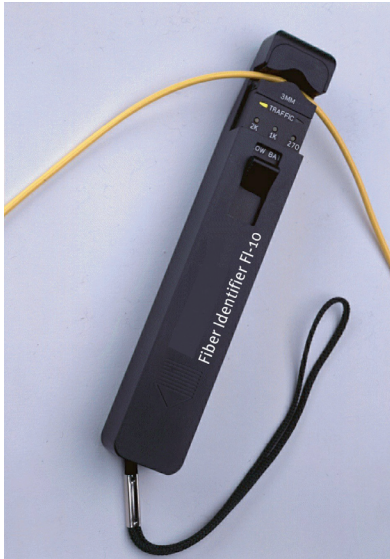


# FI-10

## Fiber Identifier



### Key Features

- **Hand-held, lightweight, rugged, battery-powered**
- **Interchangeable adapter heads for: jacketed, coated or ribbon fiber**
- **Complete with carrying case**
- **Attaches to belt or tool pouch**
- **Operates with one hand**
- **Weight 7.5 oz/213 grams**

### Live fiber identifier

- **Operates from 800 nm to 1700 nm**
- **Compatible with most AT&T and Corning optical fiber**
- **Uses non-destructive macro-bending technology**

### Easy-to-use

- **Bidirectional traffic indication**
- **High intensity LED indication of active signal transmission**
- **Detects presence of 270 Hz, 1000 Hz and 2000 Hz modulated tones**
- **Low-battery indication**

The JDSU Fiber Identifier was tested to Bellcore requirements under technical reference TR-NWT-000764, 'Generic Criteria for Optical FI-10/FI-11s' of attaching the FI to a bare 1" section of fiber 20 times without causing damage to the fiber that is visible under a microscope. For old and new fibers, there was no microscopically visible damage to the fiber coating noted as required by TR-NWT-000764.

JDSU FI's minimum bend radius is almost twice the minimum radius of 3 mm acceptable per the Bellcore Technical Reference. Referencing Corning, Inc. white paper WP5053 (February 2001).

### Application

JDSU's hand-held optical fiber identifier FI-10 probe is a rugged, easy-to-use installation and maintenance instrument which identifies optical fibers by detecting the optical signals being transmitted through a single mode fiber. By utilizing local detection technology (non-destructive macro-bend detection), the unit eliminates the need to open the fiber at the splice point for identification; eliminating the probability of interrupting service.

Signals detected by the FI-10 include continuous wave (CW), live optical transmission, and low frequency modulated tones at 270, 1000 and 2000 Hz.

When traffic is present on the fiber tested, the direction of transmission is indicated by LEDs illuminating on the probe.

During maintenance, installation, rerouting, or restoration it is often necessary to isolate a specific fiber from a bundle without disrupting service. By simply clamping the FI-10 onto a fiber, the unit will indicate if there is no signal, a 270, 1000 or 2000 Hz tone, or traffic and show signal direction.

The FI-10 has the widest environmental operating range of any optical fiber identifier on the market today.

## Specifications

### Optical characteristics (using Corning 1528)

Detection technique	non-destructive macro-bending
Typical loss	<0.6 dB @ 1310 nm typical
Spectral response	800 nm to 1700 nm
Detector sensitivity (MDSP)*	-40 dBm typical (equivalent core power)
Optical tone receiver	270 Hz, 1 kHz, 2 kHz
Minimum fiber slack	0.75 inches/19 mm required for detection

### Fiber compatibility

Dual window single mode	8 to 10 µm core diameter
Coating diameter	250 µm diameter
Coating	High refractive index acrylate

### Electrical characteristics

Power	one 9 V Alkaline battery
Operation	approx. 10,000 readings

### Environmental conditions

Operating temperature	-20 to +50°C
Storage temperature	-40 to +60°C
Humidity	0 to 90% non-condensing
Physical length	7.5 inches/190 mm
Width	1 1/4 inches/32 mm
Depth	1 inch/25 mm
Weight	7.5 oz/213 grams

\* Mean detectable signal power for single mode fiber at 1310 nm

## Ordering information

WI1000	FI-10 (includes fiber optic probe, carrying case and three interchangeable adapter heads for jacketed, coated or ribbon fiber)
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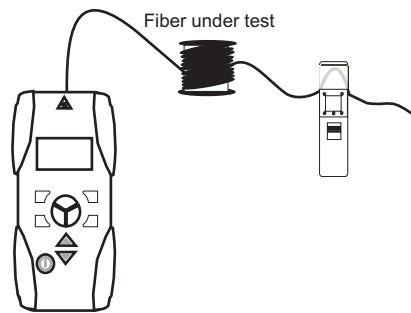
### Accessories

WI9900	2 mm adapter (optional head with 2 mm groove)
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## Fiber identification using the JDSU optical power sources

Single mode fibers can be easily identified when using an OLS-6 or OLS-55 FP laser source. Both models allow tone modulation at 270 Hz, 1 kHz and 2 kHz for fiber recognition by the hand-held optical fiber identifier FI-10.

The recommended wavelength is 1550 nm for tone identification.



## Ordering information for optical laser sources

BN 2255/02 OLS-6\*  
(connector type FC-PC)

BN 2255/21 OLS-6\*  
(connector type FC-APC)

Includes: operating manual, 2 × Alkaline battery AA size (UM3), belt bag

\* Pocket-sized, rugged dual-port dual wavelengths laser source for single mode fiber testing. Wavelengths 1310 and 1550 nm, optical power -7 dBm.

BN 2279/01 OLS-55\*\*  
(connector type PC)

BN 2279/21 OLS-55\*\*  
(connector type APC)

Includes: operating manual, 4 × Alkaline battery AA size (UM3), exchangeable adapter

Select: one type of "connector/adaptor" series 2150/00.xx. Connector is free of charge and is automatically included.

\* Handy-sized, rugged single port dual wavelengths laser source for single mode fiber testing. Wavelengths 1310 and 1550 nm, optical power -7 dBm.

### Measuring adapters

BN 2150/00.50 DIN 47256, HRL-10/DIN

BN 2150/00.51 FC, FC-PC, FC-APC (NTT)

BN 2150/00.32 ST type

BN 2150/00.58 SC type

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