

# LTB-2 rackmount platform

UP TO 4 X 100G IN A 1U SHELF FOR CORD, HERD AND DCI

- The LTB-2 is a powerful, scalable, two-slot modular rackmount platform designed for optical and multiservice testing in central office/headend environments, data centers and DCI's, and labs/manufacturers.

PART OF THE  
EXFO|FTB ecosystem



EXFO TFv  
Test function virtualization



EXFO Connect  
compatible



## KEY FEATURES AND BENEFITS

**Flexible, scalable and modular:** Compact 1U modular solution with in-rack or tabletop applications. Supports OTDR testing, optical switches, light sources, optical power meters, and datacom and transport protocol testing, including simultaneous testing of up to four times 100G

**Hot swappable:** Intelligent module hot-swap capability, enabling a quick transition from platform to platform, or from rackmount platform to portable platform without powering down

**Industrial-grade computer design:** Simple, easy-to-use design powered by a quad-core processor with the Microsoft Windows operating system

**Out-of-band management:** Optimal remote access for maintenance or initial setup using the Intel® Active Management Technology (Intel® AMT)

**Connectivity:** USB 3.0, LAN, Sync and AMT port for maximum connectivity options

**Accessibility:** Remote access capability via VNC or Remote Desktop. Third-party tools can be easily installed offering a versatile range of applications.

## RELATED PRODUCTS AND APPLICATIONS



100G multiservice test module  
FTBx-88260/FTBx-88200NGE



10G multiservice test modules  
FTBx-8870/8880



MEMS optical switch  
FTBx-9160 (1x2, 1x4 configuration)

## EXFO'S LTB-2 PLATFORM

The LTB-2 first-in-class platform is a versatile solution addressing numerous transport and datacom applications. Whether in the central office/exchange, design lab or during the manufacturing process, the LTB-2 provides users with added testing versatility and power for today's complex networks.



### DO MORE!

The Windows 10 operating system allows for a wide choice of third-party applications and supports an extensive range of USB devices.

- Start faster and multitask
- Use the 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 email and over-the-top (OTT) apps



Record and automate actions



Share files via cloud-based storage

## TRANSPORT AND DATACOM MULTISERVICE TEST MODULES



**FTBx-88200NGE**

- 40G/100G CFP4 and QSFPx high-speed module
- Ethernet testing including 10 GigE, RFC 6349 and EXFO's iSAM for 100G testing
- OTN multistage, multiplexing testing capabilities with ODU0 and ODUflex support; OTN multichannel and mix-mapping testing up to 80 x ODU0 channels
- Up to FC16X Fibre Channel true wire-speed traffic generation and monitoring
- 5G support CPRI/eCPRI
- Fast, intelligent transceiver validation with iOptics



**FTBx-88260**

- 1G/10G/25G/40G/50G/100G dual port capability
- Supported interfaces: copper SFP/SFP+, SFP, SFP+, SFP28, QSFP+, QSFP28, CFP4 and AOC cables
- Ethernet testing including RFC 6349 and EXFO's iSAM for 100G testing
- OTN multistage, multiplexing testing capabilities with ODU0 and ODUflex support
- Up to FC32X Fibre Channel true wire-speed traffic generation and monitoring
- 5G support CPRI/eCPRI, including eCPRI 10G and 25G
- Fast, intelligent transceiver validation with iOptics



**FTBx-8870/8880**

- Ethernet testing including 10 GigE dual port, OTN, RFC 6349 and EXFO's iSAM
- SONET/SDH, DSn/PDH, ISDN PRI, FTTA, Fibre Channel and packet synchronization
- 5G support CPRI/eCPRI
- Fast, intelligent transceiver validation with iOptics

## OPTICAL TEST MODULES

### HIGH-PERFORMANCE POWER METER



**FTBx-1750**

- Fast, accurate and flexible power measurements in a platform-based solution
- Remote measurement head for high-power readings

### VARIABLE ATTENUATOR



**FTBx-3500**

- Ideal for transceiver testing and system verification in demanding 24/7 production environments
- Power monitoring and BER testing

### OPTICAL SWITCHES



**FTBx-9110/FTBx-9160**

- Provide highly accurate and repeatable fiber-to-fiber switching
- MEMs-based design or opto-mechanical models available
- From 1x2 up to 1x32 configurations



**LTBe-9110**

- Repeatable fiber-to-fiber switching in a compact format
- Singlemode 1x4 and 1x8
- ½U rackmount casing

### UTILITY MODULE



**FTBx-9600**

- The utility module can integrate couplers and splitters into the LTB-12 platform
- 1x2 up to 1x8 couplers with various ratios

### LIGHT SOURCES



**FTBx-2150**

Single or multiwavelength, multimode LED diodes and singlemode DFB lasers for insertion loss and optical return loss testing



**FTBx-2250**

Broadband light source, covering all bands required for telecommunication applications and PON testing



**FTBx-2850**

µITLA continuous wave (CW) tunable laser with a high-power output, narrow linewidth and high-resolution tunability for coherent/OFDM transmission and WDM network emulation

### OTDR MODULES



**FTBx-720C**

Ideally designed OTDR for everyday field testing in any access network. With an iOLM application for both singlemode and multimode testing, it's the most automated and intelligent troubleshooting tool for FTTH, LAN and data centers



**FTBx-730C**

Seamlessly characterize splitters in PON FTTH and MDU applications



**FTBx-735C**

High-resolution OTDR designed for metro network testing and splitter characterization in PON FTTH applications



**FTBx-750C**

High dynamic range combined with high resolution for highly accurate fiber characterization

## SOFTWARE TEST TOOLS

These platform-based software testing tools enhance the value of the LTB-2 platform, providing additional monitoring and inspection testing capabilities.

### Wireshark—Third-party test tools

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.

### Intel® Active Management Technology (Intel® AMT)

Remotely manage the platform (out-of-band management) without being dependent on the operating system or the state of the unit. The AMT Web-based application simplifies the out-of-the-box experience and, as an open-source solution, allows programmable remote troubleshooting recovery with extended capabilities and increased effectiveness.



### EXFO Remote ToolBox

The Remote ToolBox application remotely controls T&D modules installed on the platform using a remote PC and an Ethernet connection.

### EXFO TFv



EXFO TFv—Test function virtualization is the industry’s first suite of defined offerings that focuses on test function virtualization. EXFO TFv offers all the benefits of virtualization through the seamless enablement of test functions on any EXFO test asset, at any time. This suite is ideal for lab managers who are looking to scale their testing requirements to their specific user needs. Under the EXFO TFv umbrella are FTB Anywhere floating licenses and FTB OnDemand time-based software licenses.

#### Benefits

- Maximizes ROI on test equipment expenditures
- Provides financial flexibility with spending options tailored to CAPEX and/or OPEX
- Optimizes test-asset investments and ensures the timely availability of required test functionality
- Enables carriers to gradually increase their test capabilities to match the rollout of new service offerings

#### FTB Anywhere: floating test licenses

FTB Anywhere allows EXFO’s platform users to share floating test licenses and get the required functionality—anywhere, anytime. In short, the customer owns the software licenses and can share them between EXFO’s platforms.

#### FTB OnDemand: time-based software licenses

Part of EXFO TFv, FTB OnDemand allows customers to activate a wide range of test functionalities (e.g., 100G testing) for a specific period of time to match their exact needs. This flexibility is perfect for situations where a test function is only needed for a specific project or for a new service that is still in the early ramp-up stage.

**Automate asset management. Push test data in the cloud. Get connected.**

### EXFO | Connect

EXFO Connect pushes and stores test equipment and test-data content automatically in the cloud, allowing you to streamline test operation from build-out to maintenance.

## 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 scope 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.

### 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 adjustment			•
Onboard pass/fail analysis		•	•
Pass/fail LED indicator		•	•

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

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

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

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

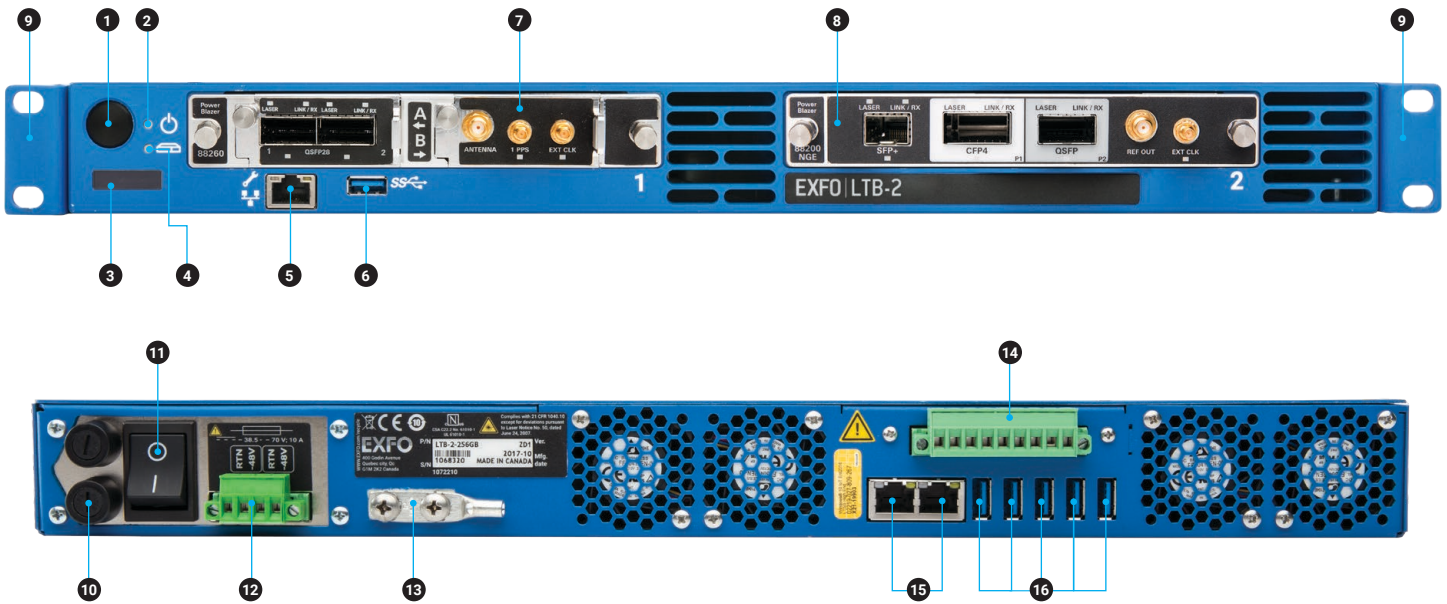
a. Model FIP-430B only.

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

**ADAPTED FOR DEDICATED APPLICATIONS. DEDICATED TO HELPING YOU ADAPT.**

Thanks to its small format, ultra-powerful processing and highly intuitive interface, this platform is optimized to enable lab users to carry out dedicated Ethernet and OTN test applications simply and efficiently.

- |                              |                                |                           |
|------------------------------|--------------------------------|---------------------------|
| 1 Power button               | 7 Module-Slot 1                | 13 Ground lug             |
| 2 Power LED                  | 8 Module-Slot 2                | 14 Dry contact relays (3) |
| 3 System information display | 9 Removable rackmount brackets | 15 Ethernet ports (2)     |
| 4 Status LED                 | 10 -48V input circuit fuses    | 16 USB 3.0 ports (5)      |
| 5 Ethernet management port   | 11 Main power switch           |                           |
| 6 USB 3.0 port               | 12 -48V dual feed input        |                           |



## SPECIFICATIONS

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

Mainframe	Quad-core Intel processor/16 GB RAM/Windows 10
Interfaces	3 x RJ45 LAN 10/100/1000 Mbit/s 6 x USB 3.0 port
Storage	256 GB SSD
Power supply	Dual -48 V input, 10 A

### GENERAL SPECIFICATIONS

Size (H x W x D) <sup>b</sup>	44 mm x 482 mm x 262 mm (1 3/4 in x 19 in x 10 5/16 in)
Weight <sup>b</sup>	4.9 kg (11 lb)
Temperature	Operating -5 °C to 40 °C (23 °F to 104 °F) Storage -40 °C to 70 °C (-40 °F to 158 °F)
Relative humidity	0 % to 95 % non-condensing

### ACCESSORIES

GP-130	GPIB cable (6 feet/2 meters)	GP-2258	USB to GPIB adapter
GP-2016	RJ45 LAN cable (10 feet)	GP-3122	External AC/DC 48V power supply with power cord
GP-2256	FTBx module slot blank cover	GP-3123	RTU-2 rackmount brackets (kit of 2)

### LASER SAFETY



- a. All specifications valid at room temperature.  
b. Size and weight inclusive of rackmount brackets.

### ORDERING INFORMATION

LTB-2-XX

Power supply ■

DC = Internal DC 48V power supply<sup>a</sup>

AC = External DC 48V adaptor with power cord

Example: LTB-2-DC

- a. Default configuration

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