

FTB-7300E—PON FTTx/MDU OTDR

OPTIMIZED FOR ACCESS FIBER DEPLOYMENTS AND TROUBLESHOOTING



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

PLATFORM COMPATIBILITY



Platform
FTB-500



Compact Platform
FTB-200

EXFO | Connect

EXFO | Assessing
Next-Gen Networks

EXFO Connect



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

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 1/4 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



IEC 60825-1:2007 21 CFR 1040.10
INVISIBLE LASER RADIATION
 DO NOT VIEW DIRECTLY
 WITH OPTICAL INSTRUMENTS
 CLASS 1M LASER PRODUCT
 λ: 800-1000 nm, P_{IR} ≤ 1 mW, P₀ ≤ 500 mW
 λ: 1000-1400 nm, P_{IR} ≤ 20 mW, P₀ ≤ 500 mW
 λ: 1200-1700 nm, P_{IR} ≤ 20 mW, P₀ ≤ 500 mW
CS1 572



IEC 60825-1:2007 21 CFR 1040.10
VISIBLE LASER RADIATION
 AVOID DIRECT EYE EXPOSURE
 CLASS 3R LASER PRODUCT
 λ: 650 ± 10 nm
 P_{out} maximum < 5mW (into free space)

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)

Visual Fault Locator

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

Software Option

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

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

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

EI: See note below

Note

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

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 Corporate Headquarters > 400 Godin Avenue, Quebec City (Quebec) G1M 2K2 CANADA | Tel.: +1 418 683-0211 | Fax: +1 418 683-2170 | info@EXFO.com

Toll-free: +1 800 663-3936 (USA and Canada) | www.EXFO.com

| | | | | |
|------------------------|--|--|---------------------------|-------------------------|
| EXFO America | 3400 Waterview Parkway, Suite 100 | Richardson, TX 75080 USA | Tel.: +1 972 761-9271 | Fax: +1 972 761-9067 |
| EXFO Asia | 100 Beach Road, #22-01/03 Shaw Tower | SINGAPORE 189702 | Tel.: +65 6333 8241 | Fax: +65 6333 8242 |
| EXFO China | 36 North, 3 rd Ring Road East, Dongcheng District Room 1207, Tower C, Global Trade Center | Beijing 100013 P. R. CHINA | Tel.: + 86 10 5825 7755 | Fax: +86 10 5825 7722 |
| EXFO Europe | Omega Enterprise Park, Electron Way | Chandlers Ford, Hampshire S053 4SE ENGLAND | Tel.: +44 23 8024 6810 | Fax: +44 23 8024 6801 |
| EXFO Finland | Elektronikkatie 2 | FI-90590 Oulu, FINLAND | Tel.: +358 (0)403 010 300 | Fax: +358 (0)8 564 5203 |
| EXFO Service Assurance | 270 Billerica Road | Chelmsford, MA 01824 USA | Tel.: +1 978 367-5600 | Fax: +1 978 367-5700 |

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.



Assessing Next-Gen Networks