FTB-7300E PON FTTx/MDU OTDR

OPTIMIZED FOR ACCESS FIBER DEPLOYMENTS AND TROUBLESHOOTING

iOLM READY

EXFO Connect Compatible

FROST & SULLIVAN
2011 BEST PRACTICES AWARD
GLOBAL PORTABLE FIBER OPTIC TEST EQUIPMENT MARKET SHARE LEADERSHIP AWARD

> 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

EXFO | Assessing Next-Gen Networks

iNTELLIGENT OPTICAL LINK MAPPER—GOING BEYOND OTDR

i OLM | **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	**OTDR combo**	**Upgrade**
FTB-7300E with iOLM application	FTB-7300E with iOLM and OTDR applications	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.

EXᴘᴇʀᴛ TEST TOOLS ON THE FTB-200 PLATFORM

EXpert Test Tools is a series of platform-based software testing tools that enhance the value of the FTB-200 platform, providing additional testing capabilities without the need for additional modules or units.

EXpert TEST TOOLS

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

EXFO | **Assessing Next-Gen Networks**

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.
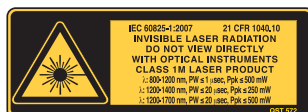d. Non-SM Live 1625 nm dynamic range is 37 dB.

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 ¼ 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

IEC 60825-1:2007   21 CFR 1040.10
INVISIBLE LASER RADIATION
DO NOT VIEW DIRECTLY
WITH OPTICAL INSTRUMENTS
CLASS 1M LASER PRODUCT
λ: 800-1200 nm, PW ≤ 1 μsec, Ppk ≤ 500 mW
λ: 1200-1400 nm, PW ≤ 20 μsec, Ppk ≤ 250 mW
λ: 1200-1700 nm, PW ≤ 20 μsec, Ppk ≤ 500 mW
GST 572

EXFO | **Assessing
Next-Gen Networks**

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 | Assessing
Next-Gen Networks