8510

NETWORK TESTING

ETHERNET TEST MODULE

FTB-8510 Packet Blazer

- Fully integrated functionality for assessing the performance of Ethernet transport networks
- Packet-jitter measurement for assessing the capability of Ethernet transport networks to transmit delay-sensitive traffic such as voice over IP (VoIP)
- Throughput, burstability (back-to-back), latency and frame loss measurements
- Remote control via the LAN connection under test, for end-to-end performance testing

Assessing the Performance of Ethernet Services

The FTB-8510 Packet Blazer™ brings performance assurance to Ethernet-based services. Its wide range of test functionalities provides all the necessary measurement tools for verifying service-level agreements (SLAs) between service providers and their customers.

This FTB-400-housed module tests transparent connectivity in its native format: 10/100/1000Base-T, 1000Base-SX, 1000Base-LX and 1000Base-ZX for LAN-to-LAN services delivered via ATM, frame relay, Next-Generation SONET/SDH, SONET/SDH hybrid multiplexers, switched Ethernet, VLANs, dark fiber, WDM or other means.

Combined with its rack-mounted manufacturing/R&D-environment counterpart, the IQS-8510 Packet Blazer, the FTB-8510 simplifies and speeds up the deployment of Ethernet services.

The FTB-8510 Packet Blazer Test Module is housed in the FTB-400 Universal Test System, EXFO's tough, all-in-one portable platform. Also shown, the FTB-8520 Packet Blazer SAN Test Module.

KEY FEATURES

- Measures throughput, back-to-back, latency and frame loss as per RFC 2544
- Performs packet-jitter measurement (frame-delay variation as per RFC 3393), assessing the capability of Ethernet transport networks to transmit delay-sensitive traffic such as voice over IP (VoIP)
- Simultaneous traffic generation and reception at 100 % wire speed for 10/100/1000Base-T, 1000Base-SX, 1000Base-LX or 1000Base-ZX full-duplex networks at all packet sizes
- Transmits and analyzes up to 10 streams, perfect for installing, commissioning and maintaining layer-2 Ethernet networks
- Dual test set feature enables end-to-end performance testing (as specified by leading standards bodies) by controlling a remote Packet Blazer via the LAN connection under test
- Tests transparent LAN services (TLS), thanks to wire-speed, full-duplex 10, 100 or 1000 Mb/s traffic-generation capabilities
- Dual test ports for lab benchmarking of Ethernet devices
- Easy-to-use smart user interface (SUI) for configurable screens, customization of test routines, as well as real-time and historical performance reporting
- EtherBERT™ for bit-error-rate testing of 10, 100 and 1000 Mb/s Ethernet circuits

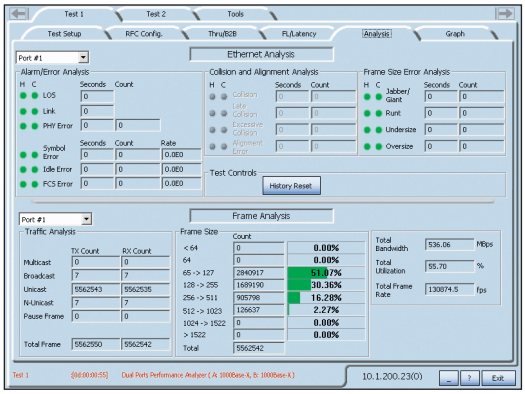
Efficient Testing Leads to Reliable Performance

A Highly Efficient and Reliable Test Solution

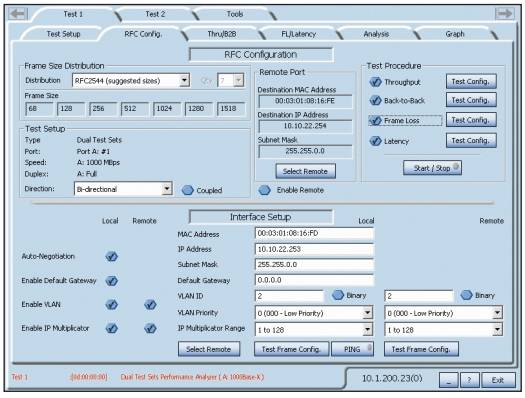
With the FTB-8510 Packet Blazer, you can test both telecom and packet services, as well as conduct end-to-end performance testing. The FTB-8510 ensures long-term integrity and error-free data delivery across Ethernet WAN links.

First-Class Comprehensiveness

The FTB-8510 performs transparent LAN service (TLS) testing with wire-speed, full-duplex 10, 100 and 1000 Mb/s traffic-generation capabilities. It delivers simultaneous traffic generation and analysis at 100% wire speed for 10/100/1000Base-T, 1000Base-SX, 1000Base-LX and 1000Base-ZX full-duplex networks at all frame sizes. The FTB-8510 also features EtherBERT for bit-error-rate testing of 10/100/1000 Mb/s Ethernet circuits.



Performing frame analysis.



The FTB-8510 Packet Blazer's RFC 2544 configuration.

Frame Analysis

This FTB-8510 Packet Blazer feature enables traffic generation and analysis, allowing you to troubleshoot an Ethernet circuit and analyze customer traffic for errors. Thanks to its packet jitter measurement capabilities (as per RFC 3393), service providers can benchmark transport networks for delay-sensitive traffic such as voice over IP (VoIP).

Performance Analysis (RFC 2544)

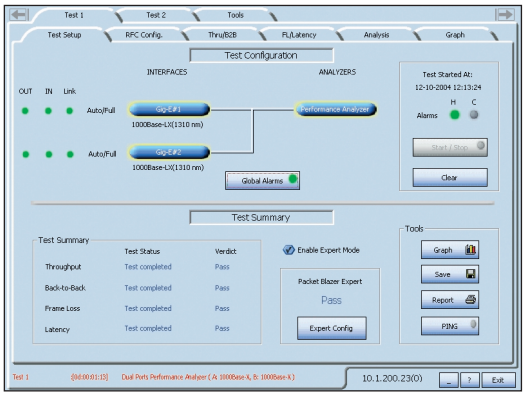
RFC 2544 measurements (throughput, back-to-back, frame loss and latency) provide a basis for service providers and their customers to define service-level agreements (SLAs). They enable service providers to validate the quality of service (QoS) delivered, and can provide them with a tool to create value-added services that can be measured and demonstrated to customers. By offering different classes of services, a service provider can create new revenue sources based on better, measurable performance.

EtherBERT Analysis

The EtherBERT functionality allows for testing transparent Gigabit Ethernet circuits running over an xWDM network as if they were SONET/SDH circuits on the same xWDM network.

User-Friendly Interface

The FTB-8510 Packet Blazer's easy-to-use smart user interface (SUI) lets you tailor screen configurations, customize test routines and format reports on real-time and historical performance.



EXFO's FTB-8510 comes with highly flexible smart user interface.

SPECIFICATIONS[1]

	FTB-8510[2]	FTB-8510-1[2]	FTB-8510-2
Ports	Two 10/100Base-T	Two 10/100Base-T and one Gigabit Ethernet	Two 10/100Base-T and two Gigabit Ethernet
Connector types	RJ-45 (ISO 8877)	RJ-45 (ISO 8877) and LC	RJ-45 (ISO 8877) and LC
Connect speed (Mb/s)	10/100	10/100/1000	10/100/1000
Duplex mode	Full/half-duplex auto-negotiation	Full/half-duplex auto-negotiation	Full/half-duplex auto-negotiation
Maximum port capacity (Mb/s)	200 (bidirectional)	2000 (bidirectional)	2000 (bidirectional)
Ethernet testing	RFC 2544 RFC 1242	RFC 2544 RFC 1242	RFC 2544 RFC 1242

GENERAL SPECIFICATIONS

Size (H x W x D)		2.5 cm x 9.6 cm x 26 cm	(1 in x 3 in x 10 in)
Weight (without transceivers)		0.5 kg	(1.1 lb)
Temperature			
	operating	0 °C to 40 °C	(32 °F to 104 °F)
	storing	–40 °C to 60 °C	(–40 °F to 140 °F)

SAFETY

21 CFR 1040.10 and IEC 60825-1 CLASS 1 LASER PRODUCT

NOTES

1. Similar specifications apply to the IQS-8510 Packet Blazer module, designed for the IQS-500 platform.
2. Upgrade kit also available for FTB-8510 Packet Blazer, providing one or two Gigabit Ethernet ports.

ORDERING INFORMATION

MODULE

FTB-85XX-XX

Model
FTB-8510
FTB-8510-1
FTB-8510-2

Software
A-1.6.1 = Packet Blazer software release 1.6.1
A-1.7.0 = Packet Blazer software release 1.7.0

Example: FTB-8510-2

For Gigabit Ethernet optical interfaces, FTB-859x Transceivers have to be ordered separately.

TRANSCEIVER

FTB-859x: Transceivers
FTB-8590: 1000Base-SX (850 nm) LC connectors; optical SFP transceiver module for IQS-8510 Packet Blazer
FTB-8591: 1000Base-LX (1310 nm) LC connectors; optical SFP transceiver module for IQS-8510 Packet Blazer
FTB-8592: 1000Base-ZX (1550 nm) LC connectors; optical SFP transceiver module for IQS-8510 Packet Blazer

TEST KIT

TK-400-8500-XX-XXX-XX-FTB-85XX-XX-XX-XX-XX

Screen code
D3 = STN passive screen
D4 = TFT active screen

Memory
N10 = 256 MB
N12 = 512 MB

Expansion unit
00 = Two-slot module receptacle
H = Seven-slot module receptacle

Model
FTB-8510
FTB-8510-1
FTB-8510-2

Software
A-1.6.1 = Packet Blazer software release 1.6.1
A-1.7.0 = Packet Blazer software release 1.7.0

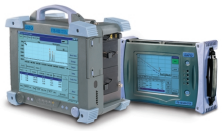
Transceiver 1550 nm options (1000Base-ZX)
8592-1 = 1 transceiver module
8592-2 = 2 transceiver modules

Transceiver 1310 nm options (1000Base-LX)
8591-1 = 1 transceiver module
8591-2 = 2 transceiver modules

Transceiver 850 nm options (1000Base-SX)
8590-1 = 1 transceiver module
8590-2 = 2 transceiver modules

Find out more about EXFO's extensive line of high-performance portable instruments by visiting our website at **www.exfo.com.**

Rugged Handheld Solutions
- OLTS
- Power meter
- Light source
- Talk set



Optical Fiber
- OTDR
- OLTS
- ORL meter
- Switch

DWDM Test Systems
- OSA
- PMD analyzer
- Chromatic dispersion analyzer
- Multiwavelength meter

Transport/Datacom
- 10/100 and Gigabit Ethernet
- SONET/SDH (DS0 to OC-192c)
- SDH/PDH (64 kb/s to STM-64c)
- SAN

Corporate Headquarters > 400 Godin Avenue, Vanier (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	4275 Kellway Circle, Suite 122	Addison, TX 75001 USA	Tel.: 1 800 663-3936	Fax: 1 972 836-0164
EXFO Europe	Le Dynasteur, 10/12 rue Andras Beck	92366 Meudon la Forêt Cedex FRANCE	Tel.: +33.1.40.83.85.85	Fax: +33.1.40.83.04.42
EXFO Asia-Pacific	151 Chin Swee Road, #03-29 Manhattan House	SINGAPORE 169876	Tel.: +65 6333 8241	Fax: +65 6333 8242
EXFO China	Beijing New Century Hotel Office Tower, Room 1754-1755 No. 6 Southern Capital Gym Road	Beijing 100044 P. R. CHINA	Tel.: +86 (10) 6849 2738	Fax: +86 (10) 6849 2662

SPFTB8510.3AN

Printed in Canada 04/10

EXPERTISE REACHING OUT