

FTB-7600E ultra-longhaul OTDR

HIGH-END FIBER CHARACTERIZATION AND SUBMARINE CABLE TESTING



40G

EXFO Connect compatible



Characterize fiber with maximum accuracy over distances of more than 200 km.

KEY FEATURES

Dynamic range of up to 50.5 dB

Dual-wavelength configurations (1310/1550/1625 nm)

Up to 256 000 sampling points

Industry-leading linearity of ± 0.03 dB/dB

EXFO Connect-compatible: automated asset management; data goes through the cloud and into a dynamic database

APPLICATIONS

Ultra-longhaul network testing

Submarine cable testing

COMPLEMENTARY PRODUCTS AND OPTIONS



Platform
FTB-2/FTB-2 Pro



Platform
FTB-500



Fiber inspection probe
FIP-400B (WiFi or USB)

FastReporter

Data post-processing software
FastReporter 3

EXFO

LOADED WITH FEATURES TO BOOST YOUR EFFICIENCY^a



Real-time averaging

Activates the OTDR laser in continuous shooting mode, the trace refreshes in real time and allows to monitor the fiber for a sudden change. Perfect for a quick overview of the fiber under test.



Automode

Used as a discovery mode, this feature automatically adjusts the distance range and the pulse width in function of the link under test. It is recommended to adjust the parameters to perform additional measurements to locate other events.



Zoom tools

Zoom and center to facilitate the analysis of your fibers. Draw a window around the area of interest and center in the screen quicker.



Set parameters on the fly

Dynamically change OTDR settings for the ongoing acquisition without stopping or returning to submenus.



Macrobend finder

This built-in feature enables the unit to automatically locate and identify macrobends, no need to spend further time analyzing the traces.



Bidirectional analysis (Via FastReporter 3 data post-processing software)

Recommended to ensure true splice characterization, bidirectional analysis combines results from both directions to provide an average loss for each event. For a more complete event characterization, use intelligent Optical Link Mapper (iOLM) and benefit from maximum resolution on both directions (multiple pulse widths at multiple wavelengths) as well as a consolidated view.

LOOKING FOR ICON-BASED MAPPING?

Linear view (included on all EXFO OTDRs)^a

Available on our OTDRs since 2006, the linear view simplifies the reading of an OTDR trace by displaying icons in a linear way for each wavelength. This view converts the graph data points obtained from a traditional single pulse trace into reflective or non-reflective icons. With applied pass/fail thresholds, it becomes easier to pinpoint faults on your link.

This improved version of linear view provides the flexibility to display both the OTDR graph and its linear view without having to toggle to analyze your fiber link.



GET THE BEST OUT OF YOUR DATA POST-PROCESSING—ONE SOFTWARE DOES IT ALL

FastReporter

This powerful reporting software is the perfect complement to your OTDR, and can be used to create and customize reports to fully address your needs.



a. Linear view representation depends on the OTDR version installed on the platform.

FIBER CONNECTOR INSPECTION AND CERTIFICATION—THE ESSENTIAL FIRST STEP BEFORE ANY OTDR TESTING

Taking the time to properly inspect a fiber-optic connector using an EXFO fiber inspection probe can prevent a host of issues from arising further down the line, thus saving you time, money and trouble. Moreover, using a fully automated solution with autofocus capabilities will turn this critical inspection phase into a fast and hassle-free one-step process.

Did you know that the connector of your OTDR/iOLM is also critical?

The presence of a dirty connector at an OTDR port or launch cable can negatively impact your test results, and even cause permanent damage during mating. Therefore, it is critical to regularly inspect these connectors to ensure that they are free of any contamination. Making inspection the first step of your OTDR best practices will maximize the performances of your OTDR and your efficiency.

ConnectorMax



Five models to fit your budget

FEATURES	USB WIRED			WIRELESS	
	Basic FIP-410B	Semi-automated FIP-420B	Fully automated FIP-430B	Semi-automated FIP-425B	Fully automated FIP-435B
Three magnification levels	✓	✓	✓	✓	✓
Image capture	✓	✓	✓	✓	✓
Five-megapixel CMOS capturing device	✓	✓	✓	✓	✓
Automatic fiber image-centering function	X	✓	✓	✓	✓
Automatic focus adjustment	X	X	✓	X	✓
Onboard pass/fail analysis	X	✓	✓	✓	✓
Pass/fail LED indicator	X	✓	✓	✓	✓
WiFi connectivity	X	X	X	✓	✓

For more information, visit www.EXFO.com/fiberinspection.

AVAILABLE IN THE FTB-2/FTB-2 PRO PLATFORM

The FTB-2, available in a standard or Pro model, is the most compact solution on the market for **multirate, multitechnology, multiservice testing**, delivering all the power of a high-end platform in a conveniently sized, go-anywhere field-testing tool.



INTUITIVE INTERFACE

Widescreen display and multitouch capability



UNMATCHED CONNECTIVITY

WiFi, Bluetooth, Gigabit Ethernet and multiple USB ports



INCREASED PRODUCTIVITY

Store, push and share test data automatically

Do more with the EXFO FTB platform

The Windows 10 operating system allows for a wide choice of third-party applications and supports an extensive range of USB devices.

- › Start faster and multitask
- › Use any office suite
- › Connect to printers, cameras, keyboards, mice, and more

Bring your own apps

- Share your desktop (e.g., using TeamViewer)
- Antivirus software
- Communicate via email services and over-the-top (OTT) apps
- Record and automate actions
- Share files via cloud-based storage



All specifications valid at 23 °C ± 2 °C with an FC/APC connector, unless otherwise specified.

TECHNICAL SPECIFICATIONS

Wavelengths (nm) ^a	1310 ± 20/1550 ± 20/1625 ± 10
Dynamic range at 20 μs (dB) ^b	50.5/50.5/48 ^c
Event dead zone (m) ^d	1
Attenuation dead zone (m) ^d	5
Distance range (km)	1.25, 2.5, 5, 10, 20, 40, 80, 160, 260, 400
Pulse width (ns)	5, 10, 30, 100, 275, 1000, 2500, 10 000, 20 000
Linearity (dB/dB) ^a	± 0.03
Loss threshold (dB)	0.01
Loss resolution (dB)	0.001
Sampling resolution (m)	0.04 to 10
Sampling points	Up to 256 000
Distance uncertainty (m) ^e	± (0.75 + 0.001 % x distance + sampling resolution)
Measurement time	User-defined (minimum: 5 seconds ; maximum: 60 minutes)
Typical real-time refresh (Hz)	4
Stable source output power (dBm) ^f	5

GENERAL SPECIFICATIONS

Size (H x W x D)	97 mm x 25 mm x 260 mm (3 ¹³ / ₁₆ in x 1 in x 10 ¹ / ₄ in)
Weight	0.55 kg (1.2 lb)
Temperature	Operating: 0 °C to 50 °C (32 °F to 122 °F) Storage: -40 °C to 70 °C (-40 °F to 158 °F)
Relative humidity	0 % to 95 % non-condensing

LASER SAFETY



a. Typical.

b. Typical dynamic range with a 3-minute averaging at SNR = 1.

c. With NZDS fiber (G.655).

d. Typical dead zone of singlemode modules for reflectance below -45 dB, using a 5-ns pulse.

e. Does not include uncertainty due to fiber index.

f. Typical output power value at 1550 nm.

ORDERING INFORMATION

FTB-7600E-XX-XX

Model

Dual-wavelength

0023B = SM OTDR module, 1310/1550 nm (9/125 μ m)0034B = SM OTDR module, 1550/1625 nm (9/125 μ m)

Connector

EA-EUI-28 = APC/DIN 47256

EA-EUI-89 = APC/FC narrow key

EA-EUI-91 = APC/SC

EA-EUI-95 = APC/E-2000

EA-EUI-98 = APC/LC

Example: FTB-7600E-0023B-EI-EUI-89

EI connectors: See section below

EI CONNECTORS



To maximize the performance of your OTDR, EXFO recommends using APC connectors on singlemode port. These connectors generate lower reflectance, which is a critical parameter that affects performance, particularly in dead zones. APC connectors provide better performance than UPC connectors, thereby improving testing efficiency.

For best results, APC connectors are mandatory with the iOLM application.

Note: UPC connectors are also available. Simply replace EA-XX by EI-XX in the ordering part number. Additional connector available: EI-EUI-90 (UPC/ST).

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