

# FTB-200

NETWORK TESTING—ACCESS



## The Compact Platform Built for the SUPERTECH

The FTB-200 is a compact, modular platform designed for multilayer and multimediatesting

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

## Designed for metro/access and FTTx networks

- Lightweight construction
- Touchscreen resistant to shock, water, dust and common chemicals
- Dial and shortcuts 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



[www.EXFO.com](http://www.EXFO.com)  
Telecom Test and Measurement



**EXFO**  
EXPERTISE REACHING OUT

# 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 transfective display, for great visibility under direct sunlight
- Rugged shortcuts and tracking knob
- GR-196-CORE-compliant
- Extended battery autonomy of more than eight hours



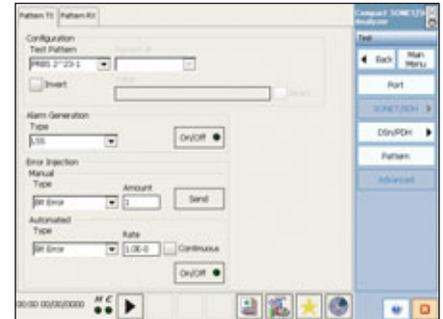
## SONET/SDH and Ethernet Test Modules

### 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 RFC2544
- 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



Power Blazer  
(FTB-8120NGE)

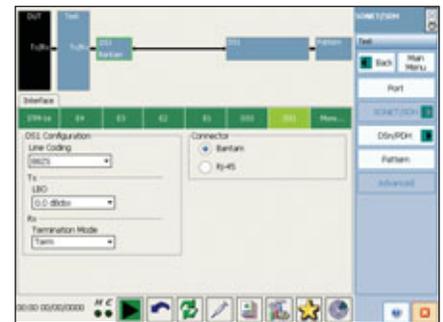


### FTB-8100 Transport Blazer SONET/SDH Test Module Series

- 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



Transport Blazer  
(FTB-8130NGE)

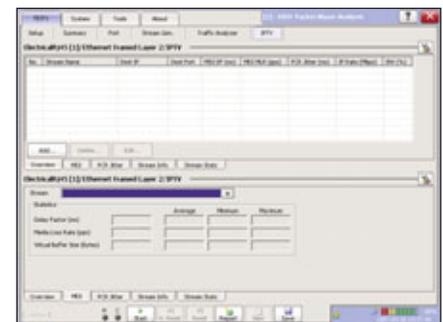


### FTB-8510B Packet Blazer Ethernet Test Module

- 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



Packet Blazer  
(FTB-8510B)



### 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



Packet Blazer 10 Gigabit  
(FTB-8510G)



## OTDR and OLTS Test Modules

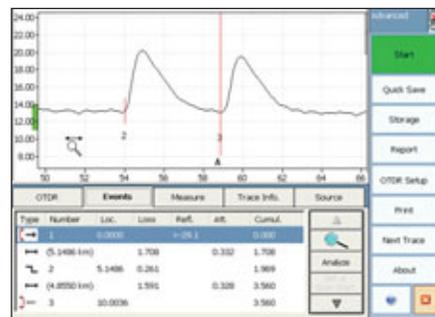
### FTB-7000 OTDR Series

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 OTDR, the FTB-7200/7300 FTx Access/Metro OTDR, the FTB-7400 Metro/Long-Haul OTDR and the FTB-7500 Long-Haul OTDR.

- Event dead zone: 0.8 m
- Attenuation dead zone: 4 m
- FTx ready: passive optical network (PON) and point-to-point testing capabilities
- 40 Gbit/s ready: metro and long-haul network testing capabilities



World-leading OTDRs (FTB-7000 series)



### FTB-3930 MultiTest Module (OLTS)

- Fully automated bidirectional loss tests in seconds for up to three wavelengths; automatic ORL and fiber-length measurements
- Combines eight functionalities 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



MultiTest module (OLTS) (FTB-3930)



### New software functions, for simpler, faster OTDR Testing

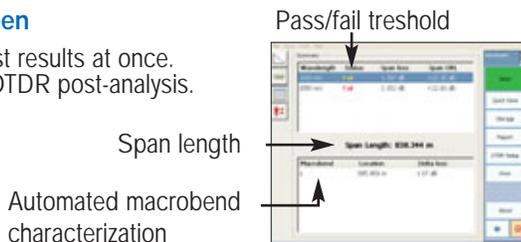
Designed for boosting OTDR testing efficiency, whether for multimode or singlemode applications, from LAN to long-haul networks, the FTB-200's software now offers:

#### ■ Full access to OTDR traces from major test equipment manufacturers

Based on the universal Bellcore format (.sor, Telcordia SR-4731), the new software lets you access OTDR traces from various test and measurement manufacturers. You can therefore seamlessly switch to the FTB-200 platform and still refer to your previously archived OTDR files.

#### ■ Summary screen

View all your test results at once. Enjoy fail-safe OTDR post-analysis.



#### ■ Faster acquisition—five seconds

Spend less time retrieving your OTDR traces, speeding up your test cycles.

#### ■ Flexible trace analysis

- Echo management
- Measure and change fiber attenuation

#### ■ Enhanced zoom function

- Simplify event pinpointing

# Intuitive Interface Designed for Time-Saving Efficiency

## All the OTDR Modes You Need

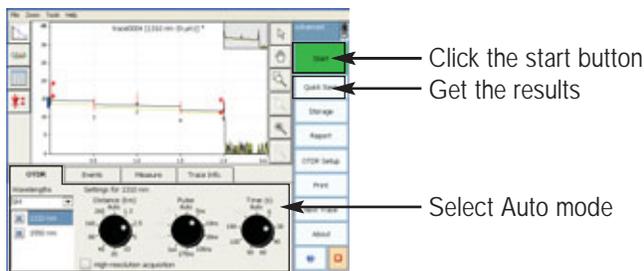
The FTB-200's OTDR software is both automated and easy to use. Choose from four operating modes according to your specific requirements:

### Auto Mode

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

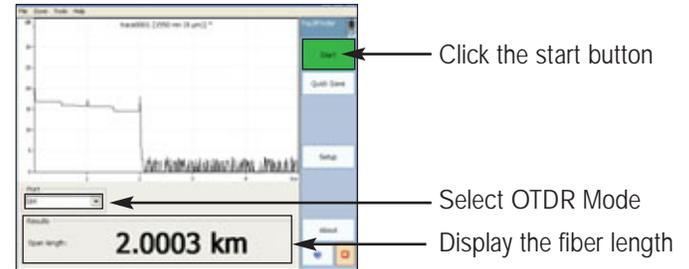
#### Parameter setup—simple as 1-2-3

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



### Fault Finder Mode NEW

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 seven wavelengths
- Data-saving capabilities
- Tone recognition



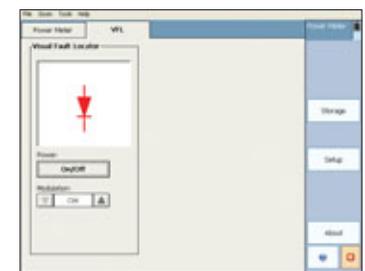
### Fiber Inspection Probe

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



### Visual Fault Locator (VFL)

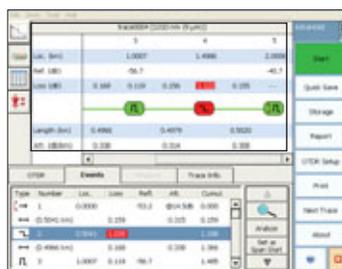
- Simple fiber identification
- Pinpoints breaks and faulty connections
- Bright and powerful red laser



## NEW Software OPTION: SMART KIT

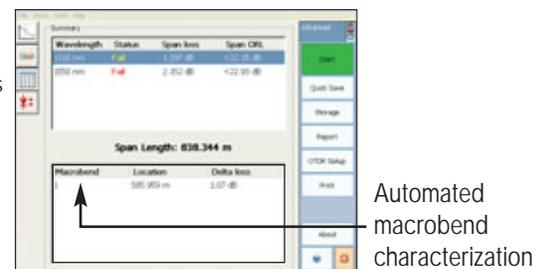
### Linear trace view

- 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



Automated macrobend characterization

# 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.

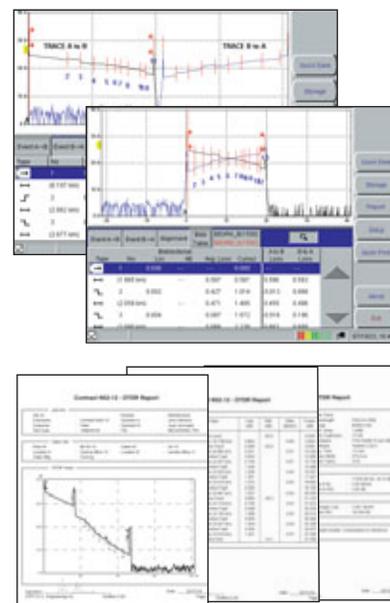
*\*Available on singlemode OTDRs only.*

- **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

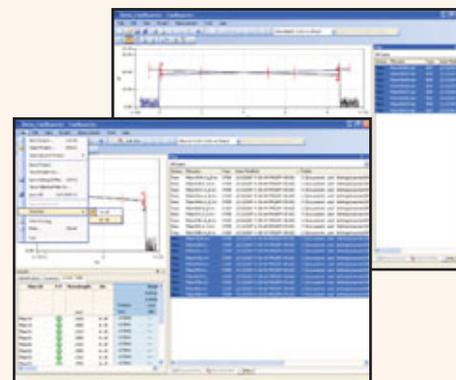
Analyze an entire cable in just **two steps**. View data for all events on all fibers, and at each wavelength, on a single screen.

### Live Templating for OTDR Testing

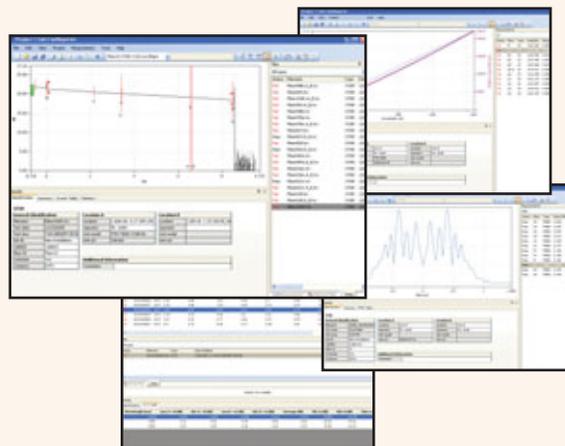
Benefit from one-step file management at any wavelength. Keep full control by adding or removing events manually, or add/remove events automatically using a reference. Get uniform, detailed cable reports.

### Flexible Reporting

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



■ Bidirectional Batch Analysis



### SPECIFICATIONS <sup>a</sup>

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 11/16 in x 7 3/4 in x 4 5/16 in)
Weight	2.5 kg	(5.4 lb)
Vibration	< 1.5 g at 10 Hz to 500 Hz (on three main axes)	
Mechanical shock	< 760 mm on six sides and eight main edges (according to GR-196-CORE)	

### ACCESSORIES

FP1	FP1 200X Fiber Inspection Probe	GP-2016	10 feet RJ-45 LAN cable
FP5	FP5 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, S-Australia and New-Zealand, U-United-Kingdom
GP-308	DC car adapter/inverter	GP-2023	Spare neck strap
GP-2001	USB keyboard	GP-2024	Spare belt strap
GP-2011	Compact Flash Ethernet WiFi card	GP-2025	Spare battery door
GP-2012	Compact Flash Bluetooth card	GP-2027	Portable printer
GP-2014	Compact Flash memory 1 GB card	GP-2028	Computer security cable kit
GP-2015	Compact Flash memory 2 GB card		

### PM-200 BUILT-IN POWER METER SPECIFICATIONS <sup>d</sup>

Calibrated wavelengths (nm)	850, 1300, 1310, 1490, 1550, 1625, 1650	
Power range (dBm)	10 to -86 (InGaAs) 26 to -64 (GeX)	
Uncertainty (%) <sup>e</sup>	±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 ± 10 nm  
CW  
Typical P<sub>out</sub> in 62.5/125 µm: 3 dBm (2 mW)

#### Notes

- All specifications valid at 23 °C (73 °F).
- Standard recharge time is 3 h.  
Recharge temperature: 0 °C to 35 °C (32 °F to 95 °F).
- Not including internal batteries.  
Battery maximum storage temperature: 60 °C (140 °F).
- At 23 °C ± 1 °C, 1550 nm and FC connector.  
With modules in idle mode. Battery operated.
- Up to 5 dBm.
- For ±0.05 dB, from 18 °C to 28 °C.

### LASER SAFETY



21 CFR 1040.10 AND IEC 60825-1:1993+A2:2001  
CLASS 3R WITH VFL OPTION

ORDERING INFORMATION

FTB-200-XX-XX-XX-XX-XX-XX

Modular compact platform ■

Display ■

- S1 = TFT active screen
- S2 = Outdoor enhanced screen

Power meter ■

- 00 = Without power meter
- PM2X = Power meter only; high-power GeX detector
- PM3 = Power meter only; InGaAs detector
- VPM2X = VFL platform; power meter; high-power GeX detector
- VPM3 = VFL platform; power meter; InGaAs detector

Note

- a. Comes with FIPT-U25M for 2.5 mm connectors; FIPT-FC and FIPT-SC for bulkhead connectors.

Example: FTB-200-S1-VPM2X-U25-FOA-22-FP5-SK2

■ Software summary kit

- 00 = Without software summary kit
- SK2 = IP testing
- SK6 = Macrobend detection and linear trace view

■ Fiber inspection probe

- FP = Probe option and connection cable
- FP1 = Probe connection cable and 200x probe <sup>a</sup>
- FP5 = Probe connection cable and 200x/400x probe <sup>a</sup>

■ Connector adapter

- FOA-12 = Biconic
- FOA-14 = D4, D4/PC
- FOA-16 = SMA/906
- FOA-22 = FC, FC (PC/SPC/UPC/APC, NEC-D3)
- FOA-28 = DIN 47256 (LSA): DIN 47256 (PC/APC)
- FOA-32 = ST, ST (PC/SPC/UPC)
- FOA-40 = Diamond HMS-0, HFS-3 (3.5 mm)
- FOA-54 = SC (PC/SPC/UPC/APC)
- FOA-76 = FSMA HMS-10/AG, HFS-10/AG
- FOA-78 = Radiall EC
- FOA-84 = Diamond HMS-10, HFS-13
- FOA-96B = E2000
- FOA-98 = LC
- FOA-99 = MU

■ VFL connector

- U25 = Connector for 2.5 mm ferrules

 <p><b>Rugged Handheld Solutions</b></p> <table border="0"> <tr> <td> <p><b>OPTICAL</b></p> <ul style="list-style-type: none"> <li>- OTDRs</li> <li>- OLTSs</li> <li>- Power meters</li> <li>- Light sources</li> <li>- Talk sets</li> </ul> </td> <td> <p><b>COPPER ACCESS</b></p> <ul style="list-style-type: none"> <li>- ADSL/ADSL2+, SHDSL, VDSL test sets</li> <li>- VoIP and IPTV test sets</li> <li>- Ethernet test sets</li> <li>- POTS test sets</li> </ul> </td> </tr> </table>		<p><b>OPTICAL</b></p> <ul style="list-style-type: none"> <li>- OTDRs</li> <li>- OLTSs</li> <li>- Power meters</li> <li>- Light sources</li> <li>- Talk sets</li> </ul>	<p><b>COPPER ACCESS</b></p> <ul style="list-style-type: none"> <li>- ADSL/ADSL2+, SHDSL, VDSL test sets</li> <li>- VoIP and IPTV test sets</li> <li>- Ethernet test sets</li> <li>- POTS test sets</li> </ul>	 <p><b>Platform-Based Solutions</b></p> <table border="0"> <tr> <td> <p><b>OPTICAL FIBER</b></p> <ul style="list-style-type: none"> <li>- OTDRs</li> <li>- OLTSs</li> <li>- ORL meters</li> <li>- Variable attenuators</li> </ul> </td> <td> <p><b>DWDM TEST SYSTEMS</b></p> <ul style="list-style-type: none"> <li>- OSAs</li> <li>- PMD analyzers</li> <li>- Chromatic dispersion analyzer</li> </ul> </td> <td colspan="2"> <p><b>TRANSPORT AND DATACOM</b></p> <ul style="list-style-type: none"> <li>- Next-generation SONET/SDH and OTN testers</li> <li>- SONET/DSn (DS0 to OC-192) testers</li> <li>- SDH/PDH (64 kbit/s to STM-64) testers</li> <li>- T1/T3, E1 testers</li> <li>- 10/100 Mbit/s and Gigabit Ethernet testers</li> <li>- Fibre Channel testers</li> <li>- 10 Gigabit Ethernet testers</li> </ul> </td> </tr> </table>			<p><b>OPTICAL FIBER</b></p> <ul style="list-style-type: none"> <li>- OTDRs</li> <li>- OLTSs</li> <li>- ORL meters</li> <li>- Variable attenuators</li> </ul>	<p><b>DWDM TEST SYSTEMS</b></p> <ul style="list-style-type: none"> <li>- OSAs</li> <li>- PMD analyzers</li> <li>- Chromatic dispersion analyzer</li> </ul>	<p><b>TRANSPORT AND DATACOM</b></p> <ul style="list-style-type: none"> <li>- Next-generation SONET/SDH and OTN testers</li> <li>- SONET/DSn (DS0 to OC-192) testers</li> <li>- SDH/PDH (64 kbit/s to STM-64) testers</li> <li>- T1/T3, E1 testers</li> <li>- 10/100 Mbit/s and Gigabit Ethernet testers</li> <li>- Fibre Channel testers</li> <li>- 10 Gigabit Ethernet testers</li> </ul>	
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EXFO Corporate Headquarters > 400 Godin Avenue, Quebec City (Quebec) G1M 2K2 CANADA | Tel.: 1 418 683-0211 | Fax: 1 418 683-2170 | info@EXFO.com

Toll-free: 1 800 663-3936 (USA and Canada) | www.EXFO.com

EXFO America	3701 Plano Parkway, Suite 160 Plano, TX 75075 USA	Tel.: 1 800 663-3936	Fax: 1 972 836-0164
EXFO Europe	Omega Enterprise Park, Electron Way Chandlers Ford, Hampshire SO53 4SE ENGLAND	Tel.: +44 2380 246810	Fax: +44 2380 246801
EXFO Asia	151 Chin Swee Road, #03-29 Manhattan House SINGAPORE 169876	Tel.: +65 6333 8241	Fax: +65 6333 8242
EXFO China	No. 88 Fuhua, First Road, Central Tower, Room 801 Futian District Beijing New Century Hotel Office Tower, Room 1754-1755 No. 6 Southern Capital Gym Road	Shenzhen 518048, CHINA Beijing 100044 P. R. CHINA	Tel.: +86 (755) 8203 2300 Tel.: +86 (10) 6849 2738
			Fax: +86 (755) 8203 2306 Fax: +86 (10) 6849 2662

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