FTB-1 Platform
EMPOWERING FRONLINE TECHNICIANS

The FTB-1 Platform is a modular platform optimized for fast, powerful, dedicated FTTH and Ethernet test applications

KEY FEATURES
Flexible connectivity: USB, mobile, Wi-Fi and Bluetooth capabilities
Utilities: supports third-party applications and all the tools that enable technicians to complete their work right in the field
Test management/reporting: lets you take advantage of the EXFO Connect environment to monitor field operations (local and remote)
PC-oriented: Intel ATOM processor with Windows Embedded Standard operating system, for optimized productivity and versatility
Power management: latest battery technology for unmatched operation autonomy

FROST & SULLIVAN
2011 BEST PRACTICES AWARD
GLOBAL PORTABLE FIBER OPTIC TEST EQUIPMENT MARKET SHARE LEADERSHIP AWARD
EXFO Assessing Next-Gen Networks
MAXIMUM CONNECTIVITY FOR MAXIMUM FIELD-TESTING EFFICIENCY

The result of EXFO’s time-proven expertise in portable platform design, the FTB-1 Platform is an open testing solution for network infrastructure construction and troubleshooting. The FTB-1’s built-in intelligence empowers frontline technicians to take field-testing efficiency to the next level.

Thanks to a highly “connected” set of tools—including Update Manager and compatibility with the EXFO Connect environment, which provides end-to-end operational visibility and centralized reporting capabilities throughout the entire test instrument pool—the FTB-1 delivers maximum return on your investment.

ADAPTED FOR DEDICATED APPLICATIONS. DEDICATED TO HELPING YOU ADAPT.

Thanks to its small format, ultra-powerful processing and highly intuitive interface, the FTB-1 is optimized to allow field technicians to carry out dedicated FTTH and Ethernet test applications simply and efficiently. Yet, its multiple connectivity possibilities and automated update capabilities ensure that users can test, process results and report them wherever, whenever, while resting assured that their platform is running the latest software version available.

### APPLICATIONS AND MODULES

**LAN/WAN**

**Module: FTB-720 LAN/WAN Access OTDR**

Access network testing

On the strength of best-in-class specifications and four test wavelengths, the FTB-720 LAN/WAN Access OTDR is optimized for fiber-optic contractors and private network operators, enabling them to fully test and qualify any type of fiber network.

**FTTH**

**Module: FTB-730 PON FTTx/MDU OTDR**

FTTH testing

With a dynamic range of up to 39 dB and enabling power meter and visual fault locator functionalities, the FTB-730 PON FTTx/MDU OTDR module allows fiber installers to seamlessly characterize splitters in PON FTTx and multiple dwelling unit (MDU) applications.

**Ethernet**

**Module: FTB-860 NetBlazer Ethernet Tester**

Ethernet testing up to 10G

Offering comprehensive, yet simple test suites, the FTB-860 NetBlazer Ethernet Tester enables field technicians to quickly and easily turn up, validate and troubleshoot Ethernet services, with full EtherSAM capabilities, from 10 Mbit/s to 10 Gbit/s.

**Fiber Inspection**

**Software: ConnectorMax Analyzer**

Connector endface analysis

Providing lightning-fast results in the first step of fiber-link testing, ConnectorMax is the industry’s first platform-based, automated inspection application; it delivers fast pass/fail assessment of connector endfaces and is specifically designed to save both time and money in the field.

### FEATURES

- USB, mobile, Wi-Fi and Bluetooth connectivity capabilities
- Supports third-party applications and all the tools that enable technicians to complete their work right in the field
- Lets you take advantage of the EXFO Connect environment to manage field testing/reporting operations as well as your platform pool
- Intel ATOM processor with Windows Embedded Standard operating system, for optimized productivity and versatility
- Latest battery technology for unmatched operation autonomy
- One GigE port and two USB 2.0 ports
- Windows Remote Assistance and Remote Control
- EXFO fiber inspection probe connector interface
- Display: TFT outdoor-enhanced LCD, 7-inch touchscreen
- Telcordia-compliant
SOFTWARE TEST TOOLS

This series of platform-based software testing tools enhance the value of the FTB-1 Platform, providing additional testing capabilities without the need for additional modules or units.

EXpert 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 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

THIRD-PARTY TEST TOOLS

Wireshark
This live-network packet capture utility makes it possible to look “inside” the packets and obtain data such as transmission time, source, destination, protocol type, etc. Users can then diagnose a problem or root out suspicious behavior. Wireshark is a standard utility on all FTB-1 platforms.

JPerf
This TCP performance testing tool can create TCP and UDP data streams, which measure the throughput of a network that is carrying them. Thanks to various user-definable parameters, technicians can rely on JPerf to optimize or tune a network under test.

Network Stumbler
Network Stumbler verifies wireless network configurations, enabling field technicians to identify areas that have poor coverage or wireless interference, and helping them to aim antennas for full effect and find unauthorized access points.

SOFTWARE UTILITIES

Update Manager
Ensure that your entire fleet of platforms is up-to-date with the latest software, and easily manage your maintenance contracts.

VNC configuration
The Virtual Network Computing utility allows technicians to easily communicate settings to remote colleagues.

Microsoft Internet Explorer
Access the Web directly from your platform interface.

Bluetooth file sharing
Share files from your FTB-1 to any Bluetooth-enabled device.

Wi-Fi connection
Display available Wi-Fi connections and save your default settings.
DESIGNED FOR EFFICIENCY

1. Power meter and VFL
2. Stylus
3. Two USB 2.0 ports
4. 1 GigE port
5. Head set
6. Fiber inspection probe video port
7. AC adapter
8. Back stand
9. Speaker out
10. Brightness
11. Keyboard/screen capture
12. Switch application
13. Power on/off
14. Battery LED
15. Module compartment
16. Battery
Connectivity
The FTB-1’s integrated wireless communication capabilities allow you to send reports anytime, anywhere using mobile, Wi-Fi or Bluetooth networking connections.

Update Manager
Stay current with the FTB-1 Update Manager, which enables you to easily manage the applications developed for your test solution. Thanks to EXFO’s feature enhancement program, it has never been easier to benefit from our latest innovation. Based on customer feedback, acute market trend analysis and compliance with the latest standards, EXFO is committed to ensuring that your product is at its best.
## TECHNICAL SPECIFICATIONS

<table>
<thead>
<tr>
<th>Feature</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Display</strong></td>
<td>Touchscreen, color, 800 x 480 TFT, 178 mm (7 in)</td>
</tr>
<tr>
<td><strong>Interfaces</strong></td>
<td>Two USB 2.0 ports</td>
</tr>
<tr>
<td></td>
<td>RJ-45 LAN 10/100/1000 Mbit/s</td>
</tr>
<tr>
<td></td>
<td>Fiber inspection probe connector port (video)</td>
</tr>
<tr>
<td></td>
<td>Built-in Bluetooth and Wi-Fi (hardware option)</td>
</tr>
<tr>
<td><strong>Storage</strong></td>
<td>8 GB internal memory (flash)</td>
</tr>
<tr>
<td></td>
<td>16 GB internal memory (flash), optional</td>
</tr>
<tr>
<td><strong>Batteries</strong></td>
<td>Rechargeable lithium-ion batteries</td>
</tr>
<tr>
<td></td>
<td>8 hours of operation as per Telcordia* (Bellcore)</td>
</tr>
<tr>
<td></td>
<td>TR-NWT-001138</td>
</tr>
<tr>
<td><strong>Power supply</strong></td>
<td>AC/DC adapter, input 100-240 VAC, 50-60 Hz, 1.6 A max, output 24 VDC, 3.75 A</td>
</tr>
<tr>
<td><strong>Computer</strong></td>
<td>Intel ATOM processor</td>
</tr>
<tr>
<td></td>
<td>Windows Embedded Standard operating system</td>
</tr>
</tbody>
</table>

## GENERAL SPECIFICATIONS

<table>
<thead>
<tr>
<th>Feature</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Size (H x W x D)</strong></td>
<td>190 mm x 252 mm x 66 mm</td>
</tr>
<tr>
<td>(7 1/2 in x 9 15/16 in x 2 3/8 in)</td>
<td></td>
</tr>
<tr>
<td><strong>Weight</strong></td>
<td>1.5 kg (3.3 lb)</td>
</tr>
<tr>
<td><strong>Temperature</strong></td>
<td>Operating: 0 °C to 50 °C (32 °F to 122 °F)</td>
</tr>
<tr>
<td></td>
<td>Storage: -40 °C to 70 °C (-40 °F to 158 °F)**</td>
</tr>
<tr>
<td><strong>Relative humidity</strong></td>
<td>0 % to 95 % non-condensing</td>
</tr>
</tbody>
</table>

* With extended-life battery.
** -20 °C to 60 °C (-4 °F to 140 °F) with the battery pack.

## ACCESSORIES

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>FP4S</td>
<td>400x Fiber Inspection Probe</td>
</tr>
<tr>
<td>FP4D</td>
<td>200x/400x Fiber Inspection Probe</td>
</tr>
<tr>
<td>GP-10-086</td>
<td>Rigid FTB-1 carrying case</td>
</tr>
<tr>
<td>GP-10-072</td>
<td>Semi-rigid FTB-1 carrying case</td>
</tr>
<tr>
<td>GP-302</td>
<td>USB mouse</td>
</tr>
<tr>
<td>GP-1002</td>
<td>Headset</td>
</tr>
<tr>
<td>GP-1008</td>
<td>VFL adapter (2.5 mm to 1.25 mm)</td>
</tr>
<tr>
<td>GP-2001</td>
<td>USB keyboard</td>
</tr>
<tr>
<td>GP-2016</td>
<td>10 feet RJ-45 LAN cable</td>
</tr>
<tr>
<td>GP-2028</td>
<td>Computer security cable kit</td>
</tr>
<tr>
<td>GP-2137</td>
<td>USB-to-RS-232 converter</td>
</tr>
<tr>
<td>GP-2138</td>
<td>DC car adapter/inverter</td>
</tr>
<tr>
<td>GP-2144</td>
<td>USB 16G micro-drive</td>
</tr>
<tr>
<td>GP-2200</td>
<td>Module receptacle back panel</td>
</tr>
<tr>
<td>GP-10-072</td>
<td>Semi-rigid FTB-1 carrying case</td>
</tr>
<tr>
<td>GP-302</td>
<td>USB mouse</td>
</tr>
<tr>
<td>GP-1002</td>
<td>Headset</td>
</tr>
<tr>
<td>GP-1008</td>
<td>VFL adapter (2.5 mm to 1.25 mm)</td>
</tr>
</tbody>
</table>

## PM-1 BUILT-IN POWER METER SPECIFICATIONS

<table>
<thead>
<tr>
<th>Feature</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Calibrated wavelengths (nm)</strong></td>
<td>850, 1300, 1310, 1490, 1550, 1625, 1650</td>
</tr>
<tr>
<td><strong>Optional CWDM calibrated wavelengths (nm)</strong></td>
<td>1270, 1290, 1310, 1330, 1350, 1370, 1390, 1410, 1430, 1450, 1470, 1490, 1510, 1530, 1550, 1570, 1590, 1610, 1638, 1625</td>
</tr>
<tr>
<td><strong>Power range (dBm)</strong></td>
<td>10 to −88 (InGaAs)</td>
</tr>
<tr>
<td></td>
<td>26 to −64 (GeX)</td>
</tr>
<tr>
<td><strong>Uncertainty (%)</strong></td>
<td>±5 % ± 3 pW (InGaAs)</td>
</tr>
<tr>
<td></td>
<td>±5 % ± 0.4 nW (GeX)</td>
</tr>
<tr>
<td><strong>Display resolution (dB)</strong></td>
<td>InGaAs: 0.01 = max to −76 dBm</td>
</tr>
<tr>
<td></td>
<td>0.1 = −76 dBm to −86 dBm</td>
</tr>
<tr>
<td></td>
<td>1 = −86 dBm to min</td>
</tr>
<tr>
<td></td>
<td>GeX: 0.01 = max to −54 dBm</td>
</tr>
<tr>
<td></td>
<td>0.1 = −50 dBm to −60 dBm</td>
</tr>
<tr>
<td></td>
<td>1 = −60 dBm to min</td>
</tr>
<tr>
<td><strong>Automatic offset nulling range</strong></td>
<td>Max power to −63 dBm for InGaAs</td>
</tr>
<tr>
<td></td>
<td>Max power to −40 dBm for GeX</td>
</tr>
<tr>
<td><strong>Tone detection (Hz)</strong></td>
<td>270/1000/2000</td>
</tr>
</tbody>
</table>

## VISUAL FAULT LOCATOR (VFL) (OPTIONAL)

<table>
<thead>
<tr>
<th>Feature</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Laser</strong></td>
<td>650 nm ± 10 nm</td>
</tr>
<tr>
<td><strong>CW</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Typical P_{out}</strong></td>
<td>in 62.5/125 µm: 3 dBm (2 mW)</td>
</tr>
</tbody>
</table>

## LASER SAFETY

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

### Notes

- a. At 23 °C ± 1 °C, 1550 nm and FC connector. With modules in idle mode. Battery operated.
- b. Up to 8 dBm.
- c. For ±0.05 dB, from 18 °C to 28 °C.
### ORDERING INFORMATION

**Model**  
FTB-1

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

**Memory**  
00 = 8 GB internal memory (flash)  
XMEM = 16 GB internal memory (flash)

**Battery**  
00 = Standard rechargeable lithium-ion battery  
EXT = Extended-life rechargeable lithium-ion battery

**Wi-Fi/Bluetooth hardware option**  
00 = Without RF components  
RF = With RF capability (Wi-Fi and Bluetooth)

**Power meter**  
00 = Without power meter  
VFL1 = Visual fault locator only  
VPM2X = VFL platform; PM; GeX detector  
VPM2X-CWDM = VFL platform; PM; GeX detector; CWDM wavelengths calibrated (from 1270 nm to 1610 nm)

**Software option**  
00 = Without software option  
IPT = Ping traceroute software  
FPSA = With fiber inspection probe analysis software  
FPSAMFT = ConnectorMax kit: Single-fiber analysis and reporting; multiple-fiber connectors wizard and reporting

**Probe**  
00 = Without probe  
FP45 = Inspection probe (400x)  
FP40 = Inspection probe (200x/400x)

**Connector adapter**  
FOA-14 = NEC D4; PC, SPC, UPC  
FOA-16 = SMA/905, SMA-906  
FOA-22 = FC/PC, FC/SPC, FC/UPC, FC/APC  
FOA-28 = DIN 47256, DIN 47258/APC  
FOA-32 = ST; ST/PC, ST/SPC, ST/UPC  
FOA-54 = SC; SC/PC, SC/SPC, SC/UPC, SC/APC)  
FOA-78 = Radial EC  
FOA-98S = E-2000 E-2000/APC  
FOA-98 = LC  
FOA-99 = MU  
WC2 = FOA/FC-ST-SC-LC

**Example:** FTB-1-S2-XMEM-EXT-RF-VPM2X-FOA-78-FP4S-FPSA

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**Note**  
a. Connector adapter available.