

# FTB-500 Platform

BOUNDLESS CAPABILITIES, TESTING UNLIMITED



PART OF THE  
EXFO | FTB Ecosystem

Powered by  
 Windows 8.1 Pro

 EXFO Connect  
Compatible



The FTB-500 platform provides boundless capabilities and expert multimodular design for true next-generation network testing.

## KEY FEATURES

**Connects anywhere:** USB, mobile, Wi-Fi, VPN and Bluetooth

**Loaded with utilities:** all the tools required to maximize field testing, plus third-party applications

**Like a PC:** Intel processor with Windows-based operating system

**EXFO Connect-compatible:** automated asset management; data goes through the cloud and into a dynamic database

## COMPLEMENTARY PRODUCT



Fiber Inspection Probe  
FIP-400B

**EXFO**

## SHAPE IT AS YOU SEE FIT.

### Massive processing power. Mix-and-match flexibility. Right out of multi-application wonderland.

The FTB-500 platform brings you, highly advanced applications and pushes the efficiency of your current applications to new heights. So go ahead: break new grounds, set new test-performance standards, and tame new technologies. Benefit from an all-in-one platform that you can build around your most unique requirements.



#### FTB-500 eight-slot platform

##### Distributed PMD

##### Distributed PMD analysis

Single-ended, span-by-span measurement of PMD, enabling targeted fiber upgrades and cost-effective deployment of 10/40/100 Gbit/s transmission.

##### Fiber analysis

##### Full fiber characterization

PMD, CD, OTDR/iOLM and connector inspection combined in a single solution for in-depth fiber characterization. Run FastReporter2 post-processing software while performing your acquisitions for faster data analysis and report generation directly on-site.

##### 100 Gbit/s

##### 100 Gbit/s testing applications

The most advanced hardware, ready for today and tomorrow's 100 Gbit/s applications.

##### ROADM/ POTS 10 Gbit/s

##### ROADM/POTS and 40 Gbit/s testing

Integrated optical and transport testing in a portable solution supporting OC-768, STM-256 and OTU3, as well as true in-band and Pol-Mux OSNR for ROADM, 40G and 100G networks.

All-in-one transport and datacom configuration supporting:

- › DS0/E0 to OC-768/STM-256
- › OTU1/OTU2/OTU3/OTU1e/OTU2e with FEC
- › 10/100M, Gigabit Ethernet and 10 Gigabit Ethernet (LAN/WAN)
- › 1x/2x/4x/10x Fibre Channel
- › Next-generation SONET/SDH (GFP, LO/HO VCAT and LCAS)



#### FTB-500 four-slot platform

##### ROADM and PTN

##### ROADM and PTN turn-up testing

Combines SONET/SDH, OTN, Ethernet and Fibre Channel analysis, as well as an optical spectrum analyzer with a built-in polarization controller.

##### CWDM

##### CWDM turn-up testing

Integrates two metro/CWDM OTDRs and a high-power (up to 23 dBm) optical spectrum analyzer (with built-in polarization controller) into a single portable solution.

##### Multiservice

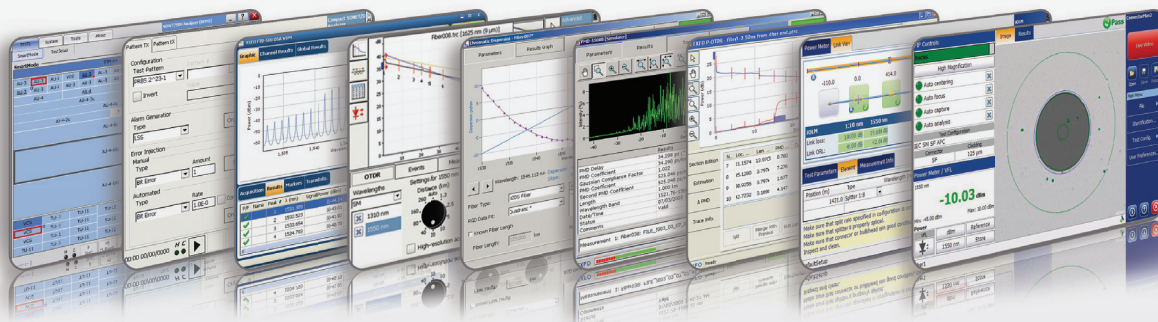
##### Multiservice testing

Simultaneously runs a 10 gigabit next-generation SONET/SDH analyzer, as well as 1 gigabit and 10 gigabit Ethernet analyzers, delivering IPTV test capabilities and TCP throughput assessment.

##### GigE/ 10 GigE

##### Gigabit/10 Gigabit Ethernet configurations

- › Gigabit Ethernet analyzer, OTDR and optical spectrum analyzer with polarization controller
- › Gigabit Ethernet analyzer, 10 gigabit Ethernet analyzer and OTDR



## A BROADER SCOPE OF TESTS. A BROADER RANGE OF MODULES. A BREADTH OF FRESH AIR.

The FTB-500 can house any of EXFO's FTB plug-and-play modules, enabling you to reconfigure your test solution as your test needs evolve. Combine physical and optical characterization applications with transport and datacom test modules covering next-generation 10G, 40G and 100G analysis.

### Optical

#### Optical test modules

Choose from the industry's most renowned line of OTDRs and most advanced dispersion analyzers.

OTDR	FTB-7xxx (D-E series)	MultiTest Module	FTB-3930
Optical Spectrum Analyzers	FTB-5230S, FTB-5240S, FTB-5240S-P and FTB-5240BP	PMD Analyzer	FTB-5500B
Single-Ended Dispersion Analyzer	FTB-5700	Chromatic Dispersion Analyzer	FTB-5800
Distributed PMD Analyzer	FTB-5600 (Industry first!)		

### Transport and datacom

#### Transport and datacom test modules

Discover the most compact and powerful SONET/SDH, OTN, Fibre Channel and Ethernet analyzers—the new standards in next-generation network testing.

40/43 Gigabit SONET/SDH Test Module	FTB-8140 Transport Blazer	Fibre Channel and Ethernet Test Modules	FTB-8525/8535 Packet Blazer
Next-Generation SONET/SDH Test Modules	FTB-8120/8130 Transport Blazer	100G/40G Ethernet Test Module	FTB-85100G Packet Blazer
SONET/SDH Test Module	FTB-8115 Transport Blazer	DSn/PDH and SONET/SDH Electrical Test Module	FTB-8805 Power Blazer
DSn/PDH and SONET/SDH Electrical Test Module	FTB-8105 Transport Blazer	10G Multiservice Test Module	FTB-8830NGE Power Blazer
Multiservice Test Modules	FTB-8120NGE/8130NGE Power Blazer	40G/100G Multiservice Test Module	FTB-88100G Power Blazer
10 Gigabit Ethernet Test Module	FTB-8510G Packet Blazer	10M to 100G Multiservice Test Module	FTB-88100NGE Power Blazer
Ethernet Test Modules	FTB-8510B Packet Blazer		

### Fiber inspection

#### Connector endface analysis software

Providing lightning-fast results in the first step of fiber-link testing, ConnectorMax2 is a powerful, platform-based, automated inspection application that it delivers fast pass/fail assessment of connector endfaces and is specifically designed to save both time and money in the field.

## ENJOY TESTING AT YOUR SWIFT PACE.

### Faster setups. Faster testing. Faster everything.

When you're ready to start your day, you want to get it started quickly. The FTB-500 "understands" this, enabling you expedite the setup process and get down to testing so that you can get to your next location faster and breeze through your tight day-to-day schedule.

Loading a 10G BER test configuration from your Favorites list

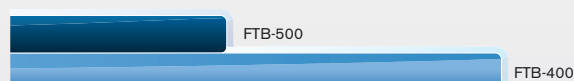


Generating a .pdf file for a 10G BER test



Setting up a complex test case:

OTU2/ODU2 + ODU1 (all TCMs enabled)/STM-16/LOP VCG/AU-4/TU-11-64v/BER



Timing comparison between the new FTB-500 and the FTB-400.



## FIBER CONNECTOR INSPECTION AND CERTIFICATION—THE ESSENTIAL FIRST STEP



Taking the time to properly inspect a fiber-optic cable can prevent a slew of problems down the line, saving you time, money and headaches.

### FIP-430B | The First Fully Automated Fiber Inspection Probe for the Field

Housing a unique automatic focus adjustment system, the FIP-430B automates each operation in the connector endface inspection sequence, transforming this critical process into one quick and easy step that can be performed by technicians of all skill levels.

**100%**  
Automated<sup>a</sup>

**1-step**  
process<sup>a</sup>

**57%**  
shorter test time<sup>b</sup>

Three models to fit your budget:

FEATURES	Basic FIP-410B	Semi-Automated FIP-420B	Fully-Automated FIP-430B
Three magnification levels	✓	✓	✓
Image capture	✓	✓	✓
Five-megapixel CMOS capturing device	✓	✓	✓
Automatic fiber image-centering function	✗	✓	✓
Automatic focus function	✗	✗	✓
Onboard pass/fail analysis	✗	✓	✓
Pass/fail LED indicator	✗	✓	✓



Read the FIP-400B specification sheet or visit [www.EXFO.com/keepthefocus](http://www.EXFO.com/keepthefocus) for more information.

#### Notes

a. Model FIP-430B only

b. Data sourced from EXFO's case study, with calculation based on typical analysis time.

## SOFTWARE TEST TOOLS

### SOFTWARE APPLICATIONS



Providing lightning-fast results in the first step of fiber-link testing, ConnectorMax2 is a powerful, platform-based, automated inspection application; it delivers quick pass/fail assessment of connector endfaces and is specifically designed to save both time and money in the field.

### THIRD-PARTY TEST TOOLS

#### Wireshark

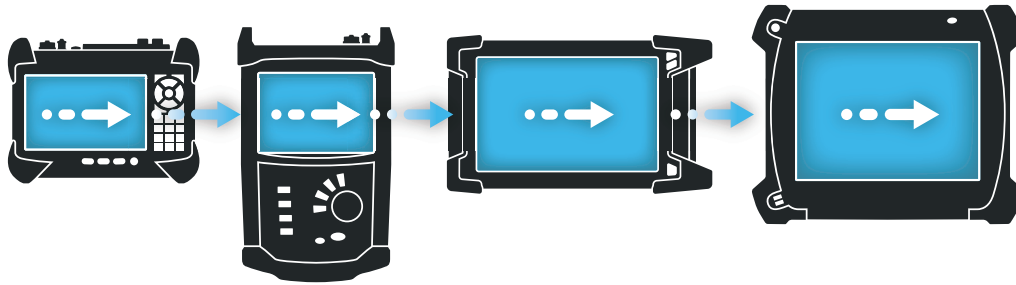
This live-network packet-capture utility makes it possible to look "inside" the packets and obtain data such as transmission time, source, destination, protocol type, etc. Users can then diagnose a problem or root out suspicious behavior. Wireshark is a standard utility on all FTB-500 platforms.

### 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-500 to any Bluetooth-enabled device.
Wi-Fi connection	Display available Wi-Fi connections and save your default settings.

## CONNECTED ANYWHERE, ANYTIME

The value of connectivity resides in the ability to connect your platform anywhere, at any time. That's why we have equipped our platforms with the technology to be as flexible as possible. Whether to transfer data to the cloud, to a device, or to acquire a platform's location via GPS, you have what it takes.



### Bluetooth – Wi-Fi – 3G – LTE



#### Secure VPN communications

Equipped with onboard VPN capabilities our platforms provide a secured connection to those who need it. Secure communications are now within your reach.



#### 3G/LTE mobility

Get connected wherever you are: choose any Windows-supported 3G/LTE USB dongle and connect to your wireless service provider.



#### Remote control

Use remote assistance to troubleshoot units in the field, trigger tests remotely, or help a technician with a problem. It's hard to imagine working without it.



#### Instant messaging

Since our platforms are Windows-based, they function just like a PC. You can even install chat tools to quickly communicate with your team.

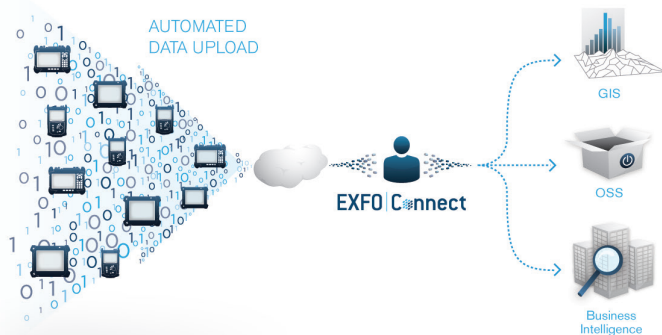
# EXFO | Connect

## EXFO CONNECT MAKES YOUR DATA MEAN BUSINESS

EXFO Connect completely redefines integrated testing with its cloud-hosted solution. Equipped with powerful database and application technologies, EXFO Connect provides an automated, secure environment that links together your EXFO test instruments, and centralizes captured data across your organization. With its powerful correlation engine, EXFO Connect enables you to convert captured data into actionable information through customized test-data reporting and features that streamline test operations from build-out to maintenance.

### Test Equipment Manager

EXFO Connect's Test Equipment Manager is an automated application that centralizes the management of all EXFO test instruments. A repository for software loads, licenses and platform profiles, it helps managers handle constant demands for software updates. EXFO Connect also keeps track of equipment and ensures field technicians are equipped with up-to-date capabilities.

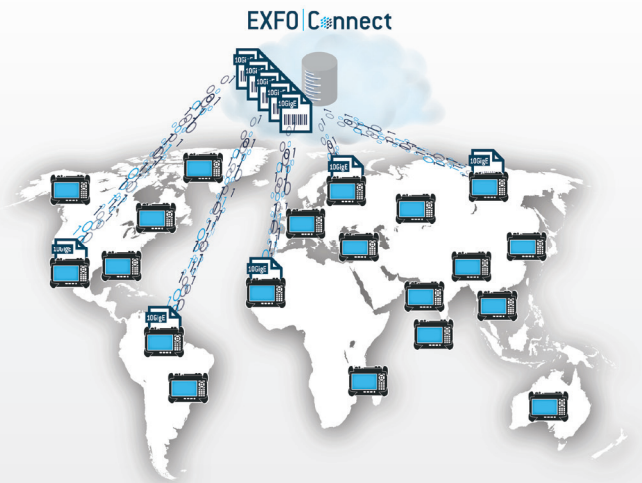


### Test Data Manager

EXFO Connect's Test Data Manager is an automated application that provides a secure and centralized environment in which test data is collected, archived and referenced for future use. With test results at their fingertips, managers can create birth certificates, generate reports and set benchmarks.

### FTB Anywhere: Floating Test Licenses

FTB Anywhere™ is a shared test license capability for the award-winning FTB Ecosystem. This unique approach in delivering advanced test applications enables network operators to purchase a certain number of cloud-hosted licenses that can be shared instantly with their technicians, wherever they happen to be.



DESIGNED FOR PORTABILITY, MANAGEABILITY, VIEWABILITY—IN SHORT, FOR EASABILITY.



- |                             |                              |
|-----------------------------|------------------------------|
| 1 E-Z grip bumpers          | 12 Headset audio out         |
| 2 Back footstand            | 13 Microphone audio in       |
| 3 Power cable strain relief | 14 DB9 serial port           |
| 4 Internal power supply     | 15 Power meter/VFL           |
| 5 Bottom footstand          | 16 Stylus and enclosure      |
| 6 Module finger screws      | 17 Application-specific LEDs |
| 7 Express Card              | 18 Power ON/OFF buttons      |
| 8 Ethernet port             | 19 Platform LEDs             |
| 9 VGA port                  | 20 Front USB ports           |
| 10 Two USB 2.0 ports        | 21 Control buttons           |
| 11 Videoprobe port          | 22 Speaker                   |

SPECIFICATIONS<sup>a</sup>

Central processing unit (CPU)	Intel Core 2 Duo
Display	Touch screen, color TFT, 800 x 600 TFT, 307 mm (12.1 in)
Interfaces	Ethernet port Fiber probe port ExpressCard port 34 mm format Serial RS-232 port Monitor port Four USB 2.0 ports Standard PC mic in and speaker out ports (3.5 mm)
Storage	Internal 80 GB hard drive minimum with G-shock protection Flash USB drive (1 GB, 2 GB and 8 GB optional) ExpressCard memory card (16 GB and up, optional) External USB read/write DVD drive (optional)
Batteries <sup>b</sup>	Eight-slot configuration: three rechargeable Li-ion smart batteries (total of 207 W•h) Four-slot configuration: two rechargeable Li-ion smart batteries (total of 138 W•h)
Power supply	Eight-slot configuration: AC input: ~ 100 – 240 V; 50/60 Hz; 4.8 A Four-slot configuration: AC/DC adapter, input: ~ 100 – 240 V; 50/60 Hz; 4.8 A, output: --- 24 V; 8.33 A

## GENERAL SPECIFICATIONS

Temperature operating storage <sup>c</sup>	0 °C to 50 °C (32 °F to 122 °F) –40 °C to 70 °C (–40 °F to 158 °F)
Relative humidity	0 % to 95 % (non-condensing)
Size (H x W x D)	Eight-slot configuration: 366 mm x 296 mm x 216 mm (11 11/16 in x 14 7/16 in x 8 1/2 in) Four-slot configuration: 366 mm x 296 mm x 146 mm (11 11/16 in x 14 7/16 in x 5 3/4 in)
Weight <sup>d</sup>	Eight-slot configuration: 10.9 kg (24 lb) Four-slot configuration: 8.5 kg (18.7 lb)

## ACCESSORIES

GP-10-047B	Semirigid carrying case with wheels and handle (four-slot platform)	GP-2090	Extra Li-ion smart battery
GP-10-056B	Semirigid carrying case with wheels and handle (eight-slot platform)	GP-2091	USB keyboard (USB port)
GP-10-075	Universal hard carrying case (eight-slot platform)	GP-2144	USB memory stick (16GB)
GP-10-078	Universal hard carrying case (four-slot platform)	GP-2093	Wi-Fi Pico USB adapter
GP-302	USB mouse	GP-2100	DVD ±R writable 8x external USB 2.0
GP-2016	RJ-45 LAN cable (10 ft)	GP-2101	Cable RS232 straight F-M
GP-2028	Computer security cable kit	GP-2112	3G Universal USB dongle
GP-2086	Bluetooth USB Adapter	GP-2113	GPS USB dongle

PM-500 BUILT-IN POWER METER SPECIFICATIONS (OPTIONAL)<sup>e</sup>

Calibrated wavelengths (nm)	850, 1300, 1310, 1490, 1550, 1625, 1650
Power range (dBm)	10 to –86
Uncertainty (%) <sup>e</sup>	±5 % ± 3 pW (up to 5 dBm)
Display resolution (dB)	0.01 = max to –76 dBm 0.1 = –76 dBm to –86 dBm
Automatic offset nulling range <sup>f</sup>	Max power to –63 dBm
Tone detection (Hz)	270/1000/2000

## Notes

- a. All specifications valid at 23 °C (73 °F).  
b. Standard recharge time is 4 h. Recharge temperature: 0 °C to 45 °C (32 °F to 113 °F).  
c. Not including internal batteries. Battery storage temperatures: –20 °C to 60 °C (–4 °F to 140 °F) for shipping, and –20 °C to 45 °C (–4 °F to 113 °F) for long-term storage.  
d. Platform with batteries (three for the eight-slot configuration, and two for the four-slot configuration) and without modules.  
e. At 23 °C ± 1 °C, at 1550 nm and with an FC connector. With modules in idle mode. Battery-operated.  
f. For ±0.05 dB, from 18 °C to 28 °C.

## VISUAL FAULT LOCATOR (VFL) (OPTIONAL)

Laser, 650 nm  $\pm$  10 nm

CW

Typical  $P_{out}$  in 62.5/125  $\mu$ m: 2 dBm (1.6 mW)

## LASER SAFETY



## ORDERING INFORMATION

FTB-500-XX-XX-XX-XX-XX-XX-XX

## Display

S1 = TFT active screen  
S2 = Outdoor-enhanced screen

## Module capacity

QTR = Four-slot module capacity  
OCT = Eight-slot module capacity

## Batteries

00 = Without batteries  
BTY = With batteries

## Power meter

00 = Without power meter  
VPM3 = VFL, power meter with InGaAs detector

Connector adapter<sup>a</sup>

FOA-12 = Biconic  
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 47256/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-96B = E-2000 E-2000/APC  
FOA-98 = LC  
FOA-99 = MU

Inspection Probe Base Tips<sup>b</sup>

APC = Includes FIPT-400-U25MA and FIPT-400-SC-APC  
UPC = Includes FIPT-400-U25M and FIPT-400-FC-SC

## Inspection Probe Models

00 = Without inspection Probe

FP410B = Digital video inspection probe<sup>c</sup>  
Triple magnification

FP420B = Analysis digital video inspection probe<sup>c</sup>  
Automated pass/fail analysis  
Triple magnification  
Autocentering

FP430B = Automated analysis digital video inspection probe<sup>c</sup>  
Automated focus  
Automated pass/fail analysis  
Triple magnification  
Autocentering

Example: FTB-500-S1-OCT-BTY-VPM3-FOA-22-FP430B-APC

## Notes

- a. Available if power meter is selected.  
b. Available if inspection probe is selected.  
c. Includes ConnectorMax2 software.

EXFO Headquarters > Tel.: +1 418 683-0211 | Toll-free: +1 800 663-3936 (USA and Canada) | Fax: +1 418 683-2170 | info@EXFO.com | [www.EXFO.com](http://www.EXFO.com)EXFO serves over 2000 customers in more than 100 countries. To find your local office contact details, please go to [www.EXFO.com/contact](http://www.EXFO.com/contact).

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