



HUBBELL 10GbE Fiber Enhanced Performance System

Laser Certified 10GbE Fiber for 300m Operation at 850nm.

Unique, Patented **2QUICK®** Connector Crimp System ETL Tested to TIA/EIA-568-B.3.

Connectors Can Be Used With or Without Adhesives.



FEATURES

- 50 Micron, 10GbE compatibility.
- 10GbE 300 meter operation at 850nm.
- 10GBASE-SR/SW applications.
- Extended bandwidth/distance.
- Modular, flexible solutions.
- SC and LC adapters and connectors.
- Plug and play systems.

Achieving a 10GbE cost-effective solution was a challenge for the fiber industry, because expensive lasers were required to get maximum bandwidth. The introduction of the 850nm VCSEL lasers, combined with laser-optimized 50 μ m multimode fiber provided the most economical solution.

To successfully achieve 10GbE over fiber, Hubbell has introduced a new comprehensive line of fiber products that incorporates laser-optimized 50mm multimode fibers in cassettes, pigtails, patch cords, and MTP cables. These products incorporate Hubbell's modular designs for simplified and rapid field installation. All products are backed by Hubbell's 25-year **MISSION CRITICAL®** Warranty Program.

STANDARDS/VERIFICATIONS

- ◆ ANSI/TIA/EIA-568-B.3-1.
- ◆ ISO/IEC 11801, 2nd Edition.
- ◆ AF-PHY-0110.0.
- ◆ IEEE 802.3ae.
- ◆ IEEE 802.3z
- ◆ 2,000 MHz-Km effective mode bandwidth 50/125mm fiber in cassettes, pigtails and patch cords.

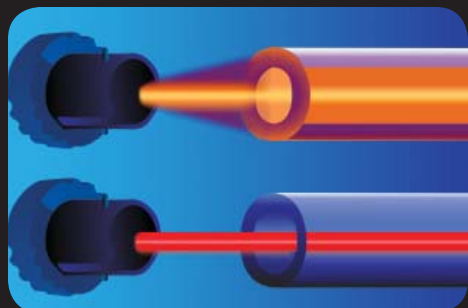
APPLICATIONS

- ▲ Data centers 10GbE between devices:
 - Server to switch.
 - Server to server.
 - Server to storage.
- ▲ SANs (Storage Area Networks).
- ▲ NAS (Network Attached Storage).
- ▲ 155 Mbps ATM OC-3.
- ▲ 100 Mbps FDDI.
- ▲ 10BASE-SX.
- ▲ 100BASE-FX Fast Ethernet.
- ▲ 1000BASE-SX/LX Gigabit Ethernet.
- ▲ Baseband and Broadband Video.
- ▲ 10GBASE-SR/SW.



Hubbell Meets the 10GbE Fiber Challenge

OptiChannel™ Solutions Incorporate Laser Optimized 50μm/125 Multimode Fiber.

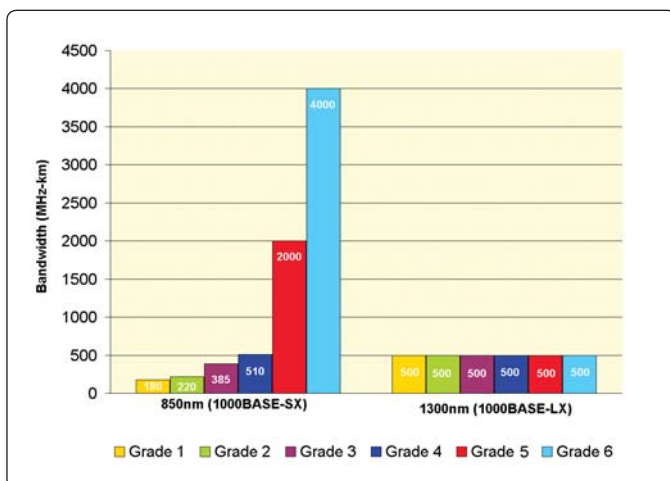


LED spot size: >100μm, 62.5/125 fiber.
Laser spot size: ~30μm, 50/125 fiber.

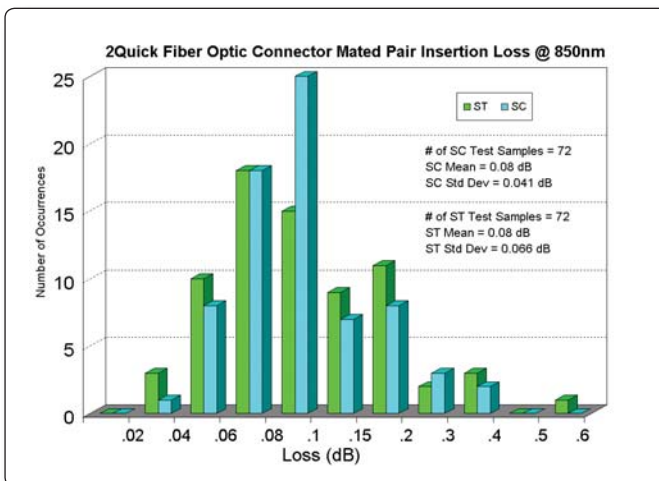
Laser optimized 50 micron multimode fiber is tailored for use with 850nm VCSEL lasers to provide 10-Gigabit Ethernet operation up to 300 meters. Products incorporating this fiber allow backbone distances to be extended. HPW's 10GbE fiber products are 100% factory tested with this fiber.

In addition, connection losses become more significant over longer distances where loss budgets are tight. HPW's fiber connectors are designed with premium quality zirconia ferrules to minimize mated pair connection losses without sacrificing installation speed and ease.

Extended Bandwidth



Connector Losses 2QUICK® Connectors



Hubbell 10GbE Warranty Coverage

Terms	What's Covered (Must be a Hubbell CI)	Support	Application Assurance
25 Years	Cable	Installation Issues	All existing and future applications developed under ANSI (TIA, IEEE, ISO) required to operate over 50μm laser optimized fiber.
	Connecting Hardware	Product Replacement (if defective)	
	Labor	Labor	
	Applications*	Technical Representative	
Hubbell Certified Installer (CI) must install end-to-end Hubbell solution, including patch cords.			



Application Guarantee

- ◆ Guaranteed to meet IEEE 802.3ae requirements for 10GBASE operation.
- ◆ Guaranteed to support any IEEE standardized applications specified to operate over laser optimized 50μm fiber optic cabling.

System Performance Guarantee

- ◆ Guaranteed to operate at 10Gbps over 300 meters at 850nm.

* Proposed draft.





OptiChannel™ Fiber Products

2QUICK® Crimp-style Fiber Connectors



2QUICK® ST-style Connectors

Description	Pack of 12	Pack of 100
Multimode	FCSTMQ12RA	FCSTMQ100R
Singlemode	FCSTSQ12R	FCSTSQ100R

2QUICK® SC Connectors

Description	Pack of 12	Pack of 100
Multimode	FCSCMQ12R	FCSCMQ100R
Singlemode	FCSCSQ12R	FCSCSQ100R

OptiChannel™ Adhesive Fiber Connectors



OptiChannel™ SC Connectors

Description	Pack of 12	Pack of 100
Multimode	FCSCM12R	FCSCM100R
Singlemode	FCSCS12R	FCSCS100R

OptiChannel™ ST-style Connectors

Delivery: 1 connector, dust cap, black boot (MM) or yellow boot (SM) and dust cap.

Description	Pack of 12	Pack of 100
Multimode	FCSTM12R	FCSTM100R
Singlemode	FCSTS12R	FCSTS100R

Fiber Tools



Description	Catalog No.
Termination Kit for SC/ST-style, 16-port (110VAC)	OFTK03C
Connector Installation Tool Pouch, SC/ST-style	OFTP02C
Connector Installation Tool Pouch, MT-RJ	OFTP03
Connector Installation Tool Pouch, LC	OFTP04C
Cleave Tool, Dual Fiber	OFCLV2
Strip Tool, Universal, Fiber Optic	OFSTRIP2
Fiber Optic Fault Finder Kit	OFAULT1
Microscope 400X	OFSCOPE1
Complete Multimode Test Set	OFPLK813

OptiChannel™ 10GbE Fiber Pigtails (3m long)



Delivery: 1 fiber optic pigtail with 900μm fiber

Description	Catalog No.
SC 50/125, 10GbE Multimode	FPSCE3MM
LC 50/125, 10GbE Multimode	FPLCE3MM

OptiChannel™ 10GbE Fiber Patch Cords



Replace 'X' with standard lengths of 1, 2, 3, or 5 meters.

Delivery: 1 Duplex/Multimode fiber optic patch cord.

Description	Catalog No.
SC to SC 50/125, 10GbE	DFPCSCSCEXMM
LC to LC 50/125, 10GbE	DFPCLCLCEXMM
LC to SC 50/125, 10GbE	DFPCLSCCEXMM

Fiber Adapters



Description	Catalog No.
SC Duplex, Blue	FASCMPB6
SC Duplex, Blue, Snap Mount	FASCMPB6
SC Simplex, Blue, Snap Mount	FASCMPB12
SC to ST-style Duplex, Blue	FASTSCMPB6
SC to ST-style Duplex, Blue, Snap Mount	FASTSCMPB6
SC to ST-style Simplex, Blue	FASCSTSEMPB12
LC Duplex, Blue, Snap Mount	FALCMPB6
LC Quad, Blue	FAQLCMPB6
MT-RJ, Beige, Snap Mount	FAMTRJMPB6

Keystone Adapters



Description (Office White)*	Catalog No.
SC Simplex	SFSC
SC Simplex Flush Mount	SFFSC
SC/APC Simplex	SFSCAOW
ST-style	SFST
ST-style to SC Simplex	SFSCST
MT-RJ	SFMRJ
MT-RJ Flush Mount	FAMTRJJK
LC Duplex	SFLC
LC Duplex Flush Mount	SFFLC

* See Full Line Catalog for more colors.



Rack Mount Enclosures

**FCR Series** - Sliding Rack Mount Enclosure

# of FSP Adapter Panels	Height	Rack Units	Catalog No.
6	3.50" (89)	2	FCR350SP36R
9	3.50" (89)	2	FCR350SP54R
12	5.25" (133)	3	FCR525SPR
15	7.00" (178)	4	FCR700SP

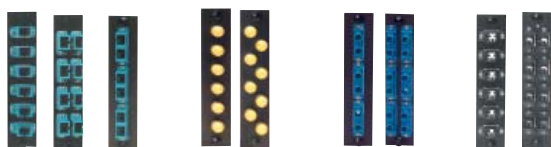
**FPR Series** - Hinged Rack Mount Enclosure

Adapter Panel Version	Catalog No.
Up to 3 FSP Adapter Panels	FPR3SP

Fiber Strand Panel Version

Capacity	Format	Style	Catalog No.
12	ST	Unloaded	FPR012STX
12	SC	Unloaded	FPR012SCX
24	ST	Unloaded	FPR024STX
24	SC	Unloaded	FPR024SCX
12	ST	Loaded	FPR012STM
12	SC	Loaded	FPR012SCM
24	ST	Loaded	FPR024STM
24	SC	Loaded	FPR024SCM

Fiber Adapter Panels



Description	# Adapters	# Fibers	Catalog No.
SC Duplex, Beige	3	6	FSPSCDBE3
SC Duplex, Beige	6	12	FSPSCDBE6
SC Simplex, Blue	6	6	FSPSC6
SC Simplex, Blue	8	8	FSPSC8
SC Duplex, Blue	3	6	FSPSCD3
SC Duplex, Blue	6	12	FSPSCD6
ST-style, Blue	6	6	FSPST6
ST-style, Blue	8	8	FSPST8
SC to ST-style, Blue	3	6	FSPSCST3
SC to ST-style, Blue	6	12	FSPSCST6
MT-RJ	6	12	FSPMTRJ6
MT-RJ	8	16	FSPMTRJ8
LC Quad	3	12	FSPLCQ3
LC Quad	6	24	FSPLCQ6
APC, SC Simplex, Green	6	6	FSPSCA6
APC, SC Simplex, Green	8	8	FSPSCA8

Plug and Play Cassettes

Connector Type	Fiber Type	Catalog No.
SC Duplex	50µm/10GbE	OCSC50G
LC Duplex	50µm/10GbE	OCLC50G



MTP to MTP Cords, 12-Fiber, 10GbE



On spool with pulling grip attached to one end.

Fiber Type	Length	Catalog No.
50µm/10GbE	10	FPCMTP50G10
50µm/10GbE	25	FPCMTP50G25
50µm/10GbE	50	FPCMTP50G50
50µm/10GbE	100	FPCMTP50G100

**Hubbell Premise Wiring**

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