

Live Fiber Detector

LFD-200



No more need to open fiber for identification

Hold button provides hands-free operation

Perfect fit: three interchangeable adapter heads

Insightful Instrument

Detect traffic and measure signals anywhere on singlemode and multimode fibers without having to disconnect them. Check for signal presence before rerouting or maintenance, perform continuity tests and verify cable labeling. The LFD-200 Live Fiber Detector's non-destructive macrobending technique doesn't disrupt traffic, damage or overstress fiber. Get precise and reliable data efficiently.

Always Ready...

EXFO's LFD-200 is the only live fiber detector on the market that comes with a choice of three interchangeable adapter heads built right into the unit. Achieve an ideal fit by opening the storage compartment in the handle to access the extra adapter heads for simple conversion and easy multiple fiber type testing.

The LFD-200 also features a unique Hold button that enables hands-free operation. Just slide the button up and over to lock it in place. You are now free to operate your setup. The LFD-200 is the all-in-one solution for live fiber detection.

Complete Diagnosis. Fast.

Simply clamp the LFD-200 onto a fiber, listen for a beep indicating the presence of traffic, then view a complete status report on the multifunction LED display including,

- signal presence or absence (live or dark fiber)
- signal type (customer traffic, continuous or modulated test signal at 270 Hz, 1 kHz or 2 kHz)
- signal direction
- absolute core power within 2 dB



Specifications

Optical Characteristics, Typical (using Corning 1528)

Optical tone receiver	270 Hz, 1 kHz, 2 kHz
Detection technique	Non-destructive macrobending
Loss	< 0.6 dB at 1310 nm
Spectral response	800 nm to 1650 nm
Detector sensitivity (MDS _P)*	-40 dBm (equivalent core power)
Minimum fiber slack	1.9 cm (¾ in) required for detection

Core Power Detection, Typical

LFD-201	0 dBm to -40 dBm ± 2 dB
LFD-202	0 dBm to -40 dBm ± 2 dB
LFD-202P	20 dBm to -20 dBm ± 2 dB

Fiber Compatibility

Dual window, singlemode	8 µm to 10 µm core diameter
Coating diameter	250 µm diameter
Coating	High refractive index, acrylate

* Mean detectable signal power for singlemode fiber at 1310 nm.

General Specifications

Size (H x W x D)	19.1 cm x 3.2 cm x 2.5 cm	(7½ in x 1¼ in x 1 in)
Weight	0.2 kg	(0.5 lb)
Battery	Standard 9 V alkaline battery	
Battery life	Approx. 10 000 readings	
Temperature		
Operating	-20 °C to 50 °C	(-4 °F to 122 °F)
Storage	-40 °C to 60 °C	(-40 °F to 140 °F)
Humidity	0 % to 90 % non-condensing	

Optional Accessory

Optional interchangeable 2 mm head

Ordering Information

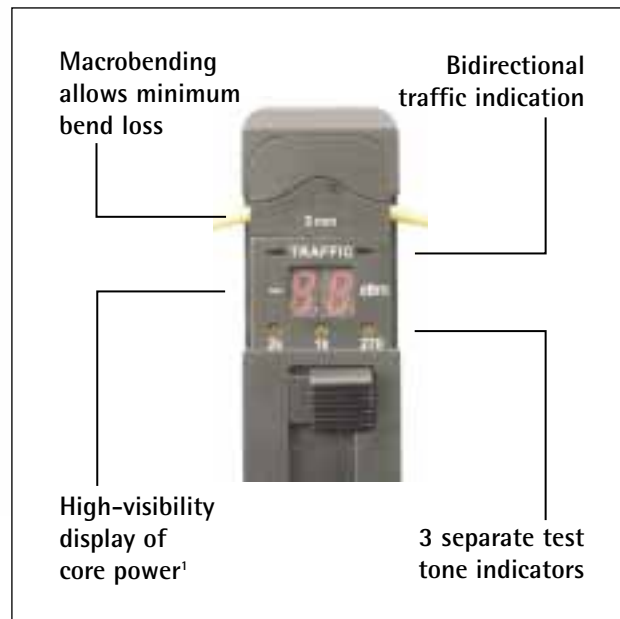
LFD-20X

Live fiber detector

- 1 = Standard live fiber detector without core power reading display
- 2 = Live fiber detector with core power reading display
- 2P = High power live fiber detector with core power reading display

Includes: LFD-200 carrying case and three interchangeable adapter heads for jacketed, coated or ribbon fiber. Instruction manual, 9 V alkaline battery and Certificate of Compliance.

Example: LFD-202P



¹Only on LFD-202 and LFD-202P models

Find out more about EXFO's extensive line of high-performance portable instruments by visiting our Web site at www.exfo.com



Rugged Handheld Solutions

- OLTS
- Power Meter
- Light Source
- Talk Set



Modular Platforms

- OTDR
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Advanced DWDM Test Systems

- OSA
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EXFO is certified ISO 9001 and attests to the quality of these products. This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation. EXFO has made every effort to ensure that the information contained in this specification sheet is accurate. However, we accept no responsibility for any errors or omissions, and we reserve the right to modify design, characteristics and products at any time without obligation. Units of measurement in this document conform to SI standards and practices. **Contact EXFO for prices and availability or to obtain the phone number of your local EXFO distributor.** For the most recent version of this spec sheet, please go to the EXFO Web site at <http://www.exfo.com/support/techdocs.asp> In case of discrepancy, the Web version takes precedence over any printed literature.

Live Fiber Detector

LFD-203



Bidirectional signal detection on a wide wavelength range of 800 nm to 1700 nm

Based on non-destructive macrobending technology

Handheld, lightweight and rugged unit ideal for testing jacketed or bare ribbon fiber

Efficient Signal Detection, No Service Disruption

The rugged, handheld LFD-203 Live Fiber Detector efficiently performs singlemode fiber signal detection, enabling easy identification of live fibers during installation and maintenance. Thanks to local detection technology (non-destructive macrobend detection), EXFO's LFD-203 eliminates the need to open the fiber at the splice level—also eliminating the risk of service disruption.

The LFD-203 detects signals such as continuous wave (CW), live optical transmission and low-frequency modulated tones at 270 Hz, 1 kHz or 2 kHz. Traffic is indicated by a beep and LEDs lighting up on the instrument.

During maintenance, installation, rerouting or restoration, it is often necessary to isolate—without disrupting service—a specific fiber from a bundle. Simply clamped onto the fiber, the LFD-203 indicates if there is no signal, a 270 Hz, 1 or 2 kHz tone, or live traffic; it also shows signal direction.

Designed for Ribbon Fiber Testing

The LFD-203 Live Fiber Detector comes with two interchangeable heads designed for ribbon fiber testing. One head is used for 2-, 4-, 6-, 8- and 12-count bare ribbon fiber, and the other for 2-, 4-, 6-, 8- and 12-count jacketed ribbon fiber.

Key Features

- Detects modulated tones at 270 Hz, 1 kHz and 2 kHz
- Compatible with most types of AT&T and Corning optical fiber
- Three interchangeable heads
- Comes with a carrying case; attaches to a belt or a tool pouch
- Battery-powered (with a low battery indicator)
- Ambient light reduction design



Fiber-optic T&M,
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Specifications

Optical Characteristics (Using SMF-28)

Detection technique	Non-destructive macrobending
Insertion loss (typical)	< 0.20 dB at 1310 nm < 2.00 dB at 1550 nm
Spectral response	800 nm to 1700 nm
Minimum detector sensitivity* (typical)	
Bare ribbon fiber:	-40 dBm at 1310 nm -50 dBm at 1550 nm
Jacketed ribbon fiber:	-30 dBm at 1310 nm -40 dBm at 1550 nm
Optical tone receiver	270 Hz, 1 kHz, 2 kHz
Minimum fiber slack	1.9 cm (3/4 in) required for detection

Fiber Compatibility

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

Interchangeable Fiber Heads

Bare ribbon fiber adapter
Jacketed ribbon fiber adapter
3 mm

* Sensitivity is color-dependent. The LFD-203 is sensitive to dark colors such as black, brown and dark blue.

Ordering Information

LFD-20X

Live fiber detector

- 1 = Standard live fiber detector without core power reading display
- 2 = Live fiber detector with core power reading display
- 2P = High-power live fiber detector with core power reading display
- 3 = Live fiber detector for ribbon fiber

Includes: LFD-200 carrying case and three interchangeable adapter heads for jacketed, coated or ribbon fiber. User Guide, 9 V alkaline battery and Certificate of Compliance.

Note: The above specifications only apply to the LFD-203 model.

Example: LFD-203

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