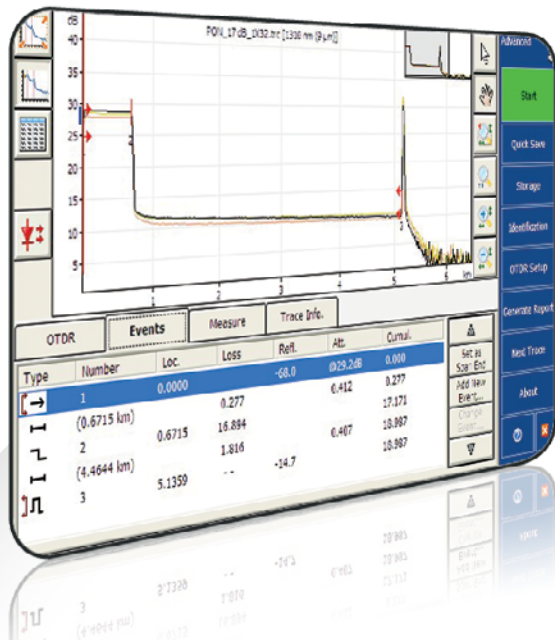


# FTB-730 PON FTTx/MDU OTDR

OPTIMIZED FOR ACCESS FIBER DEPLOYMENTS  
AND TROUBLESHOOTING



**iOLM  
READY**



The perfect tool for field technicians who must 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 with standard in-line OPM

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 (P2P)

## PLATFORM COMPATIBILITY



**FTB-1**  
One-module platform for  
dedicated applications

### iOLM-ready

- › The FTB-730 hardware has been optimized for easy field-upgradability to the iOLM optional software application.
- › Performs one-button, all-automated multi-acquisitions
- › Provides expert-level characterization into a single and comprehensive report
- › Highest performance single-ended FTTx test method

## 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 FC/APC for FTB-730, unless otherwise specified.

## TECHNICAL SPECIFICATIONS (OTDR)

Model	FTB-730 <sup>a</sup>
Wavelength (nm) <sup>b</sup>	1310 ± 20/1490 ± 10/1550 ± 20/1625 ± 10/1650 ± 7
Dynamic range at 20 μs (dB) <sup>c</sup>	39/35/37/39 <sup>d</sup> /37
Event dead zone (m) <sup>e</sup>	0.8
Attenuation dead zone (m) <sup>e</sup>	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) <sup>b</sup>	± 0.03
PON dead zone (m) <sup>f</sup>	35
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) <sup>g</sup>	± (0.75 + 0.0025 % x distance + resolution)
Measurement time	User-defined (60 min. maximum)
Typical real-time refresh (Hz)	4
Stable source output power (dBm) <sup>h</sup>	-2.5
Visual fault locator	n/a <sup>i</sup>
Reflectance (dB) <sup>b</sup>	± 2

For complete details on all available configurations, refer to the Ordering Information section.

## Notes

- SM Live port built in filter's bandpass 1625 nm ± 15 nm/1650 nm ± 7 nm.
- Typical.
- Typical dynamic range with a three-minute averaging at SNR = 1.
- Non-SM Live 1625 nm dynamic range is 37 dB.
- Typical dead zone for reflexions below -45dB using a 5 ns pulse.

- Non-reflective FUT, non-reflective splitter, 13 dB loss, 50 ns pulse, typical value.
- Does not include uncertainty due to fiber index.
- Typical output power value at 1550 nm.
- Visual fault locator available on FTB-1 platform.

**TECHNICAL SPECIFICATIONS (In-Line Power Meter)**

Input power range (dBm)	1490 nm: -65 to 18 1550 nm: -50 to 28
PON power meter (nm)	Two channels: 1490/1550
Broadband power meter (nm)	One channel: 1270 to 1625
Power uncertainty (dB) <sup>a, b</sup>	±0.2
Calibrated wavelengths (nm)	1310, 1490, 1550 and 1625
PON power meter spectral band (nm)	1450 to 1530
Broadband power meter spectral band (nm)	1270 to 1625
Display resolution (dB)	0.1
PON power meter ORL (dB) <sup>a</sup>	-55
Broadband power meter ORL (dB) <sup>a</sup>	-50

For complete details on all available configurations, refer to the Ordering Information section.

**Notes**

- a. Typical.  
b. At calibrated wavelengths.

**GENERAL SPECIFICATIONS**

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)
Weight	0.65 kg (1.4 lb)
Temperature	
Operating	-10 °C to 50 °C, 14 °F to 122 °F
Storage	-40 °C to 70 °C, -40 °F to 158 °F
Humidity conditions	0% to 95% non-condensing

**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-1 PLATFORM

## FTB-730-XX-XX-XX-XX-XX

## Model

## Dual Wavelength

FTB-730-23B = SM OTDR module, 1310/1550 nm (9/125  $\mu$ m)  
 FTB-730-34B = SM OTDR module, 1550/1625 nm (9/125  $\mu$ m)

## Triple Wavelength

FTB-730-236B = SM OTDR module, 1310/1490/1550 nm (9/125  $\mu$ m)

## SM Live Port

FTB-730-23B-04B = SM and SM live OTDR module,  
 1310/1550 and 1625 nm live port  
 including in-line broadband power meter  
 FTB-730-000-04B = SM live OTDR with 1625 nm live port (9/125  $\mu$ m)  
 including in-line broadband power meter  
 FTB-730-000-08B = SM live OTDR with 1650 nm live filtered port  
 (9/125  $\mu$ m)

## 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

## Base Software

OTDR = Enables the OTDR application only  
 iOLM = Enables the iOLM application only  
 Oi = Enables iOLM + OTDR applications

OPM Option<sup>a</sup>

OPM = One broadband channel included  
 OPM2 = Dual channel 1490/1550 nm

Software Option<sup>b</sup>

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

Example: FTB-730-23B-04B-OTDR-EA-EUI-89-AD

## Notes

- a. Available only with FTB-730-000-04B and FTB-730-23B-04B.  
 b. Only available with OTDR base software.

## 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).

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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.

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