

FTB-7300E PON FTTx/MDU OTDR

OPTIMIZED FOR ACCESS FIBER DEPLOYMENTS AND TROUBLESHOOTING



**iOLM
READY**

**EXFO Connect
Compatible**



Perfect for fiber installers to seamlessly characterize splitters in PON FTTx and MDU applications

KEY FEATURES

Test through high-port-count splitters (up to 1x128)

Singlemode port for in-service troubleshooting

Dynamic range of up to 39 dB

Short acquisition time to speed up deployment process

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

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

APPLICATIONS

FTTx/MDU test challenges within PON networks

Access network testing

PLATFORM COMPATIBILITY



Platform
FTB-500



Compact Platform
FTB-200



Assessing
Next-Gen Networks

INTELLIGENT OPTICAL LINK MAPPER—GOING BEYOND OTDR

iOLM | intelligent Optical
Link Mapper

Powered by
LINK AWARE™
TECHNOLOGY

Using an automated multipulse acquisition approach and filled with advanced algorithms, the iOLM is an OTDR-based application that delivers detailed information on every element of the link through a single button operation—providing maximum intelligence and simplicity for expert-level link characterization.

- › Hardware optimized for field upgradability to the optional iOLM software application
- › Multiple acquisitions with one button—all automated
- › Expert-level characterization results in a single, comprehensive report
- › The highest single-ended fiber testing performance available
- › No training required: self-setting device with clear go/no-go results
- › Minimized truck rolls, thanks to the smartest analysis, powered by Link Aware™ technology
- › No more trace misinterpretation: prompt diagnosis and clear optical link view

Three ways to benefit from the iOLM on this module:

iOLM only

FTB-7300E with iOLM application

OTDR combo

FTB-7300E with iOLM and
OTDR applications

Upgrade

iOLM software option for your
existing FTB-7300E OTDR

AUTOMATE ASSET MANAGEMENT. PUSH TEST DATA IN THE CLOUD. GET CONNECTED.

EXFO | **Connect**

EXFO Connect pushes and stores test equipment and test data content automatically in the cloud, allowing you to streamline test operation from build-out to maintenance.

ADDITIONAL SOFTWARE TEST CAPABILITIES ON THE FTB-200 PLATFORM

EXpert | **VoIP**
TEST TOOLS

EXpert VoIP generates a voice-over-IP call directly from the test platform to validate performance during service turn-up and troubleshooting.

- › Supports a wide range of signaling protocols, including SIP, SCCP, H.248/Megaco and H.323
- › Supports MOS and R-factor quality metrics
- › Simplifies testing with configurable pass/fail thresholds and RTP metrics

EXpert | **IP**
TEST TOOLS

EXpert IP integrates six commonly used datacom test tools into one platform-based application to ensure that field technicians are prepared for a wide range of testing needs.

- › Rapidly performs debugging sequences with VLAN scan and LAN discovery
- › Validates end-to-end ping and traceroute
- › Verifies FTP performance and HTTP availability

EXpert | **IPTV**
TEST TOOLS

This powerful IPTV quality assessment solution enables set-top-box emulation and passive monitoring of IPTV streams, allowing quick and easy pass/fail verification of IPTV installations.

- › Real-time video preview
- › Analyzes up to 10 video streams
- › Comprehensive QoS and QoE metrics including MOS score

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

TECHNICAL SPECIFICATIONS	
Model	FTB-7300E ^a
Wavelength (nm) ^b	1310 ± 20/1490 ± 10/1550 ± 20/1625 ± 10/1650 ± 7
Dynamic range at 20 μs (dB) ^c	39/38/37/39 ^d /37
Event dead zone (m) ^e	0.8
Attenuation dead zone (m) ^e	4/4.5/4.5/4.5/4.5
Distance range (km)	1.25, 2.5, 5, 10, 20, 40, 80, 160, 260, 400
Pulse width (ns)	5, 10, 30, 50, 100, 275, 500, 1000, 2500, 10 000, 20 000
Linearity (dB/dB) ^b	± 0.03
Loss threshold (dB)	0.01
Loss resolution (dB)	0.001
Sampling resolution (m)	0.04 to 5
Sampling points	Up to 256 000
Distance uncertainty (m) ^f	± (0.75 + 0.001 % x distance + sampling resolution)
Measurement time	User-defined (60 min. maximum)
Typical real-time refresh (Hz)	4
Stable source output power (dBm) ^g	-2.5
Reflectance (dB) ^b	± 2

For complete details on all available configurations, refer to the Ordering Information section.

Notes

- a. SM Live port built in filter's bandpass 1625 nm ± 15 nm/1650 nm ± 7 nm.
- b. Typical.
- c. Typical dynamic range with a three-minute averaging at SNR = 1.
- d. Non-SM Live 1625 nm dynamic range is 37 dB.
- e. Typical dead zone of singlemode modules for reflectance below -45 dB, using a 5 ns pulse.
- f. Does not include uncertainty due to fiber index.
- g. Typical output power value at 1550 nm.

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

21 CFR 1040.10 AND IEC 60825-1:2007
CLASS 1M



ORDERING INFORMATION

SINGLEMODE (PON FTTx/MDU) FOR FTB-200 COMPACT PLATFORM OR FTB-500 PLATFORM

FTB-7300E-XX-XX-XX-XX

Model ■

Dual Wavelength

FTB-7300E-023B = SM OTDR module, 1310/1550 nm (9/125 μm)
 FTB-7300E-034B = SM OTDR module, 1550/1625 nm (9/125 μm)

Triple Wavelength

FTB-7300E-234B = SM OTDR module, 1310/1550/1625 nm (9/125 μm)
 FTB-7300E-236B = SM OTDR module, 1310/1490/1550 nm (9/125 μm)

SM Live Port

FTB-7300E-023B-04B = SM and SM live OTDR module,
 1310/1550 and 1625 nm live port
 FTB-7300E-023B-08B = SM and SM live OTDR module,
 1310/1550 and 1650 nm live port
 FTB-7300E-000-04B = SM live OTDR with 1625 nm live port (9/125 μm)

Base Software ■

OTDR = Enables the OTDR application only
 iOLM = Enables the iOLM application only^a
 Oi = Enables iOLM and OTDR applications^a

Example: FTB-7300E-023B-04B-Oi-EA-EUI-89-AD

■ iOLM Software Option^a

00 = Without iOLM option
 iEX = iOLM Expert mode
 RT = Real-time OTDR mode (via iOLM application)^b

■ OTDR Software Option^{a, c}

00 = Without software option
 AD = Macrobend finder and linear view

■ 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
 EI Connectors: See note below

Notes

- a. Available on the FTB-200v2 platform only.
 b. Available with iOLM base software only. This feature is part of the Oi base software.
 c. Available with OTDR and Oi base softwares only.

EI CONNECTORS



To maximize the performance of your OTDR, EXFO recommends using APC connectors. These connectors generate lower reflectance, which is a critical parameter that affects performance, particularly dead zones. APC connectors provide better performances 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 connectors available are the EI-EUI-76 (UPC/HMS-10/AG) and EI-EUI-90 (UPC/ST).

EXFO Headquarters > Tel.: +1 418 683-0211 | Toll-free: +1 800 663-3936 (USA and Canada) | Fax: +1 418 683-2170 | info@EXFO.com | www.EXFO.com

EXFO serves over 2000 customers in more than 100 countries. To find your local office contact details, please go to www.EXFO.com/contact.

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. In addition, all of EXFO's manufactured products are compliant with the European Union's WEEE directive. For more information, please visit www.EXFO.com/recycle. 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 website at www.EXFO.com/specs.

In case of discrepancy, the web version takes precedence over any printed literature.