

ETS-1000L

NETWORK TESTING—TRANSPORT AND DATACOM



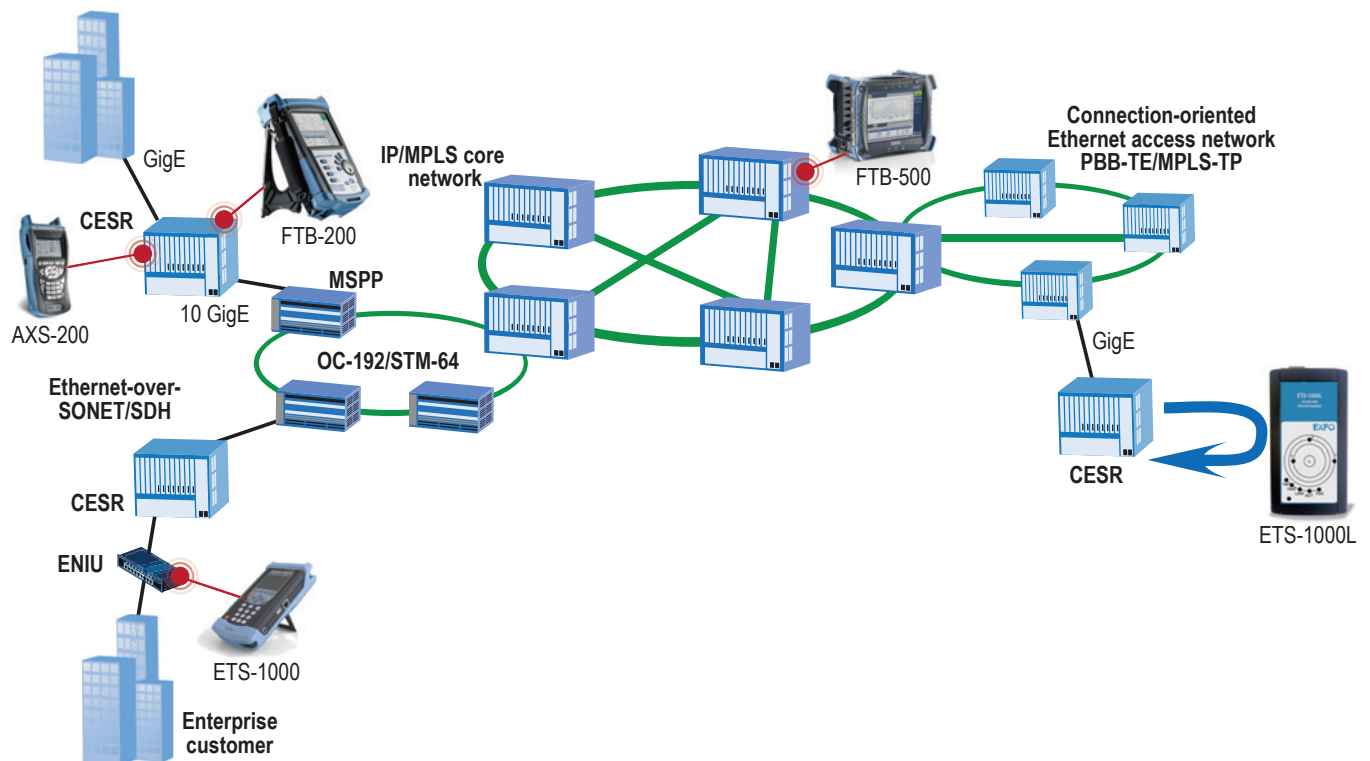
Cost-effective loopback tool for easy Ethernet services testing

- 10/100/1000BaseT and GigE ports
- Can be used as a remote loopback/reflector for all carrier Ethernet validation tests including RFC 2544, bit-error rate (BER) and quality of service (QoS)
- Selectable loopback at layers 1 through 4
- Complete interoperability with EXFO's Ethernet analyzers (ETS-1000, AXS-200/850 series, RTU-310/310G) and Ethernet test modules (FTB-8510B, FTB-8510G, FTB-8525/8535 and FTB-8120NGE/8130NGE)
- 802.3ah remote loopback support

Field Assessment of Carrier Ethernet Services

EXFO's ETS-1000L is a cost-effective, compact Ethernet loopback tool that can be used as a remote unit to return test traffic, enabling service providers to turn-up and install next-generation carrier Ethernet services. It is fully compatible with EXFO's complete portfolio of Ethernet analyzers (ETS-1000, AXS-850 series, RTU-310/310G) and Ethernet test modules (FTB-8510B, FTB-8510G, FTB-8525/8535 and FTB-8120NGE/8130NGE).

The ETS-1000L supports the following interfaces: 10/100/1000Base-T, 1000Base-SX, 1000Base-LX and 1000Base-ZX. Thanks to this simple loopback tool, technicians can loop back traffic up to layer 4 with configurable MAC, IP and VLAN parameters. The ETS-1000L can also be used as an endpoint for all of today's necessary Ethernet/IP field testing applications including RFC 2544, bit-error-rate testing, packet jitter as well as multistream generation and analysis (quality of service testing).



Key Features

- 10/100/1000BaseT and GigE ports
- Can be used as a remote loopback/reflector for all carrier Ethernet validation tests including RFC 2544, bit-error rate and quality of service (QoS)
- Supports user-configurable full line rate loopback at layers 1 through 4
- 802.3ah remote loopback support
- Complete interoperability with EXFO's Ethernet analyzers (ETS-1000, AXS-200/850 series, RTU-310/310G) and Ethernet test modules (FTB-8510B, FTB-8510G, FTB-8525/8535 and FTB-8120NGE/8130NGE)
- Responds to ping requests
- Configurable MAC/IP address and VLAN

Specifications

OPTICAL INTERFACES

Optical interfaces

Available wavelengths (nm)

	1000Base-SX	1000Base-LX	1000Base-ZX
Wavelength (nm)	850	1310	1550
Transmission level (dBm)	-9 to -3	-9.5 to -3	0 to +5
Reception level sensitivity (dBm)	-20	-22	-22
Maximum reach	550 m	10 km	80 km
Transmission bit rate (Gbit/s)	1.25	1.25	1.25
Reception bit rate (Gbit/s)	1.25	1.25	1.25
Transmission operational wavelength range (nm)	830 to 860	1270 to 1360	1540 to 1570
Maximum reception before damage (dBm)	+6	+6	+6
Measurement accuracy			
Frequency (ppm)	±4.6	±4.6	±4.6
Optical power (dB)	±2	±2	±2
Jitter compliance	IEEE 802.3	IEEE 802.3	
Ethernet classification	IEEE 802.3	IEEE 802.3	
Laser type	VCSEL	FP	DFB
Eye safety	Class 1	Class 1	Class 1
Connector	LC	LC	LC
Transceiver type	SFP	SFP	SFP

ELECTRICAL INTERFACES

Electrical interfaces

Two ports 10/100BaseT half/full duplex, 1000BaseT full duplex
Straight/crossover cable auto-detection

	10 Mbit/s	125 Mbit/s	1 Gbit/s
Transmission bit rate	10 Mbit/s	125 Mbit/s	1 Gbit/s
Transmission accuracy (ppm)	±100	±100	±100
Reception bit rate	10 Mbit/s	125 Mbit/s	1 Gbit/s
Reception measurement accuracy (ppm)	±4.6	±4.6	±4.6
Duplex mode	Half and full duplex	Half and full duplex	Full duplex
Jitter compliance	IEEE 802.3	IEEE 802.3	IEEE 802.3
Connector	RJ-45	RJ-45	RJ-45
Maximum reach (m)	100	100	100

Ethernet Functional Specifications

TESTING

Loopback	Capability to return traffic to the local unit by swapping packet overhead up to layer 4 of the OSI stack; user-selectable.
802.3ah (OAM)	Supports 802.3ah Ethernet-in-the-First-Mile OAM passive mode, allowing remote test equipment to initiate a loopback on the ETS-1000L.
Configurable address	Capability to configure the MAC,IP addresses and VLAN ID of the test port.
Remote control	Remote control of the unit via test port.

GENERAL SPECIFICATIONS

Size (H x W x D)	125 mm x 68 mm x 30 mm
Weight	0.135 kg
Temperature	
operating	0 °C to 45 °C
storing	-40 °C to 60 °C
Relative Humidity	0 % to 93 %, non-condensing
Power consumption	12 W
Languages	English, Spanish, Chinese

ORDERING INFORMATION

ETS-1000L

Example: ETS-1000L

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EXFO is certified ISO 9001 and attests to the quality of these products. This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation. EXFO has made every effort to ensure that the information contained in this specification sheet is accurate. However, we accept no responsibility for any errors or omissions, and we reserve the right to modify design, characteristics and products at any time without obligation. Units of measurement in this document conform to SI standards and practices. In addition, all of EXFO's manufactured products are compliant with the European Union's WEEE directive. For more information, please visit www.EXFO.com/recycle. **Contact EXFO for prices and availability or to obtain the phone number of your local EXFO distributor.**

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