

FTB-7300E PON FTTx/MDU OTDR

OPTIMIZED FOR ACCESS FIBER DEPLOYMENTS AND TROUBLESHOOTING



EXFO Connect
Compatible

iOLM
READY



Perfect for fiber installers needing 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-2/FTB-2 Pro



Platform
FTB-200



Platform
FTB-500

EXFO

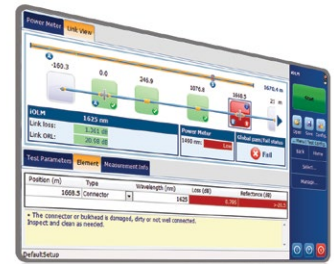
REMOVING COMPLEXITY FROM THE OTDR

OTDR TESTING COMES WITH ITS LOAD OF CHALLENGES...

WRONG
OTDR TRACESCOUNTLESS TRACES
TO ANALYZEREPEATING THE
SAME JOB TWICECOMPLEX INSTRUMENT
TRAINING/SUPPORT**iOLM** | intelligent Optical
Link Mapper**In response to these challenges, EXFO developed a better way to test fiber optics:**

The iOLM is an OTDR-based application designed to simplify OTDR testing by eliminating the need to configure parameters, and/or analyze and interpret multiple complex OTDR traces. Its advanced algorithms dynamically define the testing parameters, as well as the number of acquisitions that best fit the network under test. By correlating multipulse widths on multiple wavelengths, the iOLM locates and identifies faults with maximum resolution—all at the push of a single button.

HOW DOES IT WORK?

Dynamic
multipulse
acquisitionIntelligent
trace analysisCombines all
results into a
single link viewComprehensive
diagnosis

Turning traditional OTDR testing into clear, automated, first-time-right results for technicians of any skill level.

Patent protection applies to the intelligent Optical Link Mapper, including its proprietary measurement software. EXFO's Universal Interface is protected by US patent 6,612,750.

**Three ways to benefit
from the iOLM:****OTDR Combo (Oi Code)**

Run iOLM and OTDR
applications on one unit

Upgrade

Add the iOLM software option,
even while in the field

iOLM Only

Order a unit with the iOLM
application only

**Three iOLM feature
value packs:****iOLM Standard**

- › Dynamic multipulse acquisition
- › Intelligent trace analysis
- › Map view
- › Diagnosis
- › SOR trace generation

iOLM Advanced

All the features of iOLM, plus
additional Advanced features

iOLM Pro

All the features of iOLM
Advanced, plus additional
high-value professional
features

Note: Refer to the intelligent Optical Link Mapper (iOLM) specification sheet for the most recent description of the added-value features available in the iOLM Advanced and iOLM Pro packs.

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-1 PLATFORM

EXpert
TEST TOOLS | **IP**
IPTV
VoIP

EXpert Test Tools is a series of software applications leveraged through the FTB ecosystem platforms and designed to enhance and simplify FTTH/FTTx service deployments:

EXpert VoIP: Generate voice-over-IP call to validate performance during service turn-up and troubleshooting. This tool boasts a highly configurable test interface to maximize control over test parameters yet maintains an intuitive user interface, allowing for fast and easy test setup and completion.

EXpert IP: Benefit from six commonly used IP test tools in one application, helping field technicians deal with the complex testing environments of today's networks and further preparing them to handle unexpected customer issues easily and without interruption.

EXpert IPTV: Enables quick pass/fail verification on IPTV installations during service turn-up. By emulating a set-top box and displaying a real-time video preview, video and audio quality can be determined before any other equipment is installed, further ensuring subscribers' quality of experience (available on FTB-1 platform only).

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

TECHNICAL SPECIFICATIONS

Model	FTB-7300E ^a
Wavelength (nm) ^b	1310 ± 20/1490 ± 15/1550 ± 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.

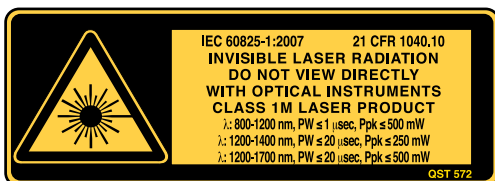
Notes

- 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 storage
	0 °C to 50 °C (32 °F to 122 °F) -40 °C to 70 °C (-40 °F to 158 °F)
Relative humidity	0 % to 95 % non-condensing

LASER SAFETY



ORDERING INFORMATION

Singlemode (PON FTTx/MDU) for FTB-2, FTB-2 Pro, FTB-200 or FTB-500 Platform

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

Model ■

Dual Wavelength

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

Triple Wavelength

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

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 μ m)

Base Software ■

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

iOLM Software Option

00 = iOLM Standard
 iADV = iOLM Advanced^a
 iPRO = iOLM Pro^a

OTDR Software Option

00 = Without software option^b
 AD = Macrobend finder and linear view^c

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

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

Notes

- a. The features available in iOLM Advanced and Pro depend on the platform and the module. Please refer to the intelligent Optical Link Mapper (iOLM) specification sheet for package details.
 b. Includes macrobend finder and linear view in FTB-2/FTB-2 Pro.
 c. Included in FTB-200. Not available in FTB-2/FTB-2 Pro.

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. 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.