

**HUBBELL**<sup>®</sup>  
Premise Wiring

PRODUCT OVERVIEW

# Enterprise Fiber Optic Guide

FIBERHUBB Solutions for the next generation  
of Enterprise Networks



## Network Health Check

Is your cabling keeping up with its technology?

Enterprise data demand is growing exponentially. As users expect faster, seamless connectivity, the strength of your enterprise's network hinges on its backbone.

Yet backbone cabling can be an afterthought, especially when transitions to 5G, AI, smart buildings, and upgrading WAPs take up so much time and resources. It's easy to focus on visible upgrades like faster devices, smarter automation, and new equipment. But without a reliable backbone cabling infrastructure, these innovations can't reach their full potential.

Fiber plays a critical role in structured premise cabling for new constructions and existing corporate offices, hospitals, universities, and government facilities. Upgrading outdated cabling to fiber improves performance and lays the groundwork for technological advancements.

Hubbell provides the latest in structured fiber cabling to meet the needs of today's enterprise networks. Our enterprise fiber optic solutions guide is your go-to resource for products and solutions to build and scale your network efficiently.

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For complete product listing  
visit our Fiber Solutions page!

# Technological Change

## Is the only constant

The technologies shaping our future, including artificial intelligence, advanced Wi-Fi, and 5G all rely on one critical element: a robust, high-performance cabling infrastructure.

Fiber optic cabling provides the speed, bandwidth, and scalability necessary to support these innovations, ensuring your network remains agile and ready for whatever comes next.

As digital demands continue to grow, so does the need for infrastructure that can keep up. Investing in fiber maximizes long-term performance, reduces latency, and sets you up to scale efficiently, keeping your network strong and safe.



### Artificial Intelligence

AI is quickly becoming a key part of daily operations in every enterprise. Fiber provides the high-speed, high-bandwidth and low latency connectivity necessary to efficiently utilize AI applications.



### Wi-Fi

With horizontal bandwidth now exceeding 1 Gbps and IEEE 802.11 standards calling for higher throughput and enhanced coverage, fiber can significantly enhance connectivity across in-building wireless systems.

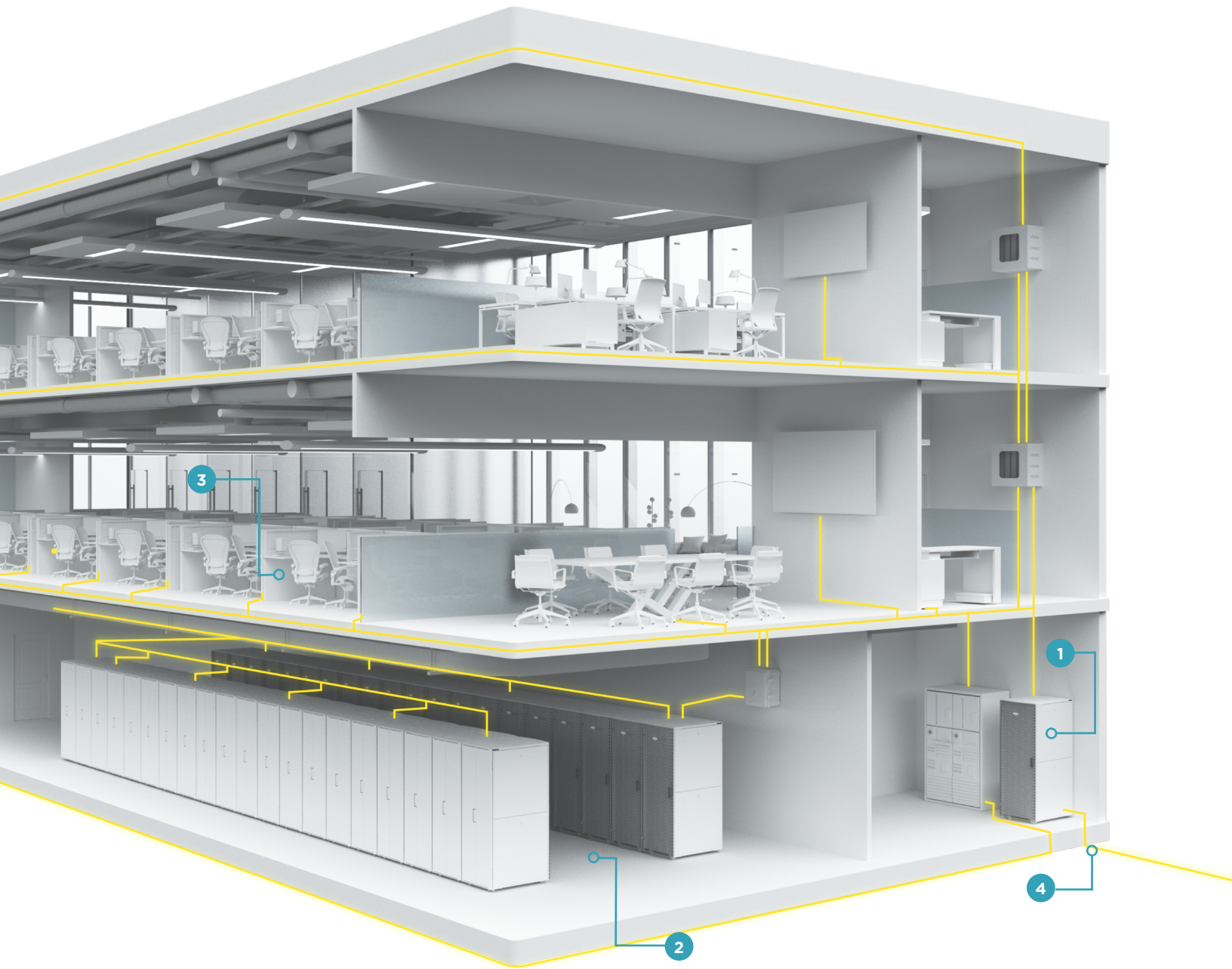


### 5G

The rise of 5G requires faster speeds, greater reliability, and increased capacity of wide area networks (WANs). 5G is all about bringing connectivity physically closer to enhance the user experience. Fiber optic cabling makes this possible by connecting devices to networks throughout the entire enterprise campus.

# FIBERHUBB™

## Universal Cable Changes the Game



### 1. Entrance Facilities

### 2. Data Center

### 3. Work Area

### 4. FiberHUBB Universal Cable

HFCB19012PS



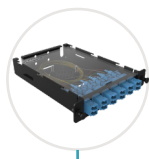
As smart buildings evolve into smart campuses, fiber optics offer the ideal solution for establishing long backbone runs, far exceeding copper's 100-meter limit.

The FiberHUBB Universal Cable is a single plenum-rated cable that simplifies deployment across both campus and premise applications, eliminating the need for transitions.

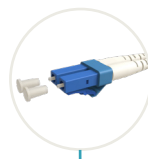


## 1. Entrance Facilities

Hubbell's Universal Cable simplifies the design and implementation of entrance facilities by seamlessly transitioning from outdoor to indoor environments. Its versatile plenum rated jacket means fewer cable types to manage, reducing complexity and cost. Easily splice and connect incoming cables with our new splice cassettes, premium enclosures, and quick turn patch cords.



OCSPLCD12SM



FDLC1SM



FCR1U3SPX

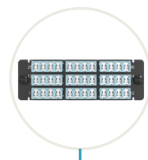


## 2. Data Center / Telecomm Room

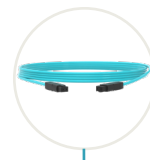
Integrate your fiber backbone cabling with our full line of data center products. Quickly connect cabinets and equipment with our plug-and-play solutions designed specifically for the enterprise data center. Explore new high-density enclosures, cassettes, and customizable assemblies for a smooth transition to 400G/800G deployments while maintaining support for legacy 4-fiber and 2-fiber applications.



FEHD1U



OCLCHDUMM

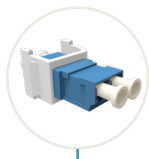


FPCPMP0B50G4M10FN

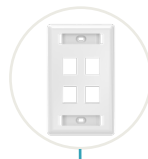


## 3. Work Area

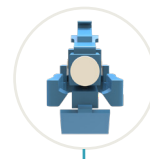
Fiber to the desktop has become commonplace in modern enterprise facilities and workstations. Utilize our PROClick mechanical connectors behind the faceplate when space is limited and time is short. Pair with our keystone fiber products that support high-speed connectivity to desks, labs, and collaboration zones without the limitations of copper.



SFLCSBW



IFP14W



FCLC900KSM12



## FiberHUBB Universal Fiber Cable

Hubbell's Universal Fiber Cable leverages the latest advancements in jacket technology to meet the evolving demands of modern infrastructure. Without any need to transition, this cable seamlessly blends into indoor environments, making interbuilding runs visually indistinguishable from indoor backbones and horizontal cabling. Its tight buffer construction allows for quick and easy termination, reducing installation and labor costs.

Available in both armored and non-armored versions, the FiberHUBB Universal Fiber Cable offers flexibility for a wide range of applications. Its plenum-rated jacket ensures compliance with building codes while simplifying management across different environments.

Key features include an enhanced water-blocking system to prevent moisture ingress and a UV-stabilized jacket which shields the cable from harmful sunlight and fungus. Made in the USA with bend-insensitive high performance glass, the FiberHUBB Universal Fiber Cable delivers reliable performance and cost-effective installation of network infrastructure.



*Non-Armored HFCB14 Series I/O Singlemode*

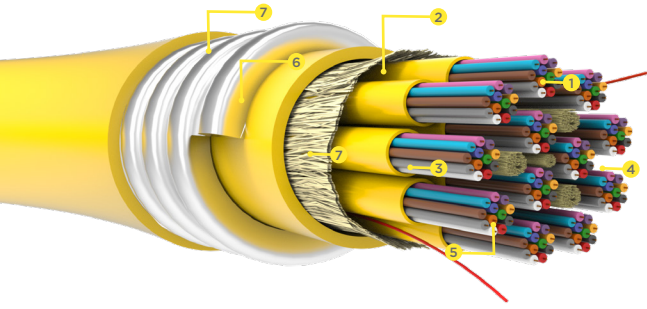


*Armored HFCB19 Series I/O Singlemode*

### Benefits

- Multi-purpose outdoor to building riser or horizontal infrastructure incorporated in a single cable design
- Armored and non-armored cables available in standard jacket colors
- Flexible, cost-effective design simplifies installation and termination
- Plenum rated jacket eliminates the need for transition points
- Enhanced water blocking system inside the core cable
- Fungus and sunlight resistant with UV stabilization
- Made in USA with bend-insensitive glass

### Armored cables

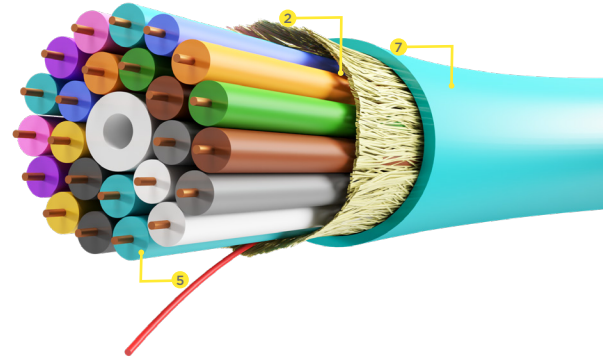


1. Buffered optical fiber
2. 5.2mm aramid-filled subunit
3. Plenum-grade subunit jacket
4. Strength member
5. Ripcord
6. Aluminum interlock armor
7. Plenum-grade jacket



For fiber counts from 36 to 144

### Non-armored cables



For fiber counts up to 24

### Cable Properties

Fiber Count	Part Number	OD in/mm	Weight lb/kft kg/km	Min. Bend Radius Install/Long Term in (cm)
<b>Armored</b>				
6	*HFCB19006Px	0.499 / 12.7	81 / 120	7.5 (19.0) / 5.0 (12.7)
12	*HFCB19012Px	0.527 / 13.4	90 / 133	7.9 (20.1) / 5.3 (13.4)
24	*HFCB19024Px	0.590 / 15.0	116 / 172	8.9 (22.5) / 5.9 (15.0)
48	HFCB19048Px	0.921 / 23.4	274 / 408	13.8 (35.1) / 9.2 (23.4)
72	HFCB19072Px	0.974 / 24.7	361 / 537	14.6 (37.1) / 9.7 (24.7)
96	HFCB19096Px	1.225 / 31.1	503 / 749	18.4 (46.7) / 12.3 (31.1)
144	HFCB19144Px	1.225 / 31.1	508 / 756	18.4 (46.7) / 12.3 (31.1)
<b>Non-Armored</b>				
6	*HFCB14006Px	0.180 / 4.6	13 / 19	2.7 (6.9) / 1.8 (4.6)
12	*HFCB14012Px	0.215 / 5.5	18 / 27	3.2 (8.2) / 2.2 (5.5)
24	*HFCB14024Px	0.288 / 7.3	34 / 51	4.3 (11.0) / 2.9 (7.3)
48	HFCB14048Px	0.558 / 14.2	136 / 202	8.4 (21.3) / 5.6 (14.2)
72	HFCB14072Px	0.671 / 17.0	212 / 316	10.1 (25.6) / 6.7 (17.0)
96	HFCB14096Px	0.859 / 21.8	313 / 466	12.9 (32.7) / 8.6 (21.8)
144	HFCB14144Px	0.896 / 22.8	318 / 474	13.4 (34.1) / 9.0 (22.8)

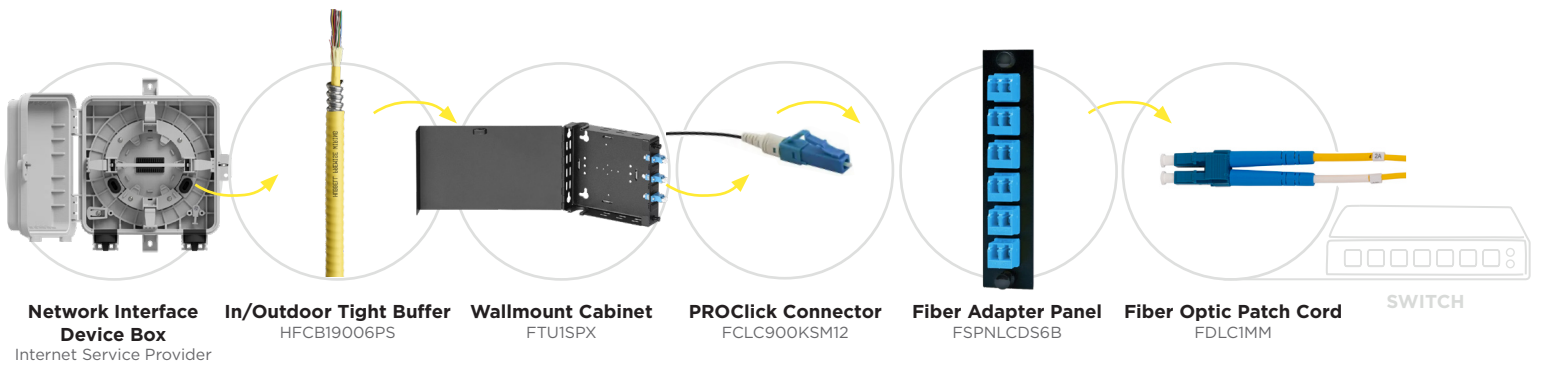
x indicates OM4 or OS2  
 \* indicates Core Stocking Cables

# Mechanical Connectivity Solutions

For compact and efficient deployments

Our mechanical connectivity solutions are engineered to maximize efficiency and minimize footprint in equipment rooms, entrance facilities, or any space where cross-connection and patching are critical. At the heart of this offering are our PROclick connectors. They support fast deployment of small fiber runs or demarcation points through a simple four-step termination process (strip, wipe, cleave, insert/click).

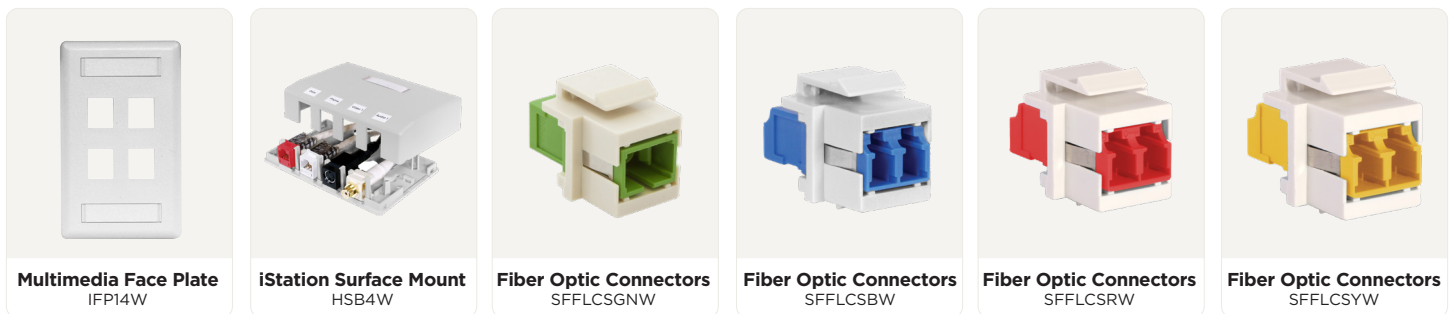
PROclick connectors are designed to mate with our armored Universal Fiber Cable and provide a flexible and cost effective alternative to expensive conduit. It simplifies installation, reduces labor, and enhances protection without compromising performance. Together, our fiber patch cords, pigtailed connectors, enclosures, and assemblies deliver a smarter, more efficient way to build and maintain high-performance networks.



## Fiber to the Desk

Run fiber directly to workstations and desks with our fiber adapters, cords, and connectors.

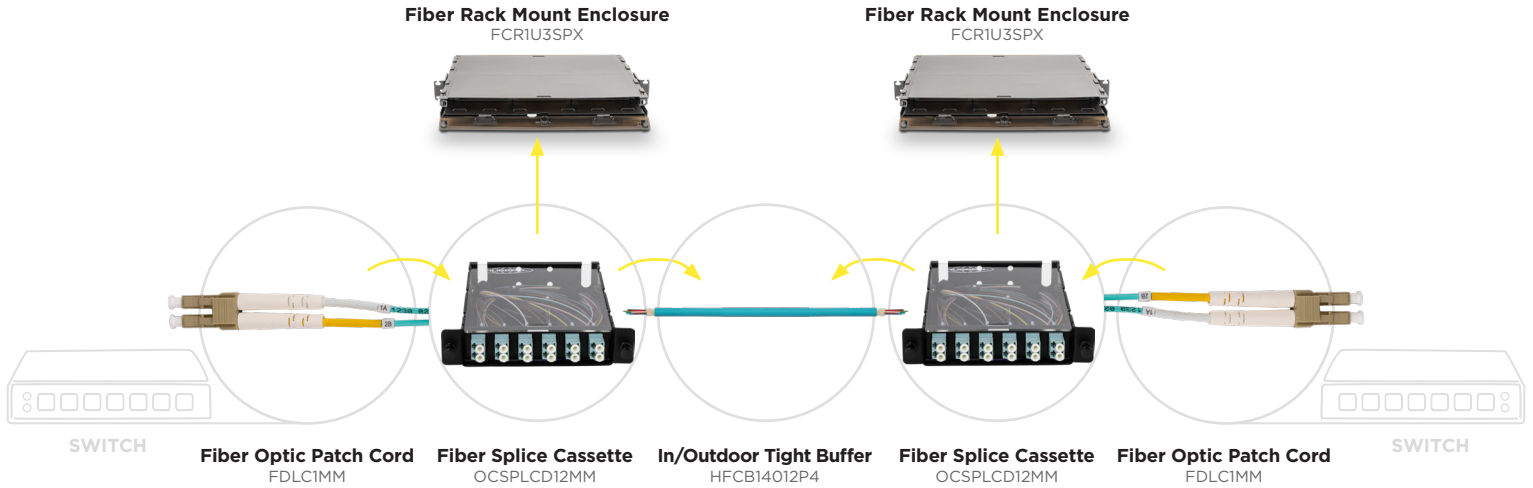
They provide ultra-fast, reliable data transmission for high-bandwidth applications like video conferencing, data analysis, and real-time collaboration. Our designs simplify installation and future upgrades, making it easy to scale as your network demands grow. Ideal for modern work environments where speed and reliability are non-negotiable.



# Splicing Connectivity Solutions

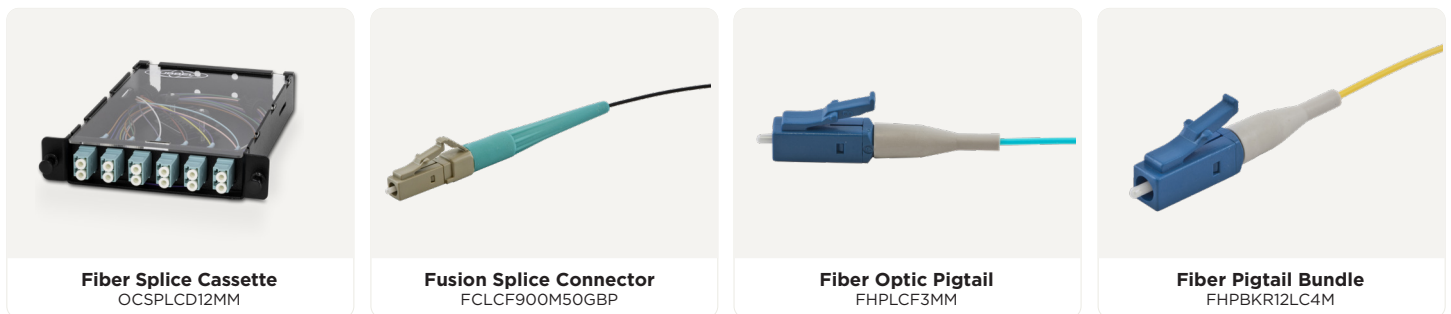
For seamless rack-to-rack fiber runs

Hubbell splicing connectivity solutions support seamless rack to rack fiber runs inside a telecom room or throughout an entire building. Our premium, feature-rich rack enclosures can be scaled to accommodate both small runs or large strand count fiber splicing. New FiberHUBB Splice Cassettes boast a feature rich design and ample cable management in the LGX format.



## Splice Options

Multimedia workstation solutions deliver high-performance fiber connectivity right to the point of use. Designed for flexibility and ease of installation, these workstations support a wide range of applications from classrooms and labs to control centers and executive offices. With sleek, low-profile designs and integrated cable management, Hubbell ensures a clean, professional finish while maintaining top-tier performance in a variety of cassettes, connectors, and pigtails.



# High Density Data Center Solutions

Supporting high bandwidth in compact environments



## Maximizing Efficiency in Limited Space

As power supply constraints continue to challenge operations, optimizing rack space has become a top priority for many enterprises. Increasing demands for bandwidth and performance are forcing enterprises to seek smarter ways to scale without expanding their physical footprint.



## Engineered for High Density Performance

Our high-density fiber solutions are specifically designed to meet the rigorous demands of modern enterprise data centers. These products support maximum throughput with greater port density and simplified cable management. They also ensure seamless scalability and faster deployment, critical for keeping pace with evolving technological trends.

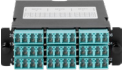


## Smarter Infrastructure for the Future

Hubbell's fiber systems are built to support high-speed data transmission, reduce downtime, and simplify maintenance. Whether upgrading existing infrastructure or building new facilities, we provide the tools to optimize data center performance and space.

### Products

Enclosures	Catalog Number	Product
1U Unloaded	<a href="#">FEHD1U</a>	 <i>shown with cassettes</i>
2U Unloaded	<a href="#">FEHD2U</a>	

### Accessories

Description	Catalog Number	Product
36-port LC to MPO cassette, OM4	<a href="#">OCLCHDUMM</a>	
36-port LC to MPO cassette, OS2	<a href="#">OCLCHDUSM</a>	
Blank Module	<a href="#">OCHDB</a>	

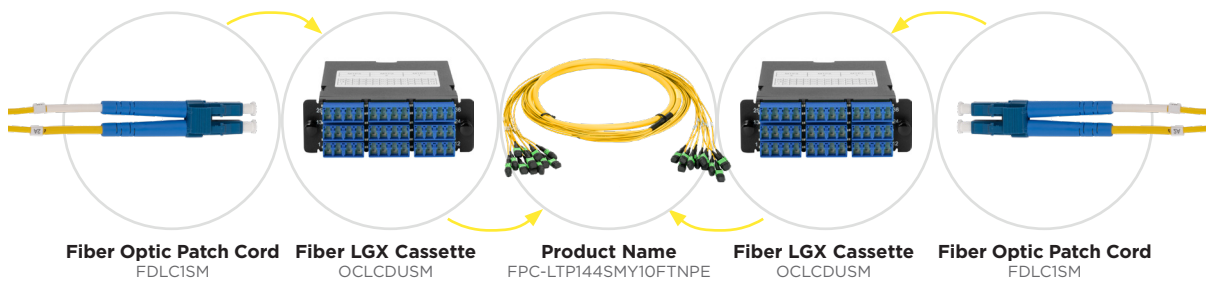
# Pre-terminated Fiber Solutions

Built for high-density applications

Whether you're connecting telecom rooms, data centers, or workstations, Hubbell's pre-terminated cables keep space and cabling clean and efficient. They offer the fastest deployment speeds and high-density connectivity in compact spaces with a flame-rated jacket that also ensures building code compliance.

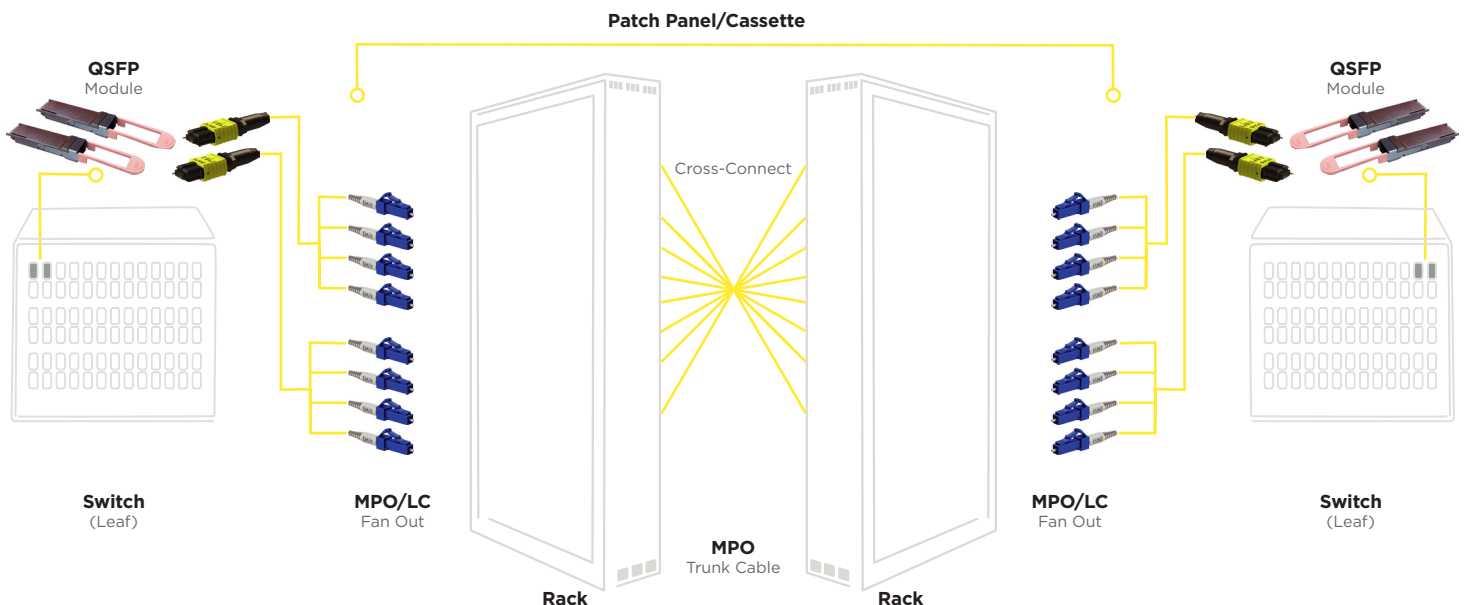
## Simplified Installation, Scalable Infrastructure

Pre-terminated fiber solutions offer unmatched scalability and plug-and-play flexibility in enterprise environments. The user-friendly design allows for quick upgrades and expansion without disrupting existing infrastructure. Fiber assemblies and cable management systems form the backbone of a future-ready fiber network.



The adoption of artificial intelligence is swiftly growing across a range of markets, specifically consumer and enterprise vertical sectors. This requires significant bandwidth, starting within the data center as high-performance GPUs are useless without equally high performing connectivity. Hubbell delivers a robust structured cabling and connectivity solution designed to provide the necessary bandwidth, headroom, design flexibility, and ease of installation to keep up with your evolving data center requirements in the enterprise. Our MPO 12-fiber, 16-fiber, and 24-fiber cabling and connectivity solutions enable a smooth transition to next level 800G/1.6T deployments while maintaining support for legacy 8-fiber, 4-fiber, and duplex applications.

## Leaf-Spine Cross Connection



# Cords & Assemblies

For fast and precise installations

FiberHubb trunk assemblies mate with all Hubbell cassettes and adapter panels to complete the end-to-end fiber solution. Hubbell's dedicated fiber optic facility is 100% tested and inspected to the industry's highest quality standards. Our quick turn ordering program supports specialized projects, application changes, and high-volume demand. Easily customize your custom fiber cords online with our online configurator.



Configure your trunk online!

## Features

- Customizable connectors, length, color, and cable construction
- Built with high performance fiber
- Premium low-loss connector options provide easy polarity and gender field changes
- Available in all standard fiber counts

## Standards

- GR-326; Telcordia
- ANSI/TIA-568.3-D
- IEEE 802.3
- RoHS; UL 94 V-0; NFPA 262

# Fiber Patch Cords

For consistent performance, use FiberHubb™ patch cords in your fiber network. The seamless choice for any fiber interconnect application, these premium cords feature a compact cable size and precision factory termination.

- Reversible polarity high density
- Push/pull options
- Bend-insensitive fiber on all Hubbell patch cords
- OM3, OM4, OS2, OM5, and other custom options available

## FiberHubb Series Patch Cords

Description	Cable Color	Length (metres)			
		1m	2m	3m	5m
<b>Standard</b>					
LC to LC, OM4	AQ	FDLC1MM	FDLC2MM	FDLC3MM	FDLC5MM
LC to LC, OS2	YL	FDLC1SM	FDLC2SM	FDLC3SM	FDLC5SM
<b>Custom</b>					
Riser - LC to SC, OM4	AQ	DFHRCLCSCF1MM	DFHRCLCSCF2MM	DFHRCLCSCF3MM	DFHRCLCSCF5MM
Riser - LC to SC, OS2	YL	DFHRCLCSCS1SM	DFHRCLCSCS2SM	DFHRCLCSCS3SM	DFHRCLCSCS5SM
Plenum - LC to LC, OM4	AQ	DFHPCLCLCF1MM	DFHPCLCLCF2MM	DFHPCLCLCF3MM	DFHPCLCLCF5MM
Plenum - LC to LC, OM4	AQ	DFHPCLCSCF1MM	DFHPCLCSCF2MM	DFHPCLCSCF3MM	DFHPCLCSCF5MM
Plenum - LC to LC, OM4	VL	DFHPCLCLCF1MV1	DFHPCLCLCF2MV1	DFHPCLCLCF3MV1	DFHPCLCLCF5MV1
Plenum - LC to LC, OM4	YL	DFHPCLCSCS1SM	DFHPCLCSCS2SM	DFHPCLCSCS3SM	DFHPCLCSCS5SM

Custom cords are available in Plenum or Riser in any length

# Universal Cassettes

Designed with polarity in mind

Hubbell's new Universal Wired MPO cassettes feature the latest in polarity management and low loss connectors all in one LGX footprint. Simplify ordering and installation by integrating the Hubbell Universal cassette into your fiber channel. When speed of deployment is paramount and labor is scarce, Hubbell can offer fully pre-terminated assemblies and cassettes that are plug-and-play ready. Our new universal wired cassettes make managing polarity as simple as 1-2-3!



OCLCDUMM (1)



OCLCDUSM (2)



OCLCQUMM (3)

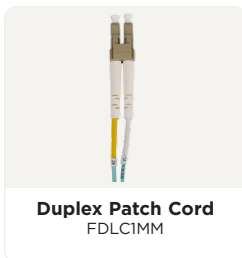


OCLCQUSM (4)

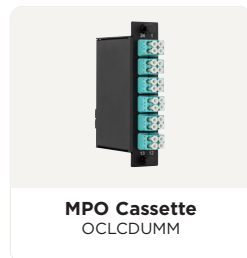
## Cassettes

Fiber	Ports	Configuration	Color	Catalog No.
OM4	12	MPO to LC Duplex	Aqua	<a href="#">OCLCUMM</a>
OS2	12	MPO to LC Duplex	Blue	<a href="#">OCLCUSM</a>
OM4	24	MPO to LC Duplex	Aqua	<a href="#">OCLCDUMM (1)</a>
OS2	24	MPO to LC Duplex	Blue	<a href="#">OCLCDUSM (2)</a>
OM4	24	MPO to LC Quad	Aqua	<a href="#">OCLCQUMM (3)</a>
OS2	24	MPO to LC Quad	Blue	<a href="#">OCLCQUSM (4)</a>

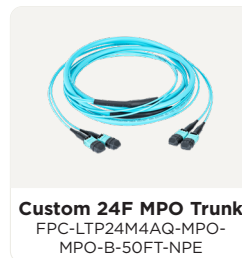
\*Add U to end of part number for Made in USA\* \*Ex. OCLCUMMU = OM4, 12F, LCD-MPO, UNI, AQ, USA



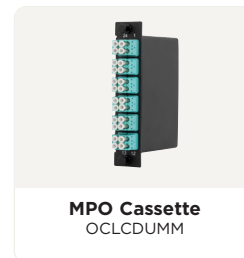
Duplex Patch Cord  
FDLC1MM



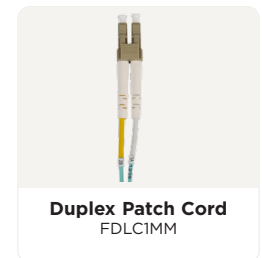
MPO Cassette  
OCLCDUMM



Custom 24F MPO Trunk  
FPC-LTP24M4AQ-MPO-  
MPO-B-50FT-NPE



MPO Cassette  
OCLCDUMM



Duplex Patch Cord  
FDLC1MM

## Polarity Configuration Chart

Product	Universal	Method A	Method B	Method C
Cassettes	Same	Same	Different	Same
Trunks	Ferrule Flipped*	Straight Through	Ferrule Flipped*	Pair Flipped
Patch Cords	Same	Different	Same	Same

\*The connector ferrule containing the row of fibers is rolled on one side

## Patch Cords

Fiber	Color	Configuration	Catalog No.
OM4	Aqua	LC Duplex to LC Duplex, 1 meter	<a href="#">FDLC1MM</a>
OM4	Aqua	LC Duplex to LC Duplex, 2 meter	<a href="#">FDLC2MM</a>
OM4	Aqua	LC Duplex to LC Duplex, 3 meter	<a href="#">FDLC3MM</a>
OM4	Aqua	LC Duplex to LC Duplex, 5 meter	<a href="#">FDLC5MM</a>
OS2	Yellow	LC Duplex to LC Duplex, 1 meter	<a href="#">FDLC1SM</a>
OS2	Yellow	LC Duplex to LC Duplex, 2 meter	<a href="#">FDLC2SM</a>
OS2	Yellow	LC Duplex to LC Duplex, 3 meter	<a href="#">FDLC3SM</a>
OS2	Yellow	LC Duplex to LC Duplex, 5 meter	<a href="#">FDLC5SM</a>

# Core Components

## Delivery meets Reliability

Hubbell has long built its reputation on being a solutions provider. As such we've compiled our top moving products below for a streamlined ordering process that aligns with our Core Components. This initiative ensures product is on the shelf to meet tight schedules and project deadlines.

### FCR Rack Mount Enclosures

Rack Units	Height: In (mm)	Width: In (mm)	Depth: In (mm)	FSP Panel Capacity	Splice Tray Capacity	Max LC Port Capacity	Standard
1	1.75" (44)	19" (483)	17" (432)	3	3	72	<a href="#">FCR1U3SPX</a>
2	3.5" (89)	19" (483)	17" (432)	6	6	144	<a href="#">FCR2U6SPX</a>
				9	6	216	<a href="#">FCR2U9SPX</a>
3	5.25" (133)	19" (483)	17" (432)	12	12	288	<a href="#">FCR3U12SPX</a>
4	7.0" (178)	19" (483)	17" (432)	15	16	360	<a href="#">FCR4U15SPX</a>

### Splice Cassettes

Description	Catalog No	Description	Catalog No
LC Duplex, 12 Port, OM3/OM4, Aqua	<a href="#">OCSPLCD12MM</a>	LC Duplex, 12 Port, OS2, Blue	<a href="#">OCSPLCD12SM</a>
LC Quad, 24 Port, OM3/OM4, Aqua	<a href="#">OCSPLCQ24MM</a>	LC Quad, 24 Port, OS2, Blue	<a href="#">OCSPLCD24SM</a>

### PROclick® and Splice-On Connectors

Description	Catalog No	Description	Catalog No
PROclick, LC, OM3/OM4, 12PK	<a href="#">FCLC900K50GM12</a>	Splice-On, LC, OM3/OM4, 10PK	<a href="#">FCLCF900M50GBP</a>
PROclick, LC, SM, 12PK	<a href="#">FCLC900KSM12</a>	Splice-On, LC, SM, 10PK	<a href="#">FCLCF900SMBP</a>

### FSP-Series LC Ceramic Adapter Panels

Description	Catalog No	Description	Catalog No
LC Duplex, 12 Port, Aqua	<a href="#">FSPNLCDS6AQ</a>	LC Duplex, 12-Port, Blue	<a href="#">FSPNLCDS6B</a>
LC Duplex, 24-Port, Aqua	<a href="#">FSPNLCDS12AQ</a>	LC Duplex, 12-Port, Yellow	<a href="#">FSPNLCDS6Y</a>
LC Quad, 24-Port, Aqua	<a href="#">FSPNLCQS6AQ</a>	SC Duplex, 12-Port, Aqua	<a href="#">FSPNSCDS6AQ</a>
LC Quad, 12-Port, Yellow	<a href="#">FSPNLCQS6Y</a>	SC Duplex, 12-Port, Blue	<a href="#">FSPNSCDS6B</a>

### Duplex Patch Cords

Description	Catalog No	Description	Catalog No
LC to LC, OM3/OM4	<a href="#">FDLCyMM</a>	LC to LC, OS2	<a href="#">FDLCySM</a>
LC to SC, OM3/OM4	<a href="#">DFHRCCLCSFyMM</a>	SC to SC, OS2	<a href="#">DFHRCSCSCSsySM</a>
SC to SC, OM3/OM4	<a href="#">DFHRCSCSCFyMM</a>	SC to SC, APC, OS2	<a href="#">DFHRCSCASCASySM</a>

Note: y = 1 to 10 meter riser, y = 1 to 25 meter plenum.. For Plenum, replace "DFRC" with "DFPC"

### Fiber Cable

Description	Catalog No	Description	Catalog No
Indoor, Tight Buffer	<a href="#">HFCD1 Series</a>	Indoor/Outdoor, Tight Buffer	<a href="#">HFCB14 Series</a>
Indoor, TB, Armored	<a href="#">HFCD15 Series</a>	Indoor/Outdoor, TB Armored	<a href="#">HFCB19 Series</a>

### Wall Mount Enclosures

Description	Catalog No	Description	Catalog No
Double- Door, 12 Adapter Panels / cassettes	<a href="#">FCW12SPX</a>	Single door, 1 FSP Adapter Panel	<a href="#">FTU1SPX</a>
Double- Door, 4 Adapter Panels/ cassettes	<a href="#">FCW4SPX</a>	Single door, 2 FSP Adapter Panels	<a href="#">FTU2SPX</a>



## Case Studies

### Real world results

#### Consumer Products Manufacturer

A globally recognized manufacturer of cleaning and home care products operates dozens of facilities across multiple countries. Their product development process requires advanced communication links in demanding environments not only in manufacturing plants but also in corporate offices.

To support these needs, Hubbell designed, manufactured, and delivered a unique cabling architecture that met bandwidth requirements in a challenging environment while allowing for future scalability.

The final solution featured high strand count OM4 fiber cabling with bend-insensitive glass, terminated using low-loss splice-on connectors in protected housing units. This setup ensured reliable, high-performance connectivity throughout the facility.

#### Food Service Distributor

One of the nation's largest food service distributors relies on a robust and dependable network to support operations across numerous locations. Each of their facilities requires seamless communication and integration to maintain efficiency in production and logistics.

During a recent expansion, the distributor worked with Hubbell to develop and implement a structured cabling strategy tailored for multiple new sites. The unique demands of a manufacturing environment called for ruggedized cabling that could traverse extremely long lengths. Hubbell's singlemode Universal Fiber Cable was the perfect solution. At the network core, premium enclosures housed reliable rack connections, delivering the speed and stability necessary to support mission-critical operations. This Hubbell design has been used as the blueprint for facilities nationwide.

# HUBBELL® Premise Wiring

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