

FTB-720 LAN/WAN Access OTDR

OPTIMIZED FOR MULTIMODE AND
SINGLEMODE ACCESS NETWORK TESTING



iOLM
READY

EXFO Connect
Compatible

40G



The ideal construction OTDRs for everyday field testing in any access network as well as in LAN/WAN networks

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

Live fiber testing at 1625 nm

EXFO Connect-compatible: automated asset management; data goes through the cloud and into a dynamic database

iOLM-ready: one-touch multiple acquisitions, with clear go/no-go results presented in a straightforward visual format

APPLICATIONS

Access network testing

LAN/WAN characterization

Private networks

Data centers

PLATFORM COMPATIBILITY



Platform
FTB-1

EXFO | Assessing
Next-Gen Networks

INTELLIGENT OPTICAL LINK MAPPER—GOING BEYOND OTDR

iOLM | intelligent Optical
Link Mapper

Powered by
LINK-AWARE™
TECHNOLOGY

Using an automated multipulse acquisition approach and filled with advanced algorithms, the iOLM is an OTDR-based application that delivers detailed information on every element of the link through a single button operation—providing maximum intelligence and simplicity for expert-level link characterization.

- › Hardware optimized for field upgradability to the optional iOLM software application
- › Multiple acquisitions with one button—all automated
- › Expert-level characterization results in a single, comprehensive report
- › The highest single-ended fiber testing performance available
- › No training required: self-setting device with clear go/no-go results
- › Minimized truck rolls, thanks to the smartest analysis, powered by Link-Aware™ technology
- › No more trace misinterpretation: prompt diagnosis and clear optical link view

Three ways to benefit from the iOLM on this module:

iOLM only

FTB-720 with iOLM application

OTDR combo

FTB-720 with iOLM and
OTDR applications

Upgrade

iOLM software option for your
existing FTB-720 OTDR

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

EXFO | **Connect**

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.

ADDITIONAL SOFTWARE TEST CAPABILITIES ON THE FTB-1 PLATFORM

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 ^a

TECHNICAL SPECIFICATIONS	
Wavelength (nm) ^b	850 ± 20, 1300 ± 20, 1310 ± 20, 1550 ± 20, 1625 ± 15 (filtered)
Dynamic range (dB) ^{c, d}	27, 26, 36, 34, 34
Event dead zone (m) ^e	0.8
Attenuation dead zone (m) ^e	4, 4.5, 5, 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, 50, 100, 275, 500, 1000 Singlemode: 5, 10, 30, 50, 100, 275, 500, 1000, 2500, 10 000, 20 000
Launch conditions ^f	Class CPR 1 or 2 ⁱ
Linearity (dB/dB) ^b	±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 256 000
Distance uncertainty (m) ^g	±(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) ^h	-3 (1300 nm), -7 (1550 nm)

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	0 °C to 50 °C (32 °F to 122 °F)
Storage	-40 °C to 70 °C (-40 °F to 158 °F)
Relative humidity	0% to 95% non-condensing

LASER SAFETY	
21 CFR 1040.10 AND IEC 60825-1:2007 CLASS 1M	

NOTES

- All specifications valid at 23 °C ± 2 °C with an FC/PC connector, unless otherwise specified; APC connector for FTB-720 singlemode model.
- 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.
- Under improvement to achieve better conditions.

ORDERING INFORMATION

Multimode and singlemode (access and LAN/WAN OTDR)

FTB-720-XX-XX-XX-XX-XX-XX

Model

FTB-720-000-04B = OTDR with filtered 1625 nm port
 FTB-720-023B-04B = OTDR 1310/1550 nm with filtered 1625 nm port
 FTB-720-23B = OTDR 1310/1550 nm
 FTB-720-12CD = OTDR 850/1300 nm
 FTB-720-12CD-23B = OTDR 850/1300 nm, 1310/1550 nm

Base Software

OTDR = Enables the OTDR application only
 iOLM = Enables the iOLM application only^a
 Oi = Enables iOLM and OTDR applications^a

Multimode Connector

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

iOLM Software Option

00 = Without iOLM option
 iEX = iOLM Expert mode
 RT = Real-time OTDR mode (via iOLM application)^b

OTDR Software Option^c

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

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

Example: FTB-720-023B-04B-Oi-EI-EUI-89-EA-EUI-89-AD

Notes

- The iOLM software is available on singlemode port only. FTB-720-12CD-23B must be ordered with Oi option to enable iOLM on the singlemode port.
- Available with iOLM base software only. This feature is part of the Oi base software.
- Available with OTDR and Oi base softwares only.

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 Headquarters > Tel.: +1 418 683-0211 | Toll-free: +1 800 663-3936 (USA and Canada) | Fax: +1 418 683-2170 | info@EXFO.com | www.EXFO.com

EXFO serves over 2000 customers in more than 100 countries. To find your local office contact details, please go to www.EXFO.com/contact.

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.