

NP 500E

**FiberExpress®
Ultra HD System**

Elegantly simple yet uncompromisingly flexible. Ultra high-density rack-mount fiber connectivity system, crafted for effortless installation and maintenance.



The FiberExpress Ultra HD System is the Next Evolution in Convenient, Easy-to-use, High-density Fiber Connectivity

- 1, 2, and 4U housings
- Ultra high cabling density: up to 72 LC Duplex or 72 MPO adapters per rack unit
- Clean, convenient cable management
- Efficient one-person installation
- Adaptable for present and future needs
- Easy access for fast, efficient MACs

FiberExpress Ultra HD

The Belden FiberExpress Ultra HD provides designers complete flexibility to architect a fiber connectivity solution to adapt to the varying port count needs in Data Centers and LANs:

- Top-of-rack configurations with low-to-medium port counts
- End-of-row configurations with medium-to-high port counts

Common intuitive components and modular design means that Installers and End-Users do not have to learn different systems to support different needs. In addition, fewer components must be stocked for different configurations. It becomes easier to manage moves, additions, and changes (MACs).

Maximize Revenue With the Highest Density Connectivity

The trend toward high-density computing and storage requires connectivity that scales to facilitate the evolution of both Data Center and LAN applications.

FiberExpress Ultra HD allows the highest density connectivity available—doubling the density over comparable units. With FiberExpress Ultra HD, each rack unit can accommodate up to:

- 72 LC Duplex connections (144 fibers) or
- 72 MPO connectors

This 50% reduction in required rack unit space means more active equipment per rack—and increased revenue per square foot for Data Center operators. Alternatively it reduces the space required for LAN equipment, reducing OPEX for end-users.

**A new product to
serve your needs.
Be certain.**

Improved accessibility and visibility leads to fast, clean, error-free installations.

Compact Size Through Modular Design

Current trends have reduced the need for splices and splice trays, FiberExpress Ultra HD supports a field-upgradable, 144 splice tray housing kit easily added to any or all of the system's 1U module trays.

Without the tray, the standard FiberExpress Ultra HD housing significantly reduces the depth of the system by over 25 cm (>10") versus competitive products. The additional space allows easier, clean cable management. It also provides additional space for opposite-rail-mounted equipment, to effectively increase the total rack unit space available.

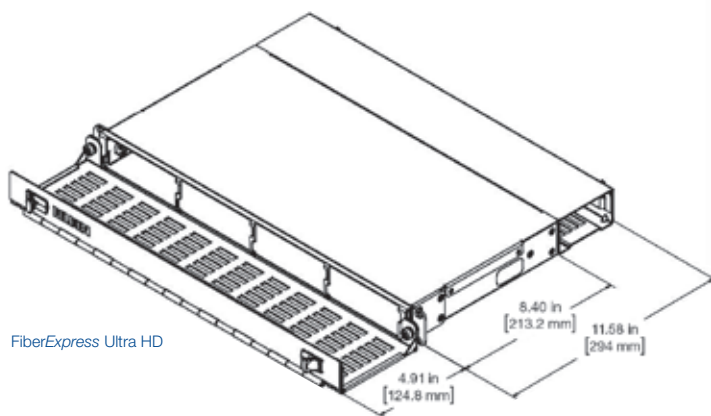
Removable front and rear cable trays add to system flexibility. The reduced physical footprint of the system enables additional mounting options – including shallow racks and cabinets, vertical mounting configurations and even floor and ceiling boxes.

Reduce Installation Labor With Lightweight Systems

Crafted out of highest quality materials using innovative design and assembly techniques, even the largest 4U FX Ultra HD weighs only 9.75 kg (21.5 lb). Toolless removable module trays mean that a single installer can safely maneuver the lightweight panel housing and secure the system into the rack.



A single installer can install the system

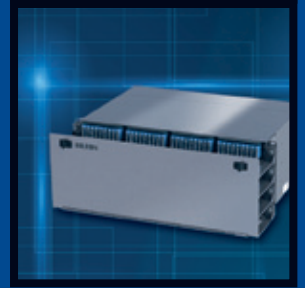


FiberExpress Ultra HD

Removable front and rear cable trays



FiberExpress Ultra HD with Splice Tray



Speed up the Install Process and Eliminate Errors With the Installer-friendly Sliding and Tilting Module Tray

A standard sliding module tray brings the work platform out of the rack and at a 23 degree tilt down toward the installer to improve accessibility during installation. A quickly installed lid and front patch cord tray provides unprecedented visibility to the work at hand.

Improved accessibility and visibility leads to fast, clean, error-free installation.



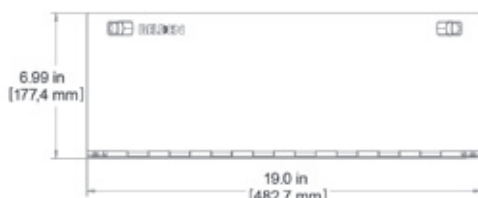
Side-in trays tilt outward to improve accessibility



FiberExpress Ultra HD 1U



FiberExpress Ultra HD 2U



FiberExpress Ultra HD 4U

Eliminate Accidental Disconnects During MACs

With the high value of data on fiber-optic networks, accidental interruption while performing MACs can have significant financial consequences for network operators.

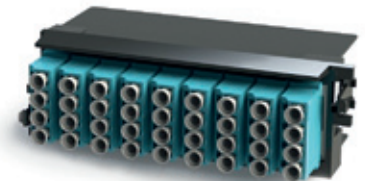
A sleek unencumbered front faceplate provides plenty of space for shelf identification labeling. Clear always-visible port labeling ensures the right fiber is found every time. The sliding module tray with access and visibility to individual cassettes and frames further reduces maintenance effort.

Protect Your Investment While Accommodating Legacy Connectivity Today

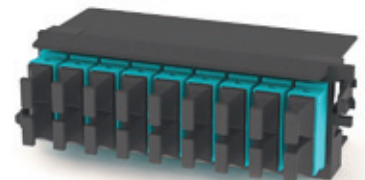
Meet the challenges of balancing future needs against the need to maintain a legacy infrastructure.

FiberExpress Ultra HD provides a cost-effective upgrade path from current 1G and 10G to 40G and 100G networks.

Its flexible modular approach supports legacy applications using ST, SC, and LC. The system can be upgraded as needed with a simple cassette or adapter frame change. With no need to replace the entire system, it provides a cost-effective entry point today with scalability to meet the needs of tomorrow.



AX104619, FiberExpress Ultra HD Frame, LC Duplex, 18 ports, 36 fibers



AX104620, FiberExpress Ultra HD Frame, 18 MPO adapters



AX104617, FiberExpress Ultra HD Pre-Terminated Cassette, LC Duplex-MPO (m), 18 ports, 36 fibers, front view



AX104617, FiberExpress Ultra HD Pre-Terminated Cassette, LC Duplex-MPO (m), 18 ports, 36 fibers, back view

Ordering Information

FiberExpress Ultra HD Housing

Description	Belden Part Number
1U Housing with Front and Rear Cable Tray, Titanium Finish	AX104681
2U Housing with Front and Rear Cable Tray, Titanium Finish	AX104682
4U Housing with Front and Rear Cable Tray, Titanium Finish	AX104683
Optional 1U Splice Housing Kit, 144 splices, Titanium Finish (add up to 4 on the 4U Housing)	AX104684

Description	Belden Part Number				
	Multimode, OM1, 62.5 µm, Beige	Multimode, OM2, 50 µm, Black	Multimode, OM3, 50 µm, Aqua	Multimode OM4, 50 µm, Aqua, Low Loss	Single-mode, OS2 LC – Blue MPO – Black

FiberExpress Ultra and Ultra HD Field-Terminated Frames

FiberExpress Ultra HD Pre-Terminated Cassettes						
LC	18 x LC Duplex to 3 x MPO (m), 36 fibers	Call for availability	Call for availability	AX104617	AX104658	AX104616
FiberExpress Ultra Pre-Terminated Cassettes						
LC	12 x LC Duplex to 2 x MPO (m), 24 fibers	AX103657	AX103687	AX103729	AX103783	AX103837
	6 x LC Duplex to 1 x MPO (m), 12 fibers	AX103641	AX103683	AX103713	AX103767	AX103821
	6 x LC Duplex w/ Shutters to 1 x MPO (m), 12 fibers	AX103642	AX103684	AX103714	Call for availability	AX103822
SC	6 x SC Duplex to 1 x MPO (m), 12 fibers	AX103639	AX103681	AX103711	Call for availability	AX103819
	3 x SC Duplex w/ shutters to 1 x MPO (m), 6 fibers	AX103621	AX103675	AX103693	Call for availability	AX103801
ST	12 x ST Simplex to 1 x MPO (m), 12 fibers	AX103638	AX103680	AX10371	Call for availability	AX103818

Description	Belden Part Number				
	Multimode, OM1, 62.5 µm	Multimode, OM2, 50 µm	Multimode, OM3, 50 µm	Multimode , OM4, 50 µm Low Loss	Single-mode, OS2

FiberExpress Ultra and Ultra HD Field-Terminated Frames

FiberExpress Ultra HD Frames						
MPO	18 x MPO to MPO Adapters	Call for availability	Call for availability	AX104620		AX104621
LC	18 x LC Duplex to LC Duplex Adapters, 36 fibers	Call for availability	Call for availability	AX104619		Ax104618
FiberExpress Ultra Frames						
MPO	12 x MPO to MPO Adapters, up to 144/288 fibers	AX103902 (black only)				
	6 x MPO to MPO Adapters, up to 72/144 fibers	AX103901 (black only)				
LC	12 x LC Duplex to LC Duplex Adapters, 24 fibers	AX103424	AX103451	AX103465		AX103519
	6 x LC Duplex to LC Duplex Adapters, 12 fibers	AX103408	AX103449	AX103463		AX103502
	6 x LC Duplex to LC Duplex w/ shutter Adapters, 12 fibers	AX103409	AX103450	AX103464		AX103503
SC	6 x SC Duplex to SC Duplex Adapters, 12 fibers	AX103406	AX103447	AX103461		AX103496
	3 x SC Duplex to SC Duplex w/shutter Adapters, 6 fibers	AX103386	AX103442	AX103456		AX103471
	12 x SC Simplex to SC Simplex Adapters, 12 fibers	AX103404	AX103445	AX103459		AX103494

FiberExpress Accessories

Description	Belden Part Number
Frame with 6 Blanks	AX103862
Cassette Rear Assembly	AX103917
FiberExpress Ultra HD Release Tool	AX104685

Refer to the Belden IBDN FiberExpress catalog for a complete listing of additional compatible FiberExpress System cassette and frame components including:

- FiberExpress Ultra frames with SC/APC and LC/APC connectivity
- FiberExpress Ultra frames pre-loaded with pigtails
- FiberExpress Secure/Keyed LC Cassettes and Frames for FiberExpress Ultra
- FiberExpress FX Color-coded icons for LC Duplex Adapters