

**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.

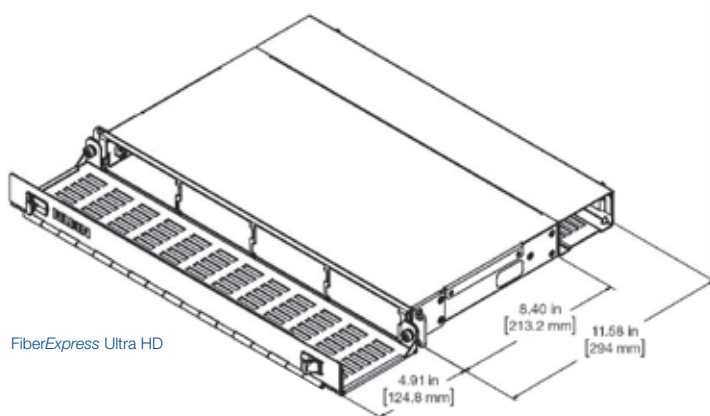
Removable front and rear cable trays add to system flexibility. The reduced physical footprint of the system enables additional mounting options – including shallow racks and cabinets, vertical mounting configurations and even floor and ceiling boxes.

**Reduce Installation Labor With Lightweight Systems**

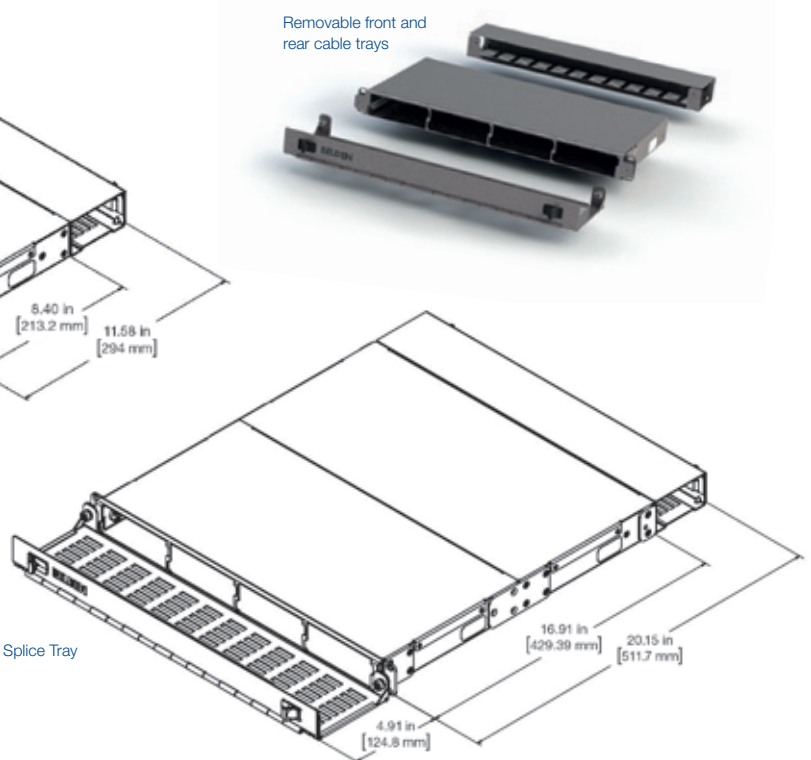
Crafted out of highest quality materials using innovative design and assembly techniques, even the largest 4U FX Ultra HD weighs only 9.75 kg (21.5 lb). Toolless removable module trays mean that a single installer can safely maneuver the lightweight panel housing and secure the system into the rack.

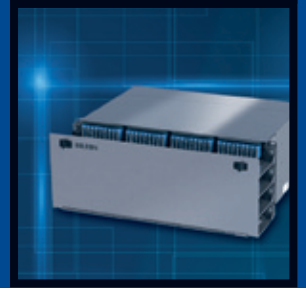


A single installer can install the system



FiberExpress Ultra HD 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.



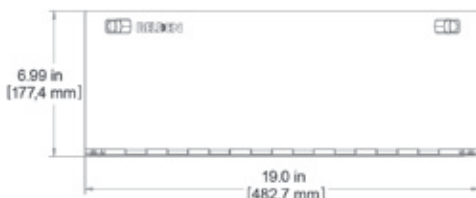
Side-in trays tilt outward to improve accessibility



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

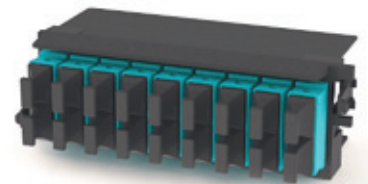
Meet the challenges of balancing future needs against the need to maintain a legacy infrastructure.

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 pigtailed
- FiberExpress Secure/Keyed LC Cassettes and Frames for FiberExpress Ultra
- FiberExpress FX Color-coded icons for LC Duplex Adapters