EX1 Testing and Monitoring Solution

SIMPLE, MULTIPURPOSE, CARRIER-GRADE AND OPEN PLATFORM

EXFO's EX1 is an industry-first: a pocket-sized test solution that evolves with your network, from validating bandwidth speed up to full line rate Gigabit Ethernet, to monitoring residential and business customers' quality of experience.

KEY FEATURES AND BENEFITS

Gigabit Tester

Carrier-grade quality hardware including onboard FPGA power—delivering repeatable and reliable metrics each time

Powered by the industry-leading Speedtest® by Ookla® algorithm

Electrical and optical* interface ready

Rechargeable Li-ion battery operated

Provides latency, download and upload throughput performance metrics

Ookla server information and client WAN IP information reporting

Android™ and iOS*-supported smart devices

Controlled entirely through Android smart devices offering an "untethered experience" for setup, testing, report generation as well as cloud-enabled firmware upgrades

Test free and clear of challenging or harsh testing environments with Bluetooth® low energy technology for a connection range up to 100 ft (30 m)

Adjustable pass/fail thresholds based on subscribers' purchased plans

Efficient job closeout with automated report generation—reports generated in PDF or CSV formats are sent by email directly to the subscriber or shared through the EXFO Connect cloud service

Active Verifier

Scalable platform capable of hosting EXFO's Active Verifier VNF for service and application performance assurance

As a Verifier, complete visibility of layer 3 to layer 7 performance through a suite of 140 different performance tests

As a Verifier, centralized management and control via EXFO Worx, with support for template-driven testing and automation from extensive API support

* Future capability   www.tvcinc.com

The EX1 is a one-of-a-kind Ethernet tester, paired with an Android smart device, to qualify broadband connections delivered to both residential and business Ethernet customers—enabling service providers to validate delivery of full line rate Gigabit Ethernet speeds to their subscribers. The EX1 advantage is two-fold: it includes FPGA-powered hardware, as well as the industry-leading Speedtest by Ookla algorithm, providing latency and download/upload throughput measurements. This allows service providers to obtain repeatable and reliable metrics, every time.

The EX1 does not require a screen. Instead, its ultra-intuitive application runs directly on a field technician's smart device to visualize all tasks performed including connection, setup, results-gathering, report generation and cloud-enabled firmware upgrades.

A flexible platform that evolves with your network, the EX1 can also host EXFO's Active Verifier VNF to deliver a complete level 3 to level 7 service assurance solution—integrated into the same compact EX1 platform. When activated, the Verifier capability opens up a world of possibilities: the Verifier VNF running in the EX1 platform can leverage a full suite of more than 140 performance tests to commission, assure and troubleshoot service performance and delivery across multiple layers. The test catalog includes support for service activation suites like Y.1564 SAM, IP connectivity tests, VoIP qualification, internet experience and infrastructure assurance that helps users assure the configuration and delivery of highly differentiated services.

The EX1 can be left on-site for temporary troubleshooting or permanently deployed as a fixed performance endpoint that continuously reports on network and service performance. It can also leverage the full capabilities of the EXFO Worx management system to facilitate test creation, aggregate performance results and integrate into any existing OSS/BSS as a data source.

SPECIFICATIONS

GENERAL SPECIFICATIONS

Size (H x W x D)	125 mm x 75 mm x 45 mm (5 in x 3 in x 1 ¾ in)
Weight	0.45 kg (1 lb)
Temperature	
Operating	0 °C to 40 °C (32 °F to 104 °F)
Storage	
With battery (short term < 1 month)	−10 °C to 40 °C (14 °F to 104 °F)
Relative humidity range	≤ 93 %, non-condensing

INTERFACES

Electrical RJ45 test port	10/100/1000 Mbit/s
Optical SFP test port [a]	Optical 1GE SFP
USB port	USB 3.0 Type-C port
Bluetooth and WiFi	Bluetooth v4.2 and WiFi 802.11 ac/a/b/g/n
Processor	ARM Dual Cortex-A53 ARMv8 1.0 GHz
Memory	1 GB
Storage	8 GB

BATTERY/POWER SUPPLY

Type	Rechargeable Li-ion smart battery
Battery autonomy	One full day of customer visits (i.e. average of 10 residential broadband customer visits)
Charging time	3.5 h using supplied wall charger
AC/DC adapter/charger	Input: 100 – 240 Vac; 50/60 Hz; 1.0 A max, output: 5 V; 2.4 A

SMART DEVICE REQUIREMENTS

Smart device supported	Android OS
OS version	Android 6.0 Marshmallow and higher
Bluetooth support	Bluetooth low energy technology (version 4.0 and higher) [b]

Note:

a. Future capability.

b. Many Android phones and tablets support Bluetooth low energy technology, especially if the device was purchased recently. To verify if supported, please check if Bluetooth low energy technology (version 4) compatibility is listed in the technical specifications of smart devices in question.

EXFO

1GE TESTING CAPABILITIES

Speedtest by Ookla

Latency
Download speed
Upload speed
Server information
Client WAN IP
Automatic/manual server selection
Pass/fail verdict based on thresholds
Configurable job information
PDF/CSV automatically generated reports

VERIFIER CAPABILITY

Turn-up tests

Y.1564 SAM
IPerf

Layer 3 - Layer 7 active tests

Ping/traceroute
One-way IP performance
Two-way active measurement protocol (TWAMP)
TCP/UDP echo
TCP/UDP bandwidth measurements
SIP VoIP signaling and media performance
IPTV assurance
Web quality and infrastructure
Full suite of more than 140 performance tests available

CONTACT INFO

Customer Service Representatives are available from 8 AM to 6 PM EST.

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