

MaxTester-735C metro/PON FTTx/MDU OTDR

OPTIMIZED FOR METRO/CORE AND FTTx/MDU FIBER DEPLOYMENTS AND TROUBLESHOOTING



- High-resolution OTDR designed for metro network testing and splitter characterization in PON FTTx applications.



KEY FEATURES

Dynamic range up to 41/40/40 dB

7-inch, outdoor-enhanced touchscreen—the biggest in the handheld industry

Support high port count PON splitters (up to 1x128)

Live fiber testing

Short dead zones: event dead zone (EDZ) = 0.5 m; attenuation dead zone (ADZ) = 2.5 m; PON dead zone = 30 m

Single port for in-service troubleshooting with in-line 1490/1550 nm PON power meter (optional)

Up to 256 000 sampling points

12-hour autonomy

Tamper-proof password protection

iOLM-ready: intelligent and dynamic application that turns complex OTDR trace analysis into a one-touch task

Rugged design built for the outside plant

Handy, lightweight, powerful, tablet-inspired design

APPLICATIONS

FTTx/MDU test challenges within PON networks

Metro/core network testing (P2P)

Manufacturing automation

COMPATIBLE WITH



EXchange

EXFO Connect compatible



iOLM READY

EF READY

COMPLEMENTARY PRODUCTS AND OPTIONS

FastReporter



Advanced data post-processing software FastReporter

Fiber inspection scope FIP-400B (WiFi or USB)

Soft pulse suppressor bag SPSB

THE HANDHELD OTDR... REINVENTED.

The MaxTester 700B/C Series is the first tablet-inspired OTDR line that is handy, lightweight and rugged enough for any outside plant environment. With a 7-inch, outdoor-enhanced touchscreen—the most efficient handheld display in the industry—it delivers an unprecedented user experience. Its intuitive Windows-like GUI ensures a fast learning curve. Plus, its new and improved OTDR 2 environment offers icon-based functions, instant boot-up, automatic macrobend finders as well as improved auto and real-time modes.

The MaxTester 700B/C Series is a line of genuine high-performance OTDRs from the world's leading manufacturer. It delivers EXFO's tried and true OTDR quality and accuracy along with the best optical performance for right-first-time results, every time.

The amazing 12-hour battery life will never let a technician down, and the plug-and-play hardware options, like the VFL, power meter and USB tools, make every technician's job easier.

Most importantly, the MaxTester 700B/C Series is finally bringing the intelligent Optical Link Mapper (iOLM), an intelligent OTDR-based application, to the handheld market. This advanced software turns even the most complex trace analysis into a simple, one-touch task.

Ultimately, the MaxTester 700B/C Series is small enough to fit in your hand and big enough to fit all your needs

SECURE YOUR INVESTMENT AGAINST THEFT

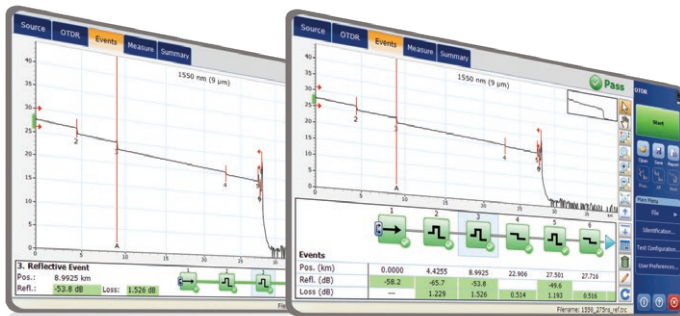
Protected instruments have no value on the black market making them completely unappealing to thieves. With our security management option, administrators can define and load a tamper-proof security profile on the MaxTester, displaying a property message on the home screen and securing it with a user password (permanent or renewable).



LOOKING FOR ICON-BASED MAPPING?

Linear view (included on all EXFO OTDRs)

Available on our OTDRs since 2006, the linear view simplifies the reading of an OTDR trace by displaying icons in a linear way for each wavelength. This view converts the graph data points obtained from a traditional single pulse trace into reflective, non-reflective or splitter icons. With applied pass/fail thresholds, it becomes easier to pinpoint faults on your link.



This improved version of linear view provides the flexibility to display both the OTDR graph and its linear view without having to toggle to analyze your fiber link.

Although this linear view simplifies the OTDR reading of a single pulse width's trace, the user will still need to set the OTDR parameters. In addition, multiple traces must often be performed in order to fully characterize the fiber links. See the section below to learn how the iOLM can perform this automatically and with more accurate results.

iOLM—REMOVING THE COMPLEXITY FROM OTDR TESTING

OTDR testing comes with its load of challenges...



In response to these challenges, EXFO developed a better way to test fiber optics: The iOLM is an OTDR-based application designed to simplify OTDR testing by eliminating the need to configure parameters, and/or analyze and interpret multiple complex OTDR traces. Its advanced algorithms dynamically define the testing parameters, as well as the number of acquisitions that best fit the network under test. By correlating multipulse widths on multiple wavelengths, the iOLM locates and identifies faults with maximum resolution—all at the push of a single button.

How does it work?



Turning traditional OTDR testing into clear, automated, first-time-right results for technicians of any skill level.

Three ways to benefit from the iOLM

COMBO

Run both iOLM and OTDR applications (Oi code)

UPGRADE

Add the iOLM software option to your iOLM-ready unit, even while in the field

iOLM ONLY

Order a unit with the iOLM application only

iOLM features value pack and options

In addition to the standard iOLM feature set, you can select added-value features as part of the **Advanced** or **Pro** packages, or standalone options. Please refer to the [iOLM specification sheet](#) for the complete and most recent description of these features.

iOLM Standard

- Dynamic multipulse multiwavelength acquisition
- Intelligent traces analysis and diagnostics
- Single link view and event table
- SOR trace generation
- Single iOLM file per link for easy reporting
- **Optimode:** Short-link close events, fast short link, fast medium range

iOLM Advanced (iADV)^a

- Real-time OTDR
- SOR pulse and wavelength editor
- SOR trace view
- Custom elements
- Advanced link edition and re-analysis
- 2:N splitter characterization
- **Optimode:** SFP-Safe Troubleshooting^b

iLOOP^a

- iOLM loopback
- iOLM automated bidirectional analysis over TestFlow^{b, c}

iOLM Pro (iPRO includes iADV and iLOOP)^a

Automated MPO cable characterization and troubleshooting (with EXFO switch) (iMF)

iCERT^a

Cabling certification option

a. Require enabling iOLM standard.
 b. Singlemode only, configuration without splitter.
 c. Requires TestFlow subscription.

FIBER CONNECTOR INSPECTION AND CERTIFICATION– THE ESSENTIAL FIRST STEP BEFORE ANY OTDR TESTING

Taking the time to properly inspect a fiber-optic connector using an EXFO fiber inspection scope can prevent a host of issues from arising further down the line, thus saving you time, money and trouble. Moreover, using a fully automated solution with autofocus capabilities will turn this critical inspection phase into a fast and hassle-free one-step process.

Did you know that the connector of your OTDR/iOLM is also critical?

The presence of a dirty connector at an OTDR port or launch cable can negatively impact your test results, and even cause permanent damage during mating. Therefore, it is critical to regularly inspect these connectors to ensure that they are free of any contamination. Making inspection the first step of your OTDR best practices will maximize the performances of your OTDR and your efficiency.



FEATURES	USB WIRED FIP-430B	WIRELESS FIP-435B	AUTONOMOUS FIP-500
Image capture	•	•	•
Five-megapixel CMOS capturing device	•	•	•
Automatic fiber image-centering function and focus adjustment	•	•	•
Automatic fiber image-focus adjustment	•	•	•
On-board pass/fail analysis	•	•	•
Pass/fail LED indicator	•	•	•
USB connectivity to an EXFO platform or PC	•	•	
Wireless connectivity to an EXFO platform or PC		•	
Wireless connectivity to a smartphone		•	•
Semi-automated multifiber / MPO inspection	•	•	
Fully automated multifiber / MPO inspection			•
On-board touch screen and data storage			•
SmarTips with automated thresholds and quick-connect mechanism			•

For more information, visit www.EXFO.com/fiberinspection.

LOADED WITH FEATURES TO BOOST YOUR EFFICIENCY



Real-time averaging

Activates the OTDR laser in continuous shooting mode, the trace refreshes in real time and allows to monitor the fiber for a sudden change. Perfect for a quick overview of the fiber under test.



Zoom tools

Zoom and center to facilitate the analysis of your fibers. Draw a window around the area of interest and center in the screen quicker.



Set parameters on the fly

Dynamically change OTDR settings for the ongoing acquisition without stopping or returning to submenus.



Macrobend finder

This built-in feature enables the unit to automatically locate and identify macrobends, no need to spend further time analyzing the traces.



Automode

Used as a discovery mode, this feature automatically adjusts the distance range and the pulse width in function of the link under test. It is recommended to adjust the parameters to perform additional measurements to locate other events.



Bidirectional analysis (Via FastReporter 3 data post-processing software)

Recommended to ensure true splice characterization, bidirectional analysis combines results from both directions to provide an average loss for each event. For a more complete event characterization, use intelligent Optical Link Mapper (iOLM) and benefit from maximum resolution on both directions (multiple pulse widths at multiple wavelengths) as well as a consolidated view.

FastReporter

Data post-processing software

GET ALL ADVANCED CAPABILITIES FOR FREE

FastReporter is a consolidated data management and post-processing solution designed to improve results quality as well as auditing and reporting productivity.

Download the latest version of FastReporter, launch the application and create your EXFO Exchange account to get the full range of capabilities, at no cost. EXFO Exchange automates and optimizes workflows, troubleshooting, field testing and reporting within a secured collaborative software platform for each step of network deployment.

FEATURES	FastReporter (version 3)	
	Basic	Full (now free with EXFO Exchange account)
Number of files	Up to 24 results	Unlimited
Measurement type	OTDR, iOLM, FIP, OLTS, OPM, CD, PMD	
Results viewer	•	•
Reporting – Basic (PDF)	•	•
Reporting – Advanced (Excel, PDF, custom)		•
Basic analysis – Bidir (OTDR and iOLM)	•	•
Advanced editing		•
Automated validation and results correction		•
Job management and identification edition	One file	Batch processing
Hundreds of additional features		•

Comparison of basic and full versions of FastReporter (version 3).

OPTICAL PLUG-AND-PLAY OPTIONS

The MaxTester features plug-and-play optical options that can be purchased whenever you need them: at the time of your order or later on. In either case, installation is a snap, and can be performed by the user without the need for any software update.

Optical power meter

A high-level power meter (GeX) that can measure up to 27 dBm, the highest in the industry. This is essential for hybrid fiber-coaxial (HFC) networks or high-power signals. If used with an auto-lambda/auto-switching compatible light source, the power meter automatically synchronizes on the same wavelength, thus avoiding any risk of mismatched measurement.

- Extensive range of connectors
- Auto-lambda and auto-switching
- Offers measurement storage and reporting
- Seven standard calibrated wavelengths

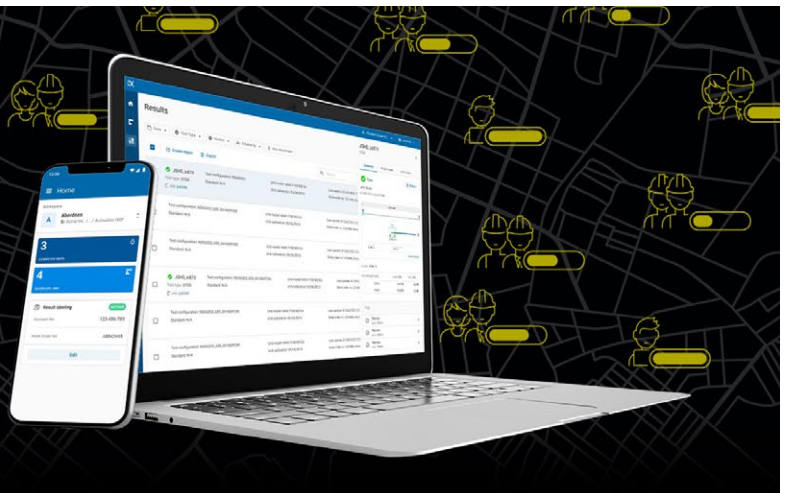
Visual fault locator (VFL)

The plug-and-play VFL easily identifies breaks, bends, faulty connectors and splices, in addition to other causes of signal loss. This basic, yet essential troubleshooting tool should be part of every field technician's toolbox. The VFL visually locates and detects faults over distances of up to 5 km by creating a bright-red glow at the exact location of the fault on singlemode or multimode fibers (available with the optical power meter only).



**MANAGE FIELD TESTS.
STREAMLINE WORKFLOWS.
UNLOCK INSIGHTS.**

Interconnect all parts of your field test ecosystem through EXFO Exchange, our open collaborative software platform.



KEY BENEFITS



Connect operations with real-time visibility



Increase collaboration and build trust with business partners



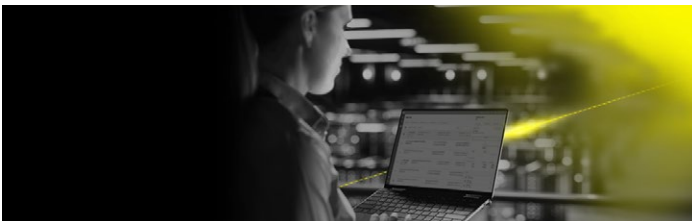
Boost efficiency with automated processes



Reduce maintenance costs

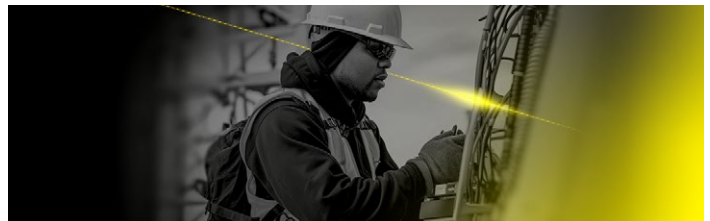


Unlock insights to see what matters



From the office

Invite your workforce and contractors to join your organization's workspace on EXFO Exchange. This will help you better organize projects and gain unprecedented visibility in real time over job progress and MoP compliance. Optimize closeout package generation to close jobs rapidly and monetize/get paid faster.



From the field

Request an invitation from your team manager to complete jobs faster and better, save results automatically and share them in real time.

KEY FEATURES

Centralized and organized data

Easy integration

Consolidated reporting service

Process automation

Collaboration



SOFTWARE UTILITIES

Software update	Ensure that your MaxTester is up-to-date with the latest software.
VNC configuration	The Virtual Network Computing (VNC) utility allows technicians to easily remote control the unit via a computer or laptop.
Microsoft Internet Explorer	Access the Web directly from your device interface.
Data mover	Transfer all your daily test results quickly and easily.
Centralized documentation	Instant access to user guides and other relevant documents.
Wallpapers	Enhance your work environment with colorful and scenic backgrounds.
PDF Reader	View your reports in PDF format.
Bluetooth file sharing	Share files between your MaxTester and any Bluetooth-enabled device.
WiFi connection	WiFi FIP inspection scope interface. Upload test results and browse the Internet.
Inspection scope	USB or WiFi scope to inspect and analyze connectors.
FTP server	Exchange files over WiFi to an FTP application on a smartphone for easier file sharing from the field.
Security management	Tamper-proof security profile with user password (permanent or renewable) and custom property message.

PACKAGED FOR EFFICIENCY

- 1 Singlemode OTDR port
- 2 Singlemode Live OTDR port
- 3 Stylus
- 4 Power meter
- 5 Visual fault locator
- 6 10/100 Mbit/s Ethernet port
- 7 Two USB 2.0 ports
- 8 AC adapter
- 9 Home/switch application and screen capture (hold)
- 10 Power on/off/stand by
- 11 Battery LED status
- 12 Built-in WiFi/Bluetooth
- 13 Stand support



All specifications valid at 23 °C ± 2 °C with an FC/APC connector, unless otherwise specified.

TECHNICAL SPECIFICATIONS	
Wavelengths (nm) ^a	1310 ± 20/1550 ± 20/1625 ± 10
SM live port built-in filter	1625 nm: highpass >1595 nm isolation >50 dB from 1270 nm to 1585 nm
Dynamic range at 20 μs (dB) ^b	41/40/40
Event dead zone (m) ^c	0.5
Attenuation dead zone (m) ^d	2.5
Distance range (km)	0.1 to 400
Pulse width (ns)	3 to 20 000
Linearity (dB/dB) ^a	±0.03
PON dead zone (m) ^e	30
Loss threshold (dB)	0.01
Loss resolution (dB)	0.001
Sampling resolution (m)	0.04 to 10
Sampling points	Up to 256 000
Distance uncertainty (m) ^f	±(0.75 + 0.0025 % x distance + sampling resolution)
Measurement time	User-defined (maximum: 60 minutes)
Typical real-time refresh (Hz)	4
Stable source output power (dBm) ^g	-2.5
Reflectance (dB) ^a	±2

TECHNICAL SPECIFICATIONS (in-line power meter) ^{a, h}	
Input power range (dBm)	1490 nm: -65 to 18 1550 or 1577 nm: -50 to 28
Broadband power meter (nm)	One channel: 1270 to 1625, 1650 (±10%) ^a
Power uncertainty (dB) ^a	±0.2
Calibrated wavelengths (nm)	1310, 1490, 1550 and 1625
Broadband power meter spectral band (nm)	1270 to 1650
Broadband power meter ORL (dB) ^a	-50
Display resolution (dB)	0.1
Broadband power meter selectable wavelengths (nm)	1270,1290,1310,1330,1350,1370,1390,1410,1430,1450,1470,1490,1510,1530,1550,1570,1577,1590,1610,1625,1650

GENERAL SPECIFICATIONS	
Size (H x W x D)	166 mm x 200 mm x 68 mm (6 9/16 in x 7 7/8 in x 2 3/4 in)
Display	7-in (178-mm) outdoor-enhanced touchscreen, 800 480 TFT
Temperature	Operating -10 °C to 50 °C (14 °F to 122 °F) Storage -40 °C to 70 °C (-40 °F to 158 °F)
Relative humidity	0 % to 95 % non-condensing
Weight (with battery)	1.5 kg (3.3 lb)

a. Typical.

b. Typical dynamic range with a three-minute averaging at SNR = 1.

c. Typical, for reflectance from -35 dB to -55 dB, using a 3-ns pulse.

d. Typical at 1310 nm, for reflectance at -55 dB. Attenuation dead zone at 1310 nm is 3.5 m typical with reflectance below -45 dB.

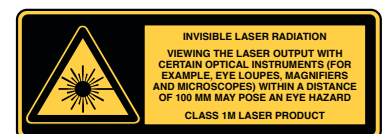
e. Non-reflective FUT, non-reflective splitter, 13-dB loss, 50-ns pulse, typical value.

f. Does not include uncertainty due to fiber index.

g. Typical output power value at 1550 nm.

h. Specifications valid when OTDR not functioning or in idle mode.

i. For $\lambda \pm 0.05$ dB, from 10 °C to 30 °C.



EXFO

ACCESSORIES (optional)

GP-10-061	Soft carrying case	GP-2209	Spare battery
GP-10-072	Semi-rigid carrying case	GP-2240	Utility glove
GP-10-100	Rigid carrying case	GP-2242	Replacement hand strap
GP-1008	VFL adapter (2.50 mm to 1.25 mm)	GP-2243	Spare AC/DC adapter (specify country power cord)
GP-2155	Carry-on size backpack	GP-3115	ickstand
GP-2205	DC vehicle battery-charging adaptor (12 V)	SPSB-EF-C30	Encircled Flux launch cables (specify connectors)
GP-2208	Spare stylus		

ORDERING INFORMATION**MAX-735C-NS3359**

MAX-735C Singlemode OTDR with wavelengths 1310/1550nm and 1625 nm live, Dynamic range 41/40/40 dB (9/125 µm), SC/APC connector

EI CONNECTORS

To maximize the performance of your OTDR, EXFO recommends using APC connectors on singlemode port. These connectors generate lower reflectance, which is a critical parameter that affects performance, particularly in dead zones. APC connectors provide better performance than UPC connectors, thereby improving testing efficiency.

For best results, APC connectors are mandatory with the iOLM application.

Note: UPC connectors are also available. Simply replace EA-XX by EI-XX in the ordering part number. Additional connector available: EI-EUI-90 (UPC/ST).

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

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