

# FTBx-740C-DWC TUNABLE OTDR

C-BAND DWDM METRO ETHERNET LINK CHARACTERIZATION



NEW OTDR  
GENERATION

Tunable DWDM OTDR for testing through MUX/DEMUX channels to provide complete end-to-end link characterization and troubleshooting of Metro Ethernet links and commercial services.

SPEC SHEET

## KEY FEATURES

- C-BAND ITU grid channel selection to test through DWDM MUX/DEMUX
- In-service testing of active networks
- High-resolution and short dead zones
- Select favorite or imported channels list
- Supports combined DWDM and CWDM modules with FTB-2 platform

## APPLICATIONS

- Single-ended construction and troubleshooting solution
- DWDM Metro Ethernet links
- Commercial services deployments
- Fiber deep and node splitting
- CBH Antenna feeds

## COMPLEMENTARY PRODUCTS



**Platform**  
FTB-2/FTB-2 Pro



**Fiber Inspection Probe**  
FIP-400B (Wi-Fi or USB)



**CWDM OTDR Module**  
FTB-7400E-CWx



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.



**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.



**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.

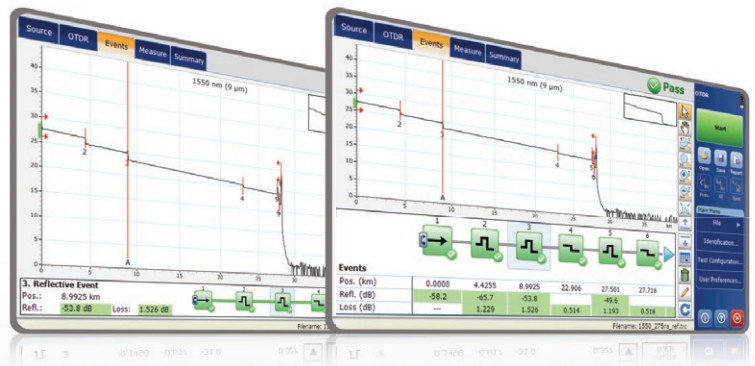
LOOKING FOR ICON-BASED MAPPING?

**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 or non-reflective 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.



GET THE BEST OUT OF YOUR DATA POST-PROCESSING



**ONE SOFTWARE DOES IT ALL**

This powerful reporting software is the perfect complement to your OTDR, and can be used to create and customize reports to fully address your needs.



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



**ConnectoMax2**

Taking the time to properly inspect a fiber-optic connector using an EXFO fiber inspection probe 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.

**FIVE MODELS TO FIT YOUR BUDGET**

FEATURES	USB WIRED			WIRELESS	
	Basic FIP-410B	Semi-Automated FIP-420B	Fully Automated FIP-430B	Semi-Automated FIP-425B	Fully Automated FIP-435B
Three magnification levels	✓	✓	✓	✓	✓
Image capture	✓	✓	✓	✓	✓
Five-megapixel CMOS capturing device	✓	✓	✓	✓	✓
Automatic fiber image-centering function	X	✓	✓	✓	✓
Automatic focus adjustment	X	X	✓	X	✓
Onboard pass/fail analysis	X	✓	✓	✓	✓
Pass/fail LED indicator	X	✓	✓	✓	✓
Wi-Fi connectivity	X	X	X	✓	✓

For additional information, please refer to the FIP-400B USB or FIP-400B wireless specification sheets.

**AVAILABLE IN THE FTB-2/FTB-2 PRO PLATFORM**

The FTB-2, available in a standard or Pro model, is the most compact solution on the market for **multirate, multitechnology, multiservice testing**, delivering all the power of a high-end platform in a conveniently sized, go-anywhere field-testing tool.



**INTUITIVE INTERFACE**

Widescreen display and single touch gesture support



**UNMATCHED CONNECTIVITY**

Wi-Fi, Bluetooth, Gigabit Ethernet and multiple USB ports



**INCREASED PRODUCTIVITY**

Store, push and share test data automatically

**DO MORE BY GOING FTB PRO**

The Windows 8.1 Pro operating system allows for a wide choice of third-party applications and supports an extensive range of USB devices.

- › Start faster and multitask
- › Use any office suite
- › Connect to printers, cameras, keyboards, mice, and more

**Bring Your Own Apps**

- Share your desktop (e.g., using TeamViewer)
- Antivirus software
- Communicate via e-mail services and over-the-top (OTT) apps
- Record and automate actions
- Share files via cloud-based storage

**Go FTB Pro!**



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

TECHNICAL SPECIFICATIONS	
Wavelength (nm) / ITU channel range	C-Band tunable 1528.77-1563.86 nm ITU Channels 17-61 (191.7 THz - 196.1 THz)
Channel spacing tuning	50 GHz increments from nominal ITU 100 GHz grid
Dynamic range at 20 µs (dB) <sup>a</sup>	40
Event dead zone (m) <sup>b</sup>	0.7
Attenuation dead zone (m) <sup>b</sup>	3.5
Distance range (km)	0.1 to 400
Pulse widths (ns)	5 to 20 000
Sampling points	Up to 256 000
Sampling resolution (m)	0.04 to 10
Distance accuracy (m) <sup>c</sup>	±(0.75 + 0.0025 % x distance + resolution)

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

**Notes**


- a. Typical dynamic range with a three-minute averaging at SNR = 1.
- b. Typical dead zone of singlemode modules for reflectance at -45 dB, using a 5-ns pulse.
- c. Does not include uncertainty due to fiber index.

GENERAL SPECIFICATIONS	
Size (H x W x D)	158 mm x 24 mm x 174 mm (6 ¼ in x 15/16 in x 5 13/16 in)
Weight	0.4 kg (0.9 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 85 % non-condensing



This picture is shown as a guideline only. Actual module may differ depending on the configuration selected.

**LASER SAFETY**



INVISIBLE LASER RADIATION

VIEWING THE LASER OUTPUT WITH CERTAIN OPTICAL INSTRUMENTS (FOR EXAMPLE, EYE LOUPES, MAGNIFIERS AND MICROSCOPES) WITHIN A DISTANCE OF 100 MM MAY POSE AN EYE HAZARD

CLASS 1M LASER PRODUCT

## ORDERING INFORMATION

### FTBx-740C-DWC-OTDR-XX

#### Model

FTBx-740C-DWC = DWDM Tunable SM OTDR  
C-Band 1528-1563 nm, 100/50 GHz, 40 dB (9/125  $\mu$ m)

Example: FTBx-740C-DWC-OTDR-EA-EUI-91

#### 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  
EA-EUI-98 = APC/LC

## 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 dead zones. APC connectors provide better performances than UPC connectors, thereby improving testing efficiency.

Note: UPC connectors are not available.

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