# FTB Lite 750C metro/longhaul OTDR

LONG-DISTANCE FIBER CHARACTERIZATION AND FIBER UPGRADES

Dedicated OTDR with always-on connectivity and optimized usability to carry out any metro/longhaul network testing in the most efficient, compliant and secure way.





### **KEY FEATURES**

Free 36-month basic data plan provided for real-time visibility

Bluetooth®, WiFi, 2G/3G/4G LTE, GNSS

8-inch (203-mm) color touchscreen for use in bright sunlit environments or any environment where you conduct tests

Up to 10-hour battery autonomy

Dynamic range of up to 46 dB

Event dead zone (EDZ) / Attenuation dead zone (ADZ): 0.5/2.5 m in SM and MM

Up to 256 000 sampling points

iOLM-ready: one-touch multiple acquisitions, with clear go/no-go results presented in a straightforward visual format

# APPLICATIONS

Metro network testing

Longhaul network testing

Manufacturing automation

# RELATED PRODUCTS AND ACCESSORIES



inspection scope

Fiber

FIP-500



SPSB

suppressor bag



Data post-processing software FastReporter



# HOW CONFIDENT ARE YOU ABOUT YOUR TEST PROCEDURES BEING FOLLOWED?

The FTB Lite 700 Series builds upon EXFO's innovation in OTDR testing with a secure, rugged Connected First<sup>™</sup> platform.

EXFO's FTB Lite 700 Series features always-on connectivity, designed to solve issues, such as lack of compliance and expertise, inefficient processes, and delays in getting the latest updates.

#### Always-on connectivity provides:

- 1. Streamlined compliance and automated validation: Automated job tracking and real-time reporting confirm adherence to methods of procedure (MoP) ensure compliance with testing standards while reducing errors and administration time.
- 2. Enhanced collaboration and efficiency: Real-time data sharing, automated uploads, and cloud-based reporting enable seamless teamwork, faster decision-making, and accelerated project timelines.
- 3. Valuable insights: Automated access to comprehensive live data to perform analytics and extract insights, enabling informed decision-making and planning.

The FTB Lite 700 Series has direct access to EXFO Exchange workspaces at all times. Onboarding has never been easier with pre-configured access and single sign-on directly from the platform, meaning no more phone pairing.

These advantages, paired with EXFO's reliable, accurate and durable OTDRs, lead to:

- · Faster deployment of jobs to users in the field to ensure compliance and increase the ratio of first-time-right results.
- · Faster access to results by managers or supervisors; leading to contractors getting paid quicker.
- · Regular unit updates from the field to get latest software.
- Simple and intuitive user interface to minimize training.
- · Real-time visibility over unit utilization to ensure equipment is dispatched and used efficiently.

### LOOKING FOR ICON-BASED MAPPING?

# Optical Link Mapper (OLM) included in all AXS and FTB Lite OTDRs

Interprets OTDR traces automatically and provides an icon-based view of the elements on the link.

- Automatic analysis of multiple wavelengths with a consolidated link view display.
- Synced with events and placed below the linear view to view all events on the link.
- Display of end-to-end link length, loss and ORL according to the pass/fail settings.
- Automatic parameter settings and clear go/no-go results.
- · Prompt guidance on what and where the network issues are.





MULTIPLE WAVELENGTHS



CLEAR CONSOLIDATED LINK DISPLAY



d you know?

Technicians set wrong thresholds **40%** of the time and may re-test the same fiber **15%** of the time.



### **OPTICAL ADD-ONS (OPTIONAL)**

#### Optical power meter (OPM)

EXFO's high-level power meter (GeX) can measure up to 27 dBm. This is essential for hybrid fiber-coaxial (HFC) networks or high-power signals. If used with an auto-lambda/auto-switching compatible light source, the power meter automatically synchronizes on the same wavelength, thus avoiding any risk of mismatched measurement.

#### Visual fault locator (VFL)

The plug-and-play VFL easily identifies breaks, bends, faulty connectors and splices, in addition to other causes of signal loss. This basic, yet essential troubleshooting tool should be part of every field technician's toolbox. The VFL visually locates and detects faults over distances of up to 7 km by creating a bright-red glow at the exact location of the fault. High-power VFL is also available as an option to test distances up to 12 km.

# **S**X change

# SHARE TEST RESULTS. BOOST COMPLIANCE. UNLOCK INSIGHTS.

# Cloud-hosted solution for sharing test results and ensuring compliance.

Paired with EXFO's leading test instruments, EXFO Exchange drives an entire ecosystem while integrating seamlessly with existing operation processes.

# FastReporter

# Advanced FastReporter capabilities included with EXFO Exchange.

FastReporter is a consolidated data management and postprocessing solution designed to improve results quality as well as auditing and reporting productivity. When logging in to your EXFO Exchange account on your PC, you will have access to all advanced capabilities for FastReporter, including:

- Results viewer
- Advanced reporting formats (Excel, PDF, custom)
- Advanced editing
- Automated validation and results correction





## **PRODUCT OVERVIEW**

- Singlemode OTDR port
   Testing LED indicator
   VFL
   Power meter
- 5 10/100/1000 Mbit/s Ethernet port
- 6 Two USB 3.0 ports
- 7 Charger/battery LED
- 8 USB-C PD port



- 14 Built-in LTE/WiFi/Bluetooth radios
- 15 Kickstand









### **SPECIFICATIONS**

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

TECHNICAL SPECIFICATIONS	
Wavelengths (nm) ª	1310 ± 20/1550 ± 20/1625 ± 15
Dynamic range at 20 $\mu s$ (dB) $^{\scriptscriptstyle b}$	1310/1550 model: dynamic range = 46/46 dB 1310/1550/1625 model: dynamic range = 45/45/45 dB
Event dead zone (m) °	0.5
Attenuation dead zone (m) <sup>d</sup>	2.5
Distance range (km)	0.1 to 400
Pulse width (ns)	3 to 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) <sup>e</sup>	±(0.75 + 0.0025 % x distance + sampling resolution)
Measurement time	User-defined (maximum: 60 minutes)
Typical real-time refresh (Hz)	4
Stable source output power $(dBm)^{f}$	1.5
Reflectance (dB) °	±2

a. Typical.

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

c. Typical for reflectance from -35 dB to -55 dB, at 3-ns pulse.

d. Typical at 1310 nm, for reflectance at -55 dB. Attenuation dead zone is 3.5 m typical at 1310 nm with reflectance below -45 dB.

e. Does not include uncertainty due to fiber index.

f. Typical output power value at 1550 nm.



GENERAL SPECIFICATIONS		
Display	8-inch (203 mm), 1280×800, color touchscreen (viewable in sunlight)	
Interfaces	USB-A ports (2) USB-C port with power delivery RJ45 LAN 10/100/1000 Mbit/s	
RF comms <sup>a, b</sup> Bluetooth, WiFi, 2G/3G/4G LTE, GNSS (GPS/GALILEO/QZSS)		
Storage	>20,000 OTDR SOR traces	
Battery	Rechargeable LiFePO4 battery, up to 10 hours $^\circ$ of operation as per Telcordia (Bellcore) GR-196-CORE	
Power supply	Input: AC/DC adapter, 100 to 240 V AC, 50 to 60 Hz, 1.5 A max. Output: 5 to 20 V DC, 3.0 A max., 45 W max., USB-C power delivery standard supported	
Weight (including battery and module)	2.4 kg (5.3 lb)	
Size ( $H \times W \times D$ )	198 mm × 249 mm × 71 mm (7.8 in × 9.8 in × 2.8 in)	
Temperature Operating Storage	−10 °C to 50 °C (14 °F to 122 °F) −40 °C to 70 °C (−40 °F to 158 °F)	
Relative humidity	0 % to 95 % non-condensing	

BUILT-IN POWER METER SPECIFICATIONS (GeX) (optional) <sup>d</sup>				
Calibrated wavelengths (nm)	850, 1300, 1310, 1342, 1358, 1490, 1550, 1577, 1625, 1650			
Selectable wavelenghts (nm)	850, 1300, 1310, 1342, 1358, 1490, 1550, 1577, 1625, 1650			
Power range (dBm) <sup>e</sup>	27 to -50			
Uncertainty (%) <sup>f</sup>	±5 %			
Display resolution (dB)	0.01 = max to −40 dBm 0.1 = −40 dBm to −50 dBm			
Tone detection (Hz)	270/330/1000/2000			

VFL SPECIFICATIONS	VFL (optional)	HIGH-POWER VFL (optional)
Operation mode	Flashing (slow/fast) and continuous	Flashing (slow/fast) and continuous
Flashing frequency (Hz)	1 or 4	1 or 4
Wavelength (nm) (typical)	650	660
Emitter type	Laser	Laser
Power output (mW) (max.)	1	5
Distance range (km) (typical) <sup>g</sup>	7	12
Laser safety class	2	3R

LASER SAFETY <sup>g</sup> (Complies with FDA 1040.10 and IEC 60825-1:2014-05)				
Without VFL (option): IEC 60825-1:2014-05	With VFL (option): IEC 60825-1:2014-05	With high power VFL (option): IEC 60825-1:2014-05		
	LASER 2			
DO NOT EXPOSE USERS OF TELESCOPIC OPTICS	DO NOT STARE INTO BEAM	AVOID DIRECT EYE EXPOSURE		
Applicability: Class 1M, 2M and 3R WARNING: Viewing the laser output with telescopic optical instruments (for example, telescopes and binoculars) may pose an eye hazard and thus the user should not direct the beam into an area where such instruments are likely to be used.				

- a. Free 36-month basic data plan provided.
- b. Restrictions may apply depending on country/region which will prevent EXFO from providing mobile connectivity. Contact EXFO for details.
- c. Battery life varies significantly based on device configuration, usage, network and feature configuration, signal strength, settings and other factors.
- d. At 23 °C ± 1 °C, 1550 nm and FC connector. With modules in idle mode. Battery operated after 30-minute warm-up.
- e. Typical.
- f. At calibration conditions.
- g. Depends on fiber attenuation and ambient light conditions.



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ACCESSORIES (optional)				
GP-10-072	Large size soft carrying case	GP-2242	Replacement hand strap	
GP-10-097	Rigid carrying case	GP-2304	Spare AC/DC adapter	
GP-1008	VFL adapter (2.50 mm to 1.25 mm)	GP-2318	Replacement kickstand	
GP-2155	Carry-on size backpack			
GP-2235	Spare stylus			
GP-2320	Utility glove			

#### **ORDERING INFORMATION**



e. Not available in India and China.

# El CONNECTORS To maximize the performance of your OTDR, EXFO recommends using APC connectors on SM 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. 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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