

# **FiberExpress - OPTIMAX Field-Installable Connectors**

2011



**WEST PENN WIRE**

## **THE OPTIMAX TOOL KIT**

The OPTIMAX installation kit is an inexpensive, self-contained set of tools including all that is needed to successfully terminate jacketed and tight-buffered 900um fiber using OPTIMAX SC, ST and LC compatible connectors. It includes a unique microscope fitted with a handy fiber holder which greatly simplifies fiber cleave inspection. The compact, rugged nylon carrying case also includes complete installation instructions, a training video, and 'quick reference cards' with visual aids.

### OPTIMAX FEATURES:

- No epoxy required
- No polishing required
- Pre-radiused PC-polish ferrule
- Critical Steps are performed in the factory
- Floating ferrule (SC) (LC) Non-Optical Disconnect
- Unlimited shelf life
- Compact, convenient tool kit
- 62.5 & 50um Multimode and 8.3um Singlemode
- Training Video

FI-3635 TOOL KIT



# THE OPTIMAX CONNECTOR

Delivers high performance optical fiber termination in the field. It provides simple, efficient and fast connectorization, and requires no polishing, heat curing, bonding, or epoxy. Instead, the patented mechanical splice body of OPTIMAX incorporates a factory-mounted fiber stub and a pre-polished ceramic ferrule which consistently provides hassle-free, secure and reliable optical fiber cable termination.

OPTIMAX simplifies the technicians work. Even novice technicians can install the OPTIMAX in just a few minutes using inexpensive, commonly available tools such as industry-standard cleavers and strippers. Key installation steps are summarized in illustrated, plasticized quick reference cards, while the OPTIMAX installation video provides an easy to follow step-by-step guide to performing successful connections.

## CONNECTORS ARE AVAILABLE IN:

- 62.5/125 Micron MultiMode
- 50/125 Micron MultiMode
- 8.3/125 Micron SingleMode

Optimax Tools and Accessories	
Catalog No.	Description
FI-3635	OPTIMAX Complete Kit
FI-3634	Installation Tool- ST
FI-3641	ST Compatible Crimp Tool
FI-8829	Fiber Cleaver
FI-8832	Microscope
FI-8835	ST 900um Connector - 62.5/125um
FI-8837	ST Universal connector- 62.5/125um
FI-1075	ST 900um Connector - 50/125um
FI-1074	ST Universal connector- 50/125um
FI-0028	SC Universal connector- 62.5/125um
FI-0029	SC 900um connector- 62.5/125um
FI-1077	SC 900um connector- 50/125um
FI-1076	SC Universal connector- 50/125um
FI-1791	ST Single-Mode 900um connector
FI-1792	SC Single-Mode 900um connector
FI-1793	ST- Accessory Kit For Jacketed Single-Mode
FI-1794	SC- Accessory Kit For Jacketed Single-Mode
FI-1981	LC 900um connector- 62.5/125um
FI-1982	LC 900um connector- 50/125um
FI-1983	LC 900um connector- Single-Mode
FI-1984	LC- Accessory Kit For Jacketed Single-Mode Fiber

## TECHNICAL INFORMATION

### PARAMETERS

### SPECIFICATIONS

Interconnection Compatibility	SC Compatible, and LC Compatible
Field Assembly Time	40 Seconds
Insertion Loss (MM and SM)	.3dB (Typical)
Durability (MM and SM)	MM- less then .2 dB Change, SM- less than .3 dB change (500 cycles)
Nominal fiber O.D	125um
Storage Temperature	-40° to 75° C
Operating Temperature	0° to 75° C
Tensile Strength	1.12 lbs.
Reflectance (MM)	-25dB (Typical)
Reflectance (SM)	-40dB (Typical)
Ferrule	Ceramic

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# FiberExpress - Brilliance Field-Installable Connectors

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## THE BRILLIANCE TOOL KIT

Contains all accessories in the Basic Kit, and also includes a Field Cleaver, VFL and Microscope. The Cleaver is a generic field cleaver commonly called a "score and snap" cleaver. The VFL with adapter cords enables on-site installation assurance.

### INSTALLATION:

4 Simple Steps:

1. Strip and cleave fiber optic cable.
2. Insert Fiber into connector.
3. Activate the fiber secure tab.
4. Install Boot.

### SAVES TIME:

- Less Than 5 Seconds!!
- NO Tools Required for Termination
- Set up times are greatly reduced
- Connectors are reusable up to 5 times

### SAVES MONEY:

- No special/proprietary tools
- Install Kits are less expensive
- Low training expense

### BRILLIANCE FEATURES:

- No epoxy required
- No polishing required
- Pre-radiused PC-polish ferrule
- Critical Steps are performed in the factory
- Floating ferrule (SC) (LC) Non-Optical Disconnect
- Unlimited shelf life
- Compact, convenient tool kit
- 62.5 & 50um Multimode and 8.3um Singlemode
- Training Video- USB

FI-4270 Field Kit



## **THE BRILLIANCE Connectors**

The FiberExpress Brilliance Field-installable Connectors ensure reliable network performance by virtue of their superior design and manufacture, which includes use of the best materials available, expert polishing processes, and a 100% connector reliability test methodology. Quality of this kind enables WPW to provide a 100% installation yield guarantee – even when the connectors are used in environments with temperatures ranging from -40°C to +75°C. The patent-pending FiberExpress Brilliance Connector is the only fiber optic connector in the marketplace to overcome the key challenges of connector installation in the field, that is, it provides a quick and greatly simplified tool-less fiber termination process and the ability to quickly and reliably verify the termination once it's made.

West Penn Wire's FiberExpress Brilliance Field-installable Connectors are available as 900  $\mu$ m tight buffered single-mode and multimode (OM1, OM2, OM3/OM4) LC Connectors, as well as 900  $\mu$ m tight buffered multimode (OM1, OM2, OM3/OM4) SC Connectors. The connectors are available individually, or in a bulk recyclable package where the 25 connectors are separated from the boots within the package. The 900  $\mu$ m tight buffered ST version, as well as 2 and 3 mm jacketed options and APC versions will be available soon. Please contact a WPW representative for additional details.

FiberExpress Tools and Accessories	
Catalog No.	Description
FI-4270	FiberExpress Field Installable Complete Kit
<b>LC Connectors</b>	
FI-4240	LC - 900 $\mu$ m, Multimode Beige Connector, 62.5um
FI-4241	LC - 900 $\mu$ m, Multimode Black Connector, 50um
FI-4242	LC - 900 $\mu$ m, Multimode Aqua Connector, 50um
FI-4243	LC - 900 $\mu$ m, Single-mode Blue Connector, 8um
<b>SC Connectors</b>	
FI-4244	SC - 900 $\mu$ m, Multimode Beige Connector, 62.5um
FI-4245	SC - 900 $\mu$ m, Multimode Black Connector, 50um
FI-4246	SC - 900 $\mu$ m, Multimode Aqua Connector, 50um

### TECHNICAL INFORMATION

#### PARAMETERS

#### SPECIFICATIONS

Interconnection Compatibility	ST Compatible, SC Compatible, and LC Compatible
Field Assembly Time	1 minute 900um, 3 minutes for Jacketed fiber
Insertion Loss (MM and SM)	.3dB (Typical)
Durability (MM and SM)	MM- less then .2 dB Change, SM- less than .3 dB change (500 cycles)
Nominal fiber O.D	125um
Storage Temperature	-40° to 40° C
Operating Temperature	0° to 55° C
Tensile Strength	12 lbs. (54 N)
Reflectance (MM)	-30dB (Typical)
Reflectance (SM)	-40dB (Typical)
Ferrule	Ceramic