

# Fiber*Express®* Ultra Patch Panel System



Belden<sup>®</sup> Offers a New Era of Fiber Patching Solutions









# **Belden<sup>®</sup> –** Innovation, Once Again

Belden has created an innovative, highly-reliable system that is ultra-rich in user-friendly features, moving fiber patching to a whole new level.

The amount of fiber in the premise has increased significantly in recent years due to decreased equipment costs, new technologies that ease implementation, and the need to support highspeed transmission in backbone infrastructures and data centers. It's anticipated that the fiber market will continue to grow significantly over the next five years, creating the need for a new era of fiber patching solutions.

The increased amount of fiber, and the increasing applications and transmission speeds that it supports, has IT managers from every market calling for higher-density, cost-effective solutions that offer easy deployment and scalability for future fiber needs. At the same time, fiber is the most critical media because it transmits large amounts of data to and from many sources within facilities and around the world. Downtime of fiber links is more costly than any other network component, and it is simply not an option. To avoid this, it requires fiber patching solutions that ensure the utmost in reliability during installation, operation, and maintenance.

As an industry leader, and in response to the needs of our customers, Belden has repeatedly delivered innovation after innovation to the network cabling industry. And with the introduction of the Fiber*Express*® Ultra Patch Panel System, Belden does it again: They have created an innovative, highly-reliable system that is ultra-rich in user-friendly features to move fiber patching to the next level. Fiber*Express* Ultra has been built around three core concepts:

- Ultra high density
- Ultra-easy installation and maintenance
- Ultra flexibility and manageability



# **Responding to Your Fiber Patching Needs**

From the data center and telecommunications room to the high-speed links that deliver voice, video, and data for a variety of markets and applications, Belden makes high-quality, highly reliable systems that ensure performance and uptime for uninterrupted availability. Belden also understands what today's IT managers need when it comes to the interconnection or splicing of optical fiber cables.

# **Data Centers and SANs**

Belden knows that the data center has become the most critical asset and investment for nearly every organization. With the need to provide for ever-increasing applications, transmission speeds and data storage, IT managers must design scalable data centers to support future fiber growth and technologies.

# **Backbone Terminations**

Over the years, optical fiber cabling has virtually replaced bulky multi-pair copper cable in backbone infrastructures that link telecommunications spaces within a facility or campus environment. These links are the fundamental foundation of every network, providing the bandwidth to transmit huge amounts of data across longer distances.

### Including Broadcasting and the Factory Floor

With telcos bringing fiber closer to the home and many markets experiencing the benefits of greater bandwidth and EMI/RFI immunity, the need for innovative fiber solutions reaches far beyond the data center and premise environment to virtually every market and application.

Because Belden understands the needs of these markets, as well, we offer fiber patching technology with the following attributes:

- **High density** to save space and provide scalability for future fiber build-outs
- Easy installation and maintenance to save on labor costs, easy-installation features abound, plus the Fiber*Express®* Ultra system offers easy access to system components for efficient moves, adds and changes without affecting other/tangential links
- Manageability it's flexible to support a variety of bandwidth-intensive fiber applications; highly manageable since it allows the user to quickly and efficiently identify, protect, store and route cables



Belden understands what today's IT managers need – no matter the environment.

# Belden Looks to the Future...





# Belden<sup>®</sup> FiberExpress<sup>®</sup> Ultra – The Ultra Solution for Fiber Patching

Belden's Fiber*Express*<sup>®</sup> Ultra is the culmination of our commitment to providing innovative, reliable fiber patching solutions.

Belden's new Fiber*Express* Ultra is a highly durable, cost-effective patch panel system that provides ultra high density, and easy installation and maintenance features. And like all Belden solutions, Fiber*Express* Ultra is extremely flexible and manageable. It is the culmination of our continued involvement in industry associations, on-going conversations with our customers and a commitment to providing innovative, reliable solutions.

# **Ultra High Density**

Fiber*Express*<sup>®</sup> Ultra is Belden's highest density solution for maximizing floor and rack space and addressing scalability in a variety of markets.

- Provides up to 96 fibers in low-profile 1U space using LC or other Small Form Factor (SFF) connectors
- Highest density available for optimized space and scalability
- Available in a 4U design for supporting up to 288 fibers
- Wall-mount solutions available for spacesaving backbone interconnect installations

#### **Ultra-Easy Installation and Maintenance**

Fiber*Express* Ultra features several innovative features that provide easy access to patch cords and connectors without impacting other links.

- Easy front access of connectors with dual swing-out frames
- 1-inch pull-out of individual adapter modules for connector maintenance or replacement; prevents possible disconnect or damage of adjacent connectors
- Additional full maintenance access at back





# **Ultra Flexibility and Manageability**

Belden knows that not every fiber application is the same. That's why our new Fiber*Express*® Ultra is designed to give you the flexibility to meet the specific fiber patching needs of your particular situation. Belden solutions are also designed with manageability in mind to facilitate connector and patch cord identification, protection, routing, and cable management.

- Dual swing-out reduces slack and affects fewer connections during maintenance
- Integrated horizontal and vertical cable management provides proper bend radius and intuitive cable routing
- Front shelf serves as platform for left/right horizontal cable management
- Includes space for splice trays and cable management/slack storage accessories
- 4U front cover provides protection and ultimate labeling administration
- 4U features a unique 3-position labeling display: when the front cover is closed, labels can be viewed from the front; when the cover is open, it can be flipped down so that the labels can be viewed, and if desired, the cover can also be stowed away by sliding it inside the unit
- Modules and frames are easily installed or removed for faster installation and MACs
- Supports LC, LC Secure/Keyed, SC, ST-Compatible and other types of connector adapter modules which can be mixed and matched within frames for flexibility
- Panels include locking options.







(Top): The 4U Fiber Express Ultra Patch Panel provides up to 288 fibers. (Left): Individual adapter modules feature a 1-inch pull out capability. (Right): Cassettes are easily installed or removed.



# Belden® FiberExpress® Ultra -

The New Cornerstone of the Belden FiberExpress® System

Belden has been involved in the development of optical fiber components since 1972 – evolving to its present status as an industry leader in supplying high-quality, cost-effective optical fiber solutions.

The Belden IBDN Fiber*Express* Solution is a complete high-performance, end-to-end cabling system that consists of a full range of fiber cables, connectivity hardware, patch cords, cable assemblies, connectors, and work area outlets. Designed to offer both superior performance and a faster, less complex installation, Belden Fiber*Express* Solutions assure a smooth operation and efficient management of your fiber network – while continually reducing total cost of ownership and preparing your system for the future.

As the cornerstone of the Fiber*Express* System, the new Fiber*Express* Ultra Patch Panel System integrates seamlessly with all FiberExpress cable, connector, and management components.

- Fiber *Express* distribution, interconnect and loose tube single-mode and multimode cables and patch cords to suit every application
- Fiber*Express* Pre-terminated System using MPO connectors for fast, easy deployments and reliable performance
- FiberExpress Optimax® field-installable connectors provide one-minute simple, efficient connectorization with no polishing, curing or epoxy
- Fiber*Express* Secure/Keyed LC System allows for physical segregation of network segments through twelve different keying options
- Fiber*Express* Multimedia and MediaFlex modules and outlets for fiber-to-the-desk applications



From scalability and flexibility to reliability, ease of installation and maintenance, Fiber*Express* Ultra has it all.



# **Designed With You in Mind**

The Belden Fiber*Express*<sup>®</sup> Ultra Patch Panel System was designed to answer all your fiber patching needs with the added benefits of improved performance and reliability with reduced cost of ownership. From scalability and flexibility to reliability and ease of installation and maintenance, Fiber*Express* Ultra provides it all.

- Ultra high density provides better return on investment through space savings and scalability
- Maximum uptime since the system is highly reliable and easily maintained
- Faster fiber deployments and upgrades with easy installation, identification, and maintenance
- Future-proofing through seamless integration and modular flexibility

And the Fiber*Express* Ultra Solution is just one part of the Fiber*Express* family. All built by Belden. All backed by a unique Certification Program that includes 25-year Product and Lifetime Application Assurance Programs.





Belden designs to your exacting specifications, addressing all your fiber patching needs.

# **Everything You Need**

Fiber is just a part of what we do at Belden. Whether networking, broadcasting, communicating on the factory floor, or protecting people and property, Belden delivers all your signal transmission needs. Our products are of exceptional quality plus they have been engineered to meet your requirements and applications, literally for years to come.

For more information on our innovative FiberExpress solutions, please call +31 (0) 77 3875 414 or visit our website at www.belden-emea.com



www.belden-emea.com

# EUROPE/AFRICA/MIDDLE EAST

The Netherlands **Division Headquarters – Europe** Edisonstraat 9, 5928 PG Venlo P.O. Box 9, 5900 AA The Netherlands Phone: +31 773 878 555 Fax: +31 773 878 448 venlo.salesinfo@belden.com

### France

Immeuble le Cesar 20, Place Louis Pradel 69001 Lyon France

**Phone: +33 472 109 990** Fax: +33 478 298 409 lyon.salesinfo@belden.com

# Italy

Via Paracelso, 26 Centro Direzionale Colleoni Palazzo Cassiopea Ingr. 3 20041 Agrate Brianza (MI) Italy

**Phone: +39 039 656 0911** Fax: +39 029 656 0929 milano.salesinfo@belden.com

### Russia

Zemlyanoy Val 9 Business Centre Regus Citydel Moscow 105064 Moscow Russia

Phone: +7 495 287-1391 or -1392 venlo.salesinfo@belden.com

#### Sweden

Stuvargatan 3, 70227 Örebrö P.O. Box 370, SE 70147 Örebrö Sweden Phone: +46-19-3078-00

Fax: +46-19-3078-29 orebro.salesinfo@belden.com

United Kingdom Manchester International Office Centre Suite 13 Styal Road Manchester M22 5WB

United Kingdom Phone: +44 161 498 3749 Fax: +44 161 498 3762 manchester.salesinfo@belden.com

# Africa/Middle East

P.O. Box 500158 Dubai Internet City Building One, Office 216 Dubai United Arab Emirates

**Phone: +97 14 391 0490** Fax: +97 14 391 8775 dubai.salesinfo@belden.com

# Belden Technical Support +31(0) 77 3875 414

For a list of our worldwide addresses visit us at www.belden-emea.com

All sales of Belden products are subject to Belden's terms and conditions of sale. All printing errors are subject to

The autor rechnical specifications are subject to bettern stand conductors of safe. An printing errors are subject to recorrection. Technical specifications are subject to change without notice. The author reserves the right not to be responsible for the topicality, correctness, completeness or quality of the information provided. Liability claims regarding damage caused by the use of any information provided, including any kind of information which is incomplete or incorrect, will therefore be rejected.