FTB-7300E—PON FTTx/MDU OTDR

OPTIMIZED FOR ACCESS FIBER DEPLOYMENTS AND TROUBLESHOOTING

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

APPLICATIONS

FTTx/MDU test challenges within PON networks

Access network testing

EXFO | C●nnect

PLATFORM COMPATIBILITY

Platform
FTB-500

Compact Platform
FTB-200

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EXFO Connect

EXFO | C⬡nnect

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

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.

EXPERT 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

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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]	39/35/37/39 [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
Visual fault locator (optional) [b]	Laser, 650 nm ± 10 nm CW, P_{out} in 62.5/125 μm: 1.5 dBm (1.4 mW)
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

Module	FTB-7300E
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)

LASER SAFETY

21 CFR 1040.10 AND IEC 60825-1:2007
CLASS 1M WITHOUT VFL OPTION
CLASS 3R WITH VFL OPTION

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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)

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

Visual Fault Locator
00 = Without visual fault locator
VFL = With visual fault locator (universal 2.5 mm connector)

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

EI: See note below

Software Option
00 = Without software option
AD = Macrobend finder and linear view [a]

Note

a. This software option is compatible only on FTB-200 platform.

EI CONNECTORS

APC

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).

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