

FTB-730 and FTB-7300E— PON FTTx/MDU OTDRs

OPTIMIZED FOR ACCESS FIBER DEPLOYMENTS
AND TROUBLESHOOTING



Perfect for fiber installers to seamlessly characterize splitters in PON FTTx and MDU applications

SPEC SHEET

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

APPLICATIONS

- FTTx/MDU test challenges within PON networks
- Access network testing

PLATFORM COMPATIBILITY

For FTB-730:



FTB-1

One-module platform for dedicated applications

For FTB-7300E:



FTB-200

Two-slot modular platform for combined applications,



FTB-500

Four- or eight-slot platform for fiber characterization



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	FTB-730 ^b
Wavelength (nm) ^c	1310 ± 20/1490 ± 10/1550 ± 20/1625 ± 10/1650 ± 7	1310 ± 20/1490 ± 10/1550 ± 20/1625 ± 10
Dynamic range at 20 μs (dB) ^d	39/35/37/39/37 ^e	39/35/37/39
Event dead zone (m) ^f	0.8	0.8
Attenuation dead zone (m) ^f	4/4.5/4.5/4.5/4.5	4/4.5/4.5/4.5
Distance range (km)	1.25, 2.5, 5, 10, 20, 40, 80, 160, 260, 400	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	5, 10, 30, 50, 100, 275, 500, 1000, 2500, 10 000, 20 000
Linearity (dB/dB) ^g	± 0.03	± 0.03
PON dead zone (m) ^h	35	35
Loss threshold (dB)	0.01	0.01
Loss resolution (dB)	0.001	0.001
Sampling resolution (m)	0.04 to 5	0.04 to 5
Sampling points	Up to 256 000	Up to 256 000
Distance uncertainty (m) ⁱ	± (0.75 + 0.001 % x distance + sampling resolution)	± (0.75m + 0.0025 % x distance + resolution)
Measurement time	User-defined (60 min. maximum)	User-defined (60 min. maximum)
Typical real-time refresh (Hz)	4	4
Stable source output power (dBm) ^j	-2.5	-2.5
Visual fault locator (optional) ^c	Laser, 650 nm ± 10 nm CW, P _{out} in 62.5/125 μm: 3 dBm (2 mW)	Laser, 650 nm ± 10 nm CW, P _{out} in 62.5/125 μm: 3 dBm (2 mW)
Reflectance (dB) ^c	± 2	± 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. SM Live port built in filter's bandpass 1625 nm ± 15 nm; 1650 nm not available for FTB-730.
- c. Typical.
- d. Typical dynamic range with a three-minute averaging at SNR = 1.
- e. Non-SM Live 1625 nm dynamic range is 37 dB.
- f. Typical dead zone of singlemode modules for reflectance below -45 dB, using a 5 ns pulse.

- g. Typical value.
- h. Non-reflective splitter, 13 dB loss, 50 ns pulse, typical value.
- i. Does not include uncertainty due to fiber index.
- j. Typical output power value at 1550 nm.

GENERAL SPECIFICATIONS		
Module	FTB-730	FTB-7300E
Size (H x W x D)	130 mm x 36 mm x 252 mm (5 1/8 in x 1 7/16 in x 9 15/16 in)	97 mm x 25 mm x 260 mm (3 13/16 in x 1 in x 10 1/4 in)
Weight	0.65 kg (1.4 lb)	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

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 OTDR, 1310/1550 nm (9/125 μm)

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

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
 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

SINGLEMODE (PON FTTx/MDU) FOR FTB-1 PLATFORM

FTB-730-XX-XX-XX

Model

Dual Wavelength

FTB-730-023B = SM OTDR module, 1310/1550 nm (9/125 μm)

Triple Wavelength

FTB-730-236B = SM OTDR module, 1310/1490/1550 nm (9/125 μm)

SM Live Port

FTB-730-023B-04B = SM and SM live OTDR module, 1310/1550 and 1625 nm live port
 FTB-730-000-04B = SM live OTDR with 1625 nm live port (9/125 μm)

Example: FTB-730-023B-04B-EI-EUI-89-AD

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-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 Options

00 = Without software option
 AD = Auto diagnostic (macrobend detection, pass/fail and fault finder)
 EC = Event characterization (bidirectional analysis and Template mode)

Note

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

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	3701 Plano Parkway, Suite 160	Plano, TX 75075 USA	Tel.: +1 800 663-3936	Fax: +1 972 836-0164
EXFO Asia	151 Chin Swee Road, #03-29 Manhattan House	SINGAPORE 169876	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 2380 246810	Fax: +44 2380 246801
EXFO NetHawk	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.