SPEC SHEET

FTBx-88800 Series

TAKE 800G FROM LAB TO LIVE

- Compact, powerful 800G traffic generation and monitoring.

KEY FEATURES AND BENEFITS

- Unique single-port test configuration: supports QSFP optics including 800G, 400G and 200G rates
- Install it in the latest FTB-1 Pro platform for the industry's first compact, portable 800G test solution that moves anywhere in the lab or beyond with ease
- Achieve 3.2 TB by combining four FTBx-88800 Series modules into EXFO's LTB-8 3RU rackmount platform
- Compliant with the Ethernet Technology Consortium's (ETC) 800G standard (800G ETC)
- Validate 800G signal-breakout accuracy across multiple configurations (i.e., 2x 400GE, 8x 100GE or 4x 200GE)
- Start up, control and run tests offsite with remote accessibility anytime, anyplace, anywhere. Perfect for distance work or overseeing and training new team members from afar.
- Integrate modules into EXFO's end-to-end optical transceiver test solution for complete 800G electro-optical transceiver compliance validation
- Test 800GE, 400GE and 200GE links using a single FTBx-88800 Series module

RELATED PRODUCTS AND ACCESSORIES

Platform
FTB-1v2 HPDC

Rackmount platform
LTB-8

SHIFT INTO HYPERDRIVE WITH 800G

The network communications industry is migrating once again—this time the shift is from 400G to 800G. Early 800G implementations (8x 100G) are starting to appear and the rush is on to develop and validate the resulting new wave of high-speed devices.

Transceiver vendors, chipset developers, network equipment manufacturers, hyperscalers, and optical R&D labs are all facing growing yet constant challenges related to developing and implementing the solutions required to support this latest global network transformation.

In this rushed and complex environment, members of the Ethernet-ecosystem community need reliable test equipment to design, manufacture and qualify emerging 800G technology.

EMPOWER YOUR LAB

The FTBx-88800 Series is a powerful 800G test solution that's compatible with EXFO's latest FTB-1 Pro portable and LTB-8 rackmount platforms. It's perfectly suited for developers who need to validate interoperability and compliance with the latest 800G standards, such as those set by the Ethernet Technology Consortium (ETC). Take 800G testing from lab to lab with the FTBx-88800 Series in the latest version of the FTB-1 Pro and experience the industry's first portable, compact 800G test solution. Featuring transceiver breakout testing and support for various transceiver form factors, the FTBx-88800 Series delivers the ultimate in speed and flexibility to 800GE test programs.

800G framed/unframed BERT testing capabilities

- Test pattern monitoring
- MDIO/I2C for all interfaces read/write
- Alarms/errors generation and monitoring
- Per lanes PRBS unframed testing with pass/fail verdict
- CMIS support with loopback testing

Advanced testing capabilities

- BER monitoring
- Advanced error analysis
- SDT measurement
- Unframed BER testing

EtherBERT

Unframed BERT

DESIGNED FOR FLEXIBILITY

A flexible solution that can adapt and adjust to the fast evolution of transceivers while providing multirate support.

MULTIPORT CAPABILITIES

FTB-1 Pro high-power dual-carrier (HPDC)

This high-power dual carrier configuration is the latest offering of the FTB-1 Pro platform. It combines all the power required for testing high speeds (up to 800G) with a compact portable design that lets developers take it anywhere inside the lab, or beyond.

LTB-8 rackmount platform

The LTB-8 is a powerful, scalable eight-slot rack-mount platform designed for advanced lab and manufacturing applications. The LTB-8 can support four FTBx-88800 test modules, allowing for the **simultaneous testing of 4x 800G ports**.

Combine four FTBx-88800 Series modules into EXFO's LTB-8 rackmount platform for 4x 800GE ports capable of either 800G ETC, 8x 100GE, 2x 400GE or 4x 200GE configurations, acceleratring your 800G developments.

SOFTWARE TEST TOOLS

These platform-based software testing tools enhance the value of the FTB-1v2 HPDC and LTB-8 platforms, providing additional monitoring and inspection testing capabilities.

Remote control

The Windows-based design enables remote operation through TeamViewer, Remote Desktop (RDP), Virtual Network Computing (VNC), Microsoft Teams and the free remote software, EXFO Remote Toolbox:

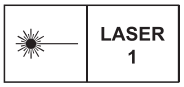
- Perform tests and evaluations remotely
- Enjoy easy remote access by connecting to a fixed/wireless Ethernet network or hotspot—no need to connect to the customer network
- Perform automation tasks using SCPI and Python in an automated test environment

SPECIFICATIONS

MECHANICAL AND ENVIRONMENTAL SPECIFICATIONS

Size (H x W x D)	51 mm x 159 mm x 187 mm (2 in x 6 1/4 in x 7 3/8 in)
Weight	0.85 kg (1.87 lb)

LASER SAFETY



Module: The host unit that you use with your module may have different laser classes. Refer to the host unit documentation for exact information.

SUMMARY OF KEY FEATURES

Compliance testing	IEEE 802.3ba and IEEE 802.3bs standard
Interface support	QSFP-DD MSA revision 4.0, 2 x 400G and 8 x 100G
Line rate	425/106.25(single lambda)
Physical-layer validation	400GAUI lane-error generation and monitoring PCS lane mapping and monitoring capability Per-lane skew generation and measurement PCS error generation and monitoring per lane Full MDIO/I2C read/write access
Transceiver validation	QSFP-DD800
Power measurement per lane	Optical channel power measurement with color indicators
Frequency measurements	Allow users to measure the received frequency per wavelength (in Hz) in the used of parallel optics
Frequency offset	Offsetting of the transmitted signal's clock on a selected interface, and monitoring
BERT	BERT framed and unframed testing using different parameters different frame sizes, including EMIX
Service disruption time (SDT)	Service disruption time measurements based on no-traffic mode, with statistics including longest disruption time,shortest, last, average, count, total and pass/fail thresholds
Error injection mode	Manual, rate and continuous (maximum rate)
Layer 2 MAC address and Ether type edition available	Q-in-Q capability with the ability to go up to three layers of stacked VLANs
Rx frame-size analysis	< 64, 65 - 127, 128 - 255, 256 - 511, 512 - 1023, 1024-1518 and > 1518
Rx rate	Line utilization (%), Ethernet bandwidth (Mbit/s), frame rate (frame/s), and frame count
Ethernet alarms	Link down, local fault detected, local fault received, remote fault, LOA
Ethernet errors	FCS, jabber, runt, undersize and oversize
PCS lane alarms and errors	LOS, LOC-lane, LOAML, excessive skew, Inv. Marker, Pre-FEC SYMB and Pre-FEC-bit
Skew insertion	Per-lane skew generation and measurement range 0 to 10550
PCS logical lane mapping	Manual and random
FEC	Generation and analysis of FEC correctable and uncorrectable errors, local and remote degraded SER monitoring (error-free and uncorrectable) and percentage
FEC statistics	Number of symbol errors per correctable codeword, number of pre-FEC symbol errors and bit statistics, codeword count
Remote access	Supported via EXFO Remote ToolBox, Remote Desktop, VNC and EXFO Multilink for multiuser support
Automation	Wide range of commands available per application to allow test automation
Reporting	Test results are included in a report that can be generated in different formats: pdf, html and json

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EXFO serves over 2000 customers in more than 100 countries. To find your local office contact details, please go to www.EXFO.com/contact.

  Printed in Canada 23/03