FTB-720 LAN/WAN Access OTDR
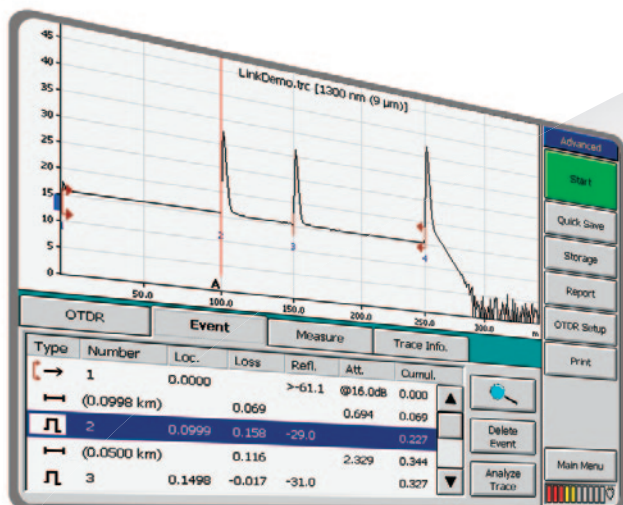
OPTIMIZED FOR MULTIMODE AND SINGLEMODE ACCESS NETWORK TESTING

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

APPLICATIONS

Access network testing

LAN/WAN characterization

Private networks

Data centers

PLATFORM COMPATIBILITY

FTB-1
One-module platform for dedicated applications

iOLM-ready

› The FTB-720 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 fiber test method

EXFO | C•nnect

40 Gbit/s Test Solutions

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EXFO Connect

EXFO|C●nnect

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 [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) [f]	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)	±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)

NOTES

a. All specifications valid at 23 °C ± 2 °C with an FC/PC connector, unless otherwise specified; APC connector for FTB-720 singlemode model.
b. Typical.
c. Typical dynamic range with longest pulse and three-minute averaging at SNR = 1.
d. Multimode dynamic range is specified for 62.5 μm fiber; a 3 dB reduction is seen when testing 50 μm fiber.
e. Typical dead zone for multimode reflectance below −35 dB and singlemode reflectance below −45 dB, using a 5 ns pulse.

f. For multimode port, controlled launch conditions allow 50 μm and 62.5 μm multimode fiber testing.
g. Does not include uncertainty due to fiber index.
h. Typical output power is given at 1300 nm for multimode output and 1550 nm for singlemode output.
i. Under improvement to achieve better conditions.

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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: 800-1200 nm, PW ≤ 1 μsec, Ppk ≤ 500 mW
λ: 1200-1400 nm, PW ≤ 20 μsec, Ppk ≤ 250 mW
λ: 1200-1700 nm, PW ≤ 20 μsec, Ppk ≤ 500 mW
OST 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

Multimode and singlemode (access and LAN/WAN OTDR)

FTB-720-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 [a] = Enables the iOLM application only
Oi [a] = Enables iOLM and OTDR applications

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

Software Option [b]
00 = Without software option
AD = Auto diagnostic (macrobend 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-720-23B-04B-Oi-EI-EUI-89-EA-EUI-89-AD

Notes

a. 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.

b. Available only with OTDR base software.

EI CONNECTORS

APC

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).

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