# FTB-200 NETWORK TESTING-ACCESS



## **The Compact Platform Built for the SUPERTECH**

## The FTB-200 is a compact, modular platform designed for multilayer and multimedium testing

- Tests physical, transport and datacom
- Accommodates two field-interchangeable modules
- Integrated hardware options such as visual fault locator (VFL), fiber inspection probe and CWDM-calibrated power meter

### Designed for metro/access and FTTx networks

- Eight CWDM wavelengths in one compact platform
- Lightweight construction
- Touchscreen resistant to shock, water, dust and common chemicals
- Dial and shortkeys for easy scrolling and selecting
- Extended battery autonomy of more than eight hours, perfect for OTDR testing

### Improved productivity

- Four-second power-up time with Windows CE
- Faster acquisition, processing and reporting









## A Compact Platform Optimized for Large-Scale Network Deployments

EXFO has created the first true compact platform for the supertech. Whether you are testing triple-wavelength insertion loss at the CO or testing data integrity at the core, the FTB-200 has the power, speed and modularity that you need in the field.

## Optimized for all phases of the network lifecycle

- Construction/installation
- System provisioning/service activation
- Maintenance/troubleshooting



## Lightweight

= 2.5 kg/5.4 lb (platform only)

## Fast and powerful

 Four-second power-up time with Windows CE/ mobile

## Faster acquisition, processing and reporting

- Instantaneous AutoSync USB data transfer
- Faster acquisitions-down to five seconds
- Remote control and virtual applications

#### Flexible connectivity

- File transfer and software upgrading through USB
- USB A/A-B, RJ-45 and Bluetooth flexibility
- Compact Flash (memory, Wi-Fi and Bluetooth)

#### Built for the outside plant

- Waterproof outer shell, sealed joints, door panels for extra port protection
- Advanced TFT transflective display, for great visibility under direct sunlight
- Rugged shortkeys and tracking knob
- GR-196-CORE-compliant
- Extended battery autonomy of more than eight hours



## SONET/SDH and Ethernet Test Modules

### FTB-8120NGE/8130NGE Power Blazer Next-Generation Multiservice Test Module

- The most compact multiservice transport network installation, commissioning and service turn-up solution
- DSn/PDH, SONET/SDH and OTN up to 10.7 Gbit/s
- 10/100/1000M, GigE and 10GigE BERT, and RFC 2544
- One-touch SONET/SDH/OTN signal discovery via SmartMode feature, ideal for service monitoring and troubleshooting
- Battery operation, instantaneous power-up, touch screen and remote control capability
- Optional integrated visual fault locator (VFL), fiber inspection probe and power meter

### FTB-8100 Transport Blazer SONET/ SDH Test Module Series

- Comprehensive test functionality for DSn/PDH and SONET/SDH test applications
- Most compact and complete SONET/SDH and OTN (ITU-T G.709) testing
- Multirate configurable test solutions ranging from DS0/E0 to OC-192/STM-64
- One-touch SONET/SDH signal discovery and fault isolation via Smartmode feature

## FTB-8510B Packet Blazer Ethernet Test Module

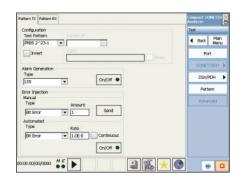
- Ethernet-based IP services testing with wire-speed full-duplex 10, 100 or 1000 Mbit/s traffic-generation capabilities
- Throughput, burstability (back-to-back), latency and frame loss measurements as per RFC 2544
- TCP throughput measurement for assessing application data transmission over a TCP/IP connection
- Quality of service performance assessment via multistream generation and analysis

## FTB-8510G Packet Blazer 10 Gigabit Ethernet Test Module

- Fully integrated functionality for assessing the performance of Ethernet transport networks
- Throughput, burstability (back-to-back), latency and frame loss measurements as per RFC 2544
- EtherBERT™ test functionality for assessing the integrity of 10 Gigabit Ethernet running on WDM networks
- Quality of service performance assessment via multistream generation and analysis

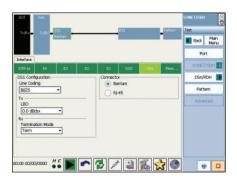


Power Blazer (FTB-8120NGE)





Transport Blazer (FTB-8130NGE)





Packet Blazer (FTB-8510B)





Packet Blazer 10 Gigabit (FTB-8510G)



## OTDR, OLTS and Dispersion Test Modules

#### FTB-7000 OTDR Series

EXFO's OTDR modules meet all your testing needs with numerous singlemode and multimode configurations available at several wavelengths. The FTB-7000 family includes four lines of OTDRs: the FTB-7200 LAN/WAN Access OTDR, the FTB-7300 FTTx PON/MDU OTDR, the FTB-7400 Metro/CWDM OTDR, the FTB-7500 Long-Haul OTDR and the FTB-7600E Ultra-Long-Haul OTDR.

- Event dead zone: 0.8 m
- Attenuation dead zone: 4 m
- Wide dynamic range: up to 50 dB
- FTTx-ready: passive optical network (PON) and point-to-point testing capabilities
- 40 Gbit/s-ready: metro and long-haul network testing capabilities
- CWDM-ready: test through mux/demux at ITU-recommended wavelengths

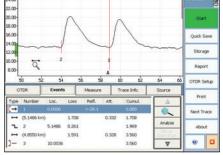
### FTB-3930 MultiTest Module (OLTS)

- Fully automated bidirectional loss tests in seconds for up to three wavelengths; automatic ORL and fiberlength measurements
- Combines eight functionalitites in a single module:
  - Loss meter
  - Power meter
  - Optical return loss (ORL) meter
  - Visual fault locator
  - Multimode and singlemode light sources
  - Digital talk set
  - Fiber-length meter

## FTB-5700 Single-Ended Dispersion Analyzer

- The ultimate CD/PMD characterization solution
- Single-ended PMD and CD measurements
- The advantage of one: complete dispersion analysis with a single module, a single connector and a onestep test setup
- Unparalleled software user-friendliness: all automated
- Testing range: up to 140 km





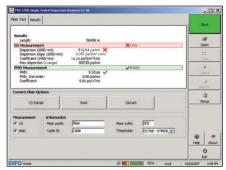
World-leading OTDRs (FTB-7000 series)





MultiTest module (OLTS) (FTB-3930)





Single-Ended Dispersion Analyzer (FTB-5700)

# Intuitive Interface Designed for Time-Saving Efficiency

#### All the OTDR Modes You Need

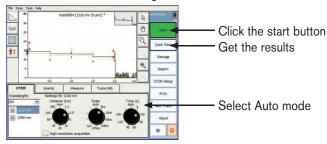
The FTB-200's OTDR software is both automated and easy to use. Choose from four operating modes according to your specific requirements:

#### **Auto Mode**

Lets you select acquisition parameters automatically. Perfect for basic, repetitive OTDR applications or for occasional users.

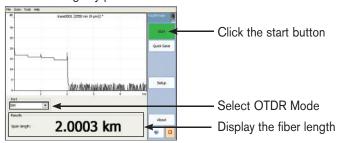
#### Parameter setup-simple as 1-2-3

- Minimal training required
- No need to browse through menus and submenus



#### **Fault Finder Mode**

Save valuable time when you need to quickly find the end of fiber, without setting any parameters.



#### **Advanced Mode**

Offers multiple setup and measurement capabilities for increased flexibility. Control all parameters on a single page and optimize your measurement setup to pinpoint specific anomalies.

#### **Template Trace Mode**

Compares each acquisition with a designated template trace for complete cable testing and documentation.

## Optional tools: Packing more functions in a single unit

#### **Power Meter**

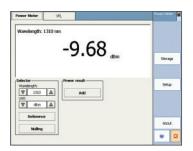
- Offered with two detector types:
  - GeX for high-power measurement
  - InGaAs for high dynamic range
- Calibrated at 7 or 20 CWDM wavelengths
  - Data-saving capabilities
- Tone recognition

#### **Fiber Inspection Probe**

- Connector endface verification
- Image capture for documentation purposes
- Compact, lightweight
- 200X or 400X magnification

#### **Visual Fault Locator (VFL)**

- Simple fiber identification
- Pinpoints breaks and faulty connections
- Bright and powerful red laser







#### Software OPTION: SMART KIT

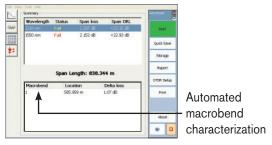
#### Linear trace view

- Virtually eliminates the need to analyze complicated OTDR traces
- Straightforward display and event table
- Easy toggling between OTDR traces and linear view



#### Macrobend finder

- Allows you to easily characterize macrobends
- View the data in the summary screen



## Data Post-Processing

The FTB-200 uses ToolBox Office software, which offers great functions:

#### Bidirectional trace analysis\*

Improve the accuracy of your loss measurements with the bidirectional averaging feature, which uses OTDR acquisitions from both ends of a fiber span to average loss results for each event.

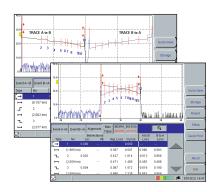
\*Available on singlemode OTDRs only.

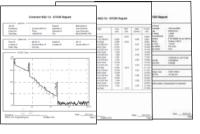
#### Efficient multifiber testing with Template Trace

Reduce testing time when commissioning a large number of fibers by using the Template Trace mode. This mode dynamically compares new OTDR results with a trace you assign as a reference. Reference trace documentation is automatically pasted onto new acquisitions to save you time.

#### Professional report generation

User-configurable test reports and batch printing let you generate complete, professional OTDR reports quickly and efficiently.





### Fast-Track Data Post-Processing with FastReporter Software

The **optional** FastReporter software package provides you with the post-processing tools and functionalities you need to achieve flexible, fully integrated data analysis, whatever the application. Designed for **off-line analysis of field-acquired data**, FastReporter offers a truly intuitive graphical user interface, which contributes to boosting productivity.

### Powerful Batch Processing

Automate repetitive operations on large numbers of OTDR test files, and optimize your productivity. Document an entire cable in a matter of seconds. Adjust your cable parameters and detection thresholds and perform batch analysis. Open OTDR files from various vendors' equipment and convert them to the universal Telcordia format.

#### Bidirectional Batch Analysis

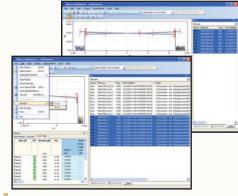
Analyze an entire cable in just **two steps**. View data for all events on all fibers, and at each wavelength, on a single screen.

## Live Templating for OTDR Testing

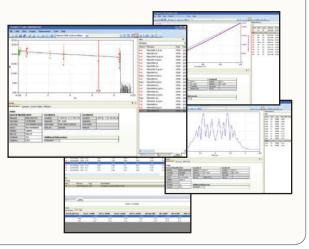
Benefit from one-step file management at any wavelength. Keep full control by adding or removing events manually, or add/remove events automatically using a reference. Get uniform, detailed cable reports.

### Flexible Reporting

Choose from **various report templates**, including loss and ORL, OTDR, PPM, PMD, CD, fiber characterization and cable report. Generate comprehensive cable reports in **PDF**, **Excel or HTML format**.



Bidirectionnal Batch Analysis



Display	Touchscreen, color, 640 x 480 TFT 163 mm (6 7/16 in)	
Interfaces	USB A main	
	USB B remote	
	RJ-45 LAN 10/100 Mbit/s	
	Compact Flash	
	Fiber inspection probe connector port (video)	
Storage	Internal 80 MB (Flash)	
	USB sticks 1 GB and 2 GB (optional)	
	Compact Flash cards (optional)	
Batteries <sup>b</sup>	Rechargeable Li-Ion	
	8 h of operation as per Bellcore TR-NWT-001138	
Power Supply AC/DC adapter, input 100-240 VAC, 50-60 Hz, 2 A max, output: 24 VDC, 90 W		

GENERAL SPECIFICATIONS				
Temperature				
	operating	−5 °C to 50 °C (23 °F to 122 °F)		
	storage <sup>c</sup>	−40 °C to 70 °C (−40 °F to 158 °F)		
Relative humidity	0 % to 95 % non-condensing			
Size (H x W x D)	322 mm x 197 mm x 109 mm	(12 <sup>11</sup> / <sub>16</sub> in x 7 <sup>3</sup> / <sub>4</sub> in x 4 <sup>5</sup> / <sub>16</sub> in)		
Weight	2.5 kg	(5.4 lb)		
Vibration	< 1.5 g at 10 Hz to 500 Hz (on the	< 1.5 g at 10 Hz to 500 Hz (on three main axes)		
Mechanical shock	< 760 mm on six sides and eight	< 760 mm on six sides and eight main edges (according to GR-196-CORE)		

ACCESSO	RIES		
FP4S	FP4S 400X Fiber Inspection Probe	GP-2016	10 feet RJ-45 LAN cable
FP4D	200/400X Fiber Inspection Probe	GP-2017	Spare FTB-200 battery
GP-10-070	Rigid FTB-200 carrying case	GP-2019	USB micro drive standard capacity
GP-10-072	Semi-rigid FTB-200 carrying case	GP-2021	Spare AC power supply (requires AC external adapter/charger).
GP-302	USB mouse	(A-E-I-J-S-U)	Specify: A-North America, E-Europe, I-India, J-Japanese,
GP-308	DC car adapter/inverter		S-Australia and New-Zealand, U-United-Kingdom
GP-2001	USB keyboard	GP-2023	Spare neck strap
GP-2011	Compact Flash Ethernet WiFi card	GP-2024	Spare belt strap
GP-2012	Compact Flash Bluetooth card	GP-2025	Spare battery door
GP-2014	Compact Flash memory 1 GB card	GP-2027	Portable printer
GP-2015	Compact Flash memory 2 GB card	GP-2028	Computer security cable kit

	PM-200 BUILT-IN POWER METER SPECIFICATIONS d					
	Calibrated wavelengths (nm)		850, 1300, 1310, 1490, 1550, 1625, 1650			
	Optional CWDM calibrated v	vavelengths (nm)	1270, 1290, 1310, 1330, 1350, 1370, 1390, 1410,			
			1430, 1450, 1470, 1490, 1510, 1530, 1550, 1570,			
			1590, 1610, 1383, 1625			
	Power range (dBm)		10 to -86 (InGaAs)			
			26 to -64 (GeX)			
	3 . ,		±5 % ± 3 pW (InGaAs)			
			±5 % ± 0.4 nW (GeX)			
	Display resolution (dB)	InGaAs	$0.01 = \max to -76 dBm$			
			0.1 = -76  dBm to  -86  dBm			
			1 = -86 dBm to min			
GeX			$0.01 = \max to -54 dBm$			
			0.1 = -54  dBm to  -64  dBm			
			1 = -64 dBm to min			
	Automatic offset nulling range <sup>f</sup>		Max power to −63 dBm for InGaAs			
			Max power to −40 dBm for GeX			
Tone detection (Hz)			270/1000/2000			

#### VISUAL FAULT LOCATOR (VFL) (OPTIONAL)

Laser, 650 nm  $\pm$  10 nm

Typical Pout in 62.5/125  $\mu m$ : 3 dBm (2 mW)

#### Notes

- a. All specifications valid at 23 °C (73 °F).
- b. Standard recharge time is 3 h. Recharge temperature: 0 °C to 35 °C (32 °F to 95 °F).
- c. Not including internal batteries.

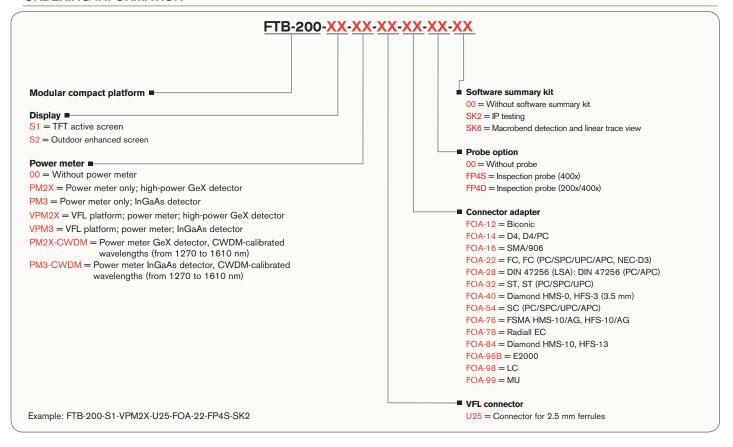
  Battery maximum storage temperature: 60 °C (140 °F).
- d. At 23 °C ± 1 °C, 1550 nm and FC connector.
   With modules in idle mode. Battery operated.
- e. Up to 5 dBm.
- f. For ±0.05 dB, from 18 °C to 28 °C.

#### LASER SAFETY



21 CFR 1040.10 AND IEC 60825-1:2007 CLASS 3R WITH VFL OPTION

#### **ORDERING INFORMATION**



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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. 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 http://www.EXFO.com/specs

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