**
Medium, Black	**AX100540**
Large, Grey	**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 Fiber*Express* accessories section. Universal adapter strips can be ordered in Fiber*Express* patch panels section.
These products are in the process of being assessed for RoHS compliance.
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AX100541 Medium Wall Mount
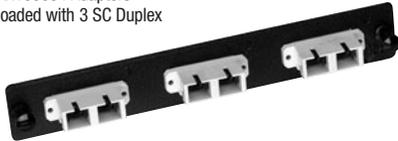
AX100495 Small Wall Mount

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Fiber*Express* Patch Panels Accessories

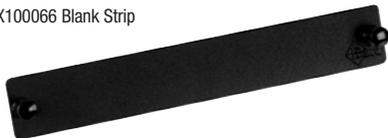## Universal Optical Fiber Adapter Strips and Accessories

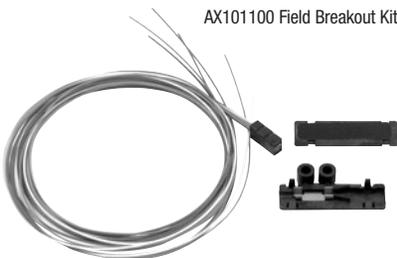AX101729 Adapters
loaded with 6 LC Duplex
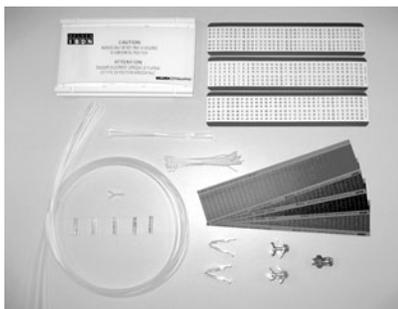
AX100094 Adapters
loaded with 3 SC Duplex
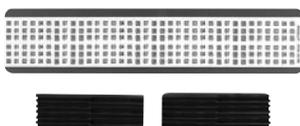
AX100066 Blank Strip

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 Fiber*Express* 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 Fiber*Express* 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 Fiber*Express* manager connector module. The Flex Kit tubes help to maintain proper fiber bend radius. One kit is required per 12 modules (one 19″/0.48 m 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
Fiber*Express* 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	
Fiber*Express* 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″)	A0649869	
Splice kit, tray, 305 mm (12″)	A0318904	
Optical Fiber Splice Tray		
Fusion, 203 mm (8″)	A0335015	
Fusion, 305 mm (12″)	A0316446	
Universal (mechanical or fusion), 203 mm (8″)	AX100079	
Universal (mechanical or fusion), 305 mm (12″)	A0394328	
Tray cover, 203 mm (8″)	A0394331	
Tray cover, 305 mm (12″)	A0394330	
Flex Kit	AX100945	
Splice Holder Kit	AX101098	

These products are in the process of being assessed for RoHS compliance.
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FiberExpress Outlets
MediaFlex Plates and Inserts

AX101869 MediaFlex Plate, Double Gang
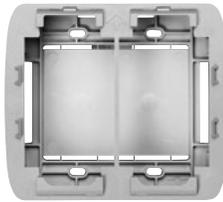
MediaFlex Plate

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/adapter 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.

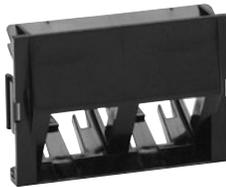AX101874 MediaFlex Adapter Box, Double Gang

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.

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

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.

AX101937 MediaFlex SC Duplex Insert, Angled

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.
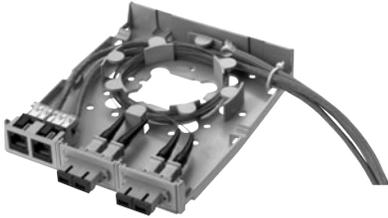
Description	Belden Part Number					
	K1, Red	K2, Green	K3, Yellow	K4, Black	K5, Orange	K6, Blue
FiberExpress Outlets						
MediaFlex Plate						
Single Gang	AX101745	AX101746	AX101747	AX101748	AX102608	AX102569
Double Gang	AX101869	AX101870	AX101871	AX101872	AX102609	AX102570
MediaFlex Adapter Box						
Single Gang	AX102480	AX102481	AX102482	AX102483	AX102484	AX102485
Double Gang	AX101873	AX101874	AX101875	AX101876	AX102610	AX102571
MediaFlex MDVO (style) Insert						
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
MediaFlex SC Duplex						
SC Duplex Single-mode	AX101935	AX101936	AX101937	AX101938	AX102619	AX102649
SC Duplex Multimode	AX101939	AX101940	AX101941	AX101942	AX102620	AX102650

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Fiber*Express* 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 low-profile design and side-entry of the outlet box offer 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			
	MOVO-Style	MOVO-Style	MOVO-Style	Keystone-Style

Fiber*Express* 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

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Network Connectivity Products
Media Converters, Transceivers & Hubs and Network Tester

Media Converters

AX-1912 Media Converter Rack

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

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

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.

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.

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.

Description	Belden Part Number
Network Connectivity Products	
Media Converter	
10Base-T/10Base2, RJ-45 to BNC	**AX-200**
10Base-T/10Base-FL, RJ-45 to ST-Compatible fiber connectors	**AX-270**
10Base2/10Base-FL, BNC to ST-Compatible fiber connectors	**AX-280**
100Base-TX/100Base-FX, SC-Compatible fiber connectors	**AX-5270SC**
100Base-TX/100Base-FX, ST-Compatible fiber connectors	**AX-5270ST**
Media Converter Rack	
Holds up to 12 converters and multi lead power supplies, 19″ (0.48 m) rack-mount ready	**AX-1912-MCR**
Power Supply, 4-lead 110v/12v, powers up to 4 converters	**AX-270P4U**
Power Supply, 8-lead 110v/12v, powers up to 8 converters	**AX-270P8U**
Transceivers and Ethernet Hubs	
UTP Transceiver, 10Base-T, AUI to RJ-45, side port	**AX-50**
UTP Transceiver, 10Base-T, AUI to RJ-45, rear port	**AX-50R**
Fiber Transceiver, 10Base-FL, AUI to ST-Compatible	**AX-70**
Thinnet Transceiver, 10Base2, AUI to BNC	**AX-80**
Ethernet Hub with 8 RJ-45 10Base-T ports and 1 AUI port	**AX-509**
Network Tester	
Realtime 10/100 Base-TX Ethernet Network Test Unit	**AX-110BT**

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