HUBBELL OptiChannel 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 50μm 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
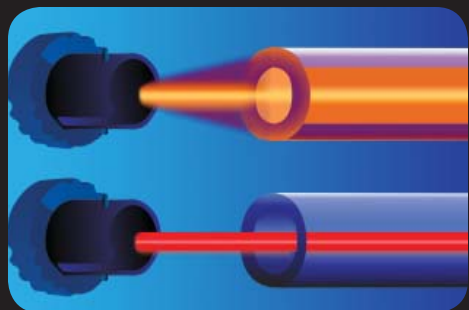- ◆ 2,000 MHz-Km effective mode bandwidth 50/125mm fiber in cassettes, pigtails and patch cords.

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.**

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.

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

Extended Bandwidth
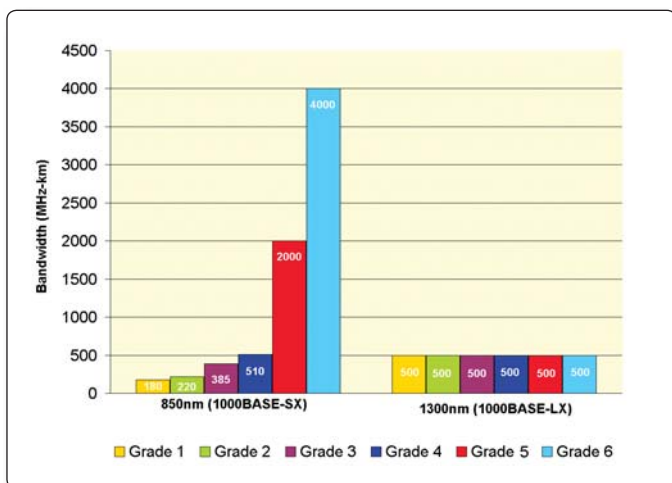
Connector Losses 2QUICK® Connectors
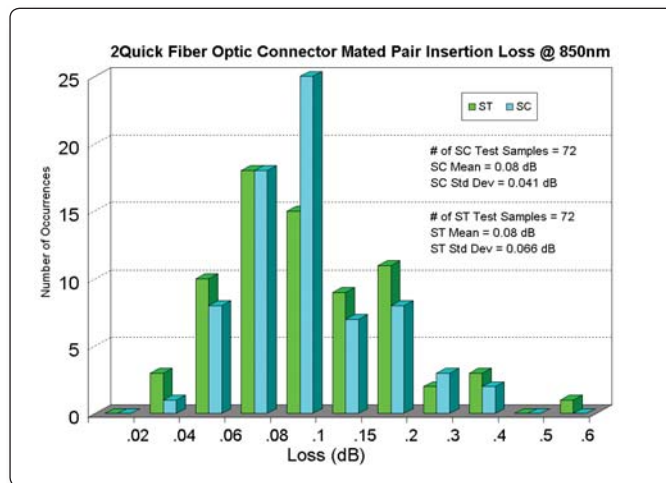
Hubbell 10GbE Warranty Coverage

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.

* Proposed draft.

System Performance Guarantee
◆ Guaranteed to operate at 10Gbps over 300 meters at 850nm.

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
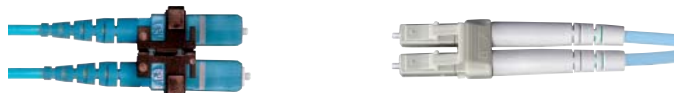
Replace 'X' with standard lengths of 1, 2, 3, or 5 meters.
Delivery: 1 Duplex/Multimode fiber optic patch cord.

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

Fiber Adapters

Description	Catalog No.
SC Duplex, Blue	**FASCMPB6**
SC Duplex, Blue, Snap Mount	**FASCEMPB6**
SC Simplex, Blue, Snap Mount	**FASCSMPB12**
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	**SFMTRJ**
MT-RJ Flush Mount	**FAMTRJK**
LC Duplex	**SFLC**
LC Duplex Flush Mount	**SFFLC**

* See Full Line Catalog for more colors.