

# FTB-7200D LAN/WAN Access OTDR

OPTIMIZED FOR MULTIMODE AND SINGLEMODE ACCESS NETWORK TESTING



Housed in a full-size portable platform, this OTDR is ideal to maximize efficiency of fiber installers testing multimode and singlemode fibers.

## KEY FEATURES

- Dynamic range of up to 36 dB
- Event dead zone as low as 0.8 meter
- Combined singlemode/multimode wavelengths (12CD-23B model)
- Integrated tool: combines a visual fault locator, inspection probe, broadband power meter and a CW source mode
- Controlled launch conditions for more accurate loss measurements
- EXFO Connect-compatible:** Automated asset management; data goes through the cloud and into a dynamic database

## PLATFORM COMPATIBILITY



**FTB-200**  
Two-slot modular platform for combined applications



**FTB-500**  
Four- or eight-slot platform for fiber characterization

## APPLICATIONS

- Access network testing
- LAN/WAN characterization

SPEC SHEET

EXFO | Connect

**EXFO** | Assessing Next-Gen Networks

## EXFO Connect

## 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

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

SPECIFICATIONS <sup>a</sup>

## TECHNICAL SPECIFICATIONS

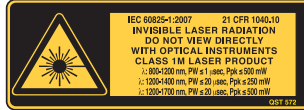
Wavelength (nm) <sup>b</sup>	850 ± 20, 1300 ± 20, 1310 ± 20, 1550 ± 20
Dynamic range (dB) <sup>c, d</sup>	27, 26, 36, 34
Event dead zone (m) <sup>e</sup>	1
Attenuation dead zone (m) <sup>f</sup>	3, 4, 4.5, 5
Distance range (km)	Multimode: 0.1, 0.3, 0.5, 1.3, 2.5, 5, 10, 20, 40 Singlemode: 1.25, 2.5, 5, 10, 20, 40, 80, 160, 260
Pulse width (ns)	Multimode: 5, 10, 30, 100, 275, 1000 Singlemode: 5, 10, 30, 100, 275, 1000, 2500, 10 000, 20 000
Launch conditions <sup>f</sup>	Class CPR 1 or 2
Linearity (dB/dB)	±0.03
Loss threshold (dB)	0.01
Loss resolution (dB)	0.001
Sampling resolution (m)	Multimode: 0.04 to 2.5 Singlemode: 0.04 to 5
Sampling points	Up to 128 000
Distance uncertainty (m) <sup>g</sup>	±(0.75 + 0.0025 % x distance + sampling resolution)
Measurement time	User-defined (60 min. maximum)
Typical real-time refresh (Hz)	3
Stable source output power (dBm) <sup>h</sup>	-1.5 (1300 nm), -7 (1550 nm)
Visual fault locator (optional) <sup>b</sup>	Laser, 650 nm ± 10 nm CW, P <sub>out</sub> in 62.5/125 μm: 1.5 dBm (1.4 mW)

## NOTES

- All specifications valid at 23 °C ± 2 °C with an FC/PC connector, unless otherwise specified.
- Typical.
- Typical dynamic range with longest pulse and three-minute averaging at SNR = 1.
- Multimode dynamic range is specified for 62.5 μm fiber; a 3 dB reduction is seen when testing 50 μm fiber.
- Typical dead zone for multimode reflectance below -35 dB and singlemode reflectance below -45 dB, using a 5 ns pulse.
- For multimode port, controlled launch conditions allow 50 μm and 62.5 μm multimode fiber testing.
- Does not include uncertainty due to fiber index.
- Typical output power is given at 1300 nm for multimode output and 1550 nm for singlemode output.

**LASER SAFETY**

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



**ORDERING INFORMATION**

**Multimode and singlemode (access and LAN/WAN OTDR)**

**FTB-7200D-XX-XX-XX-XX-XX**

**Model**

- FTB-7200D-12CD-23B = Four-wavelength MM/SM OTDR module, 850/1300 nm (50/125 μm and 62.5/125 μm) and 1310/1550 nm (9/125 μm)
- FTB-7200D-12CD = Dual-wavelength MM OTDR module, 850/1300 nm (50/125 μm and 62.5/125 μm)
- FTB-7200D-023B = Dual-wavelength SM OTDR module, 1310/1550 nm (9/125 μm)

Example: FTB-7200D-12CD-23B-EI-EUI-89-EA-EUI-95-VFL-AD

**Singlemode 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 connectors = See note below

**Multimode Connector<sup>a</sup>**

- EI-EUI-28 = UPC/DIN 47256
- EI-EUI-76 = UPC/HMS-10/AG
- EI-EUI-89 = UPC/FC narrow key
- EI-EUI-90 = UPC/ST
- EI-EUI-91 = UPC/SC
- EI-EUI-95 = UPC/E-2000

**Software Option**

- 00 = Without software option
- AD = Macroband finder and linear view

**Visual fault locator**

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

**Note**

a. Please refer to the example above. First select the multimode connector, then the singlemode connector.

**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-91 (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 <sup>rd</sup> 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](http://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](http://www.EXFO.com/specs).

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

