

# EtherCHK kits

ETHERNET HANDHELD TESTER UP TO 10G



The EtherCHK kits, based on the MAX-860, is an easy-to-use, portable 10G test solution. Optimize your field technicians' tasks by running up to two 10G tests simultaneously.

## KEY FEATURES AND BENEFITS

Partner kit only

### Platform highlights

Custom-designed platform with 64 GB of onboard memory, including a micro SD card interface (massively expand the memory)

Ultra-bright 8-inch multitouch screen

Built-in connectivity—choose between Gigabit interface, Wi-Fi, Bluetooth, and 3G or 4G LTE via USB dongle

Lightweight and portable solution designed for field engineers or cell technicians installing, troubleshooting and maintaining backhaul Carrier Ethernet networks

### Ethernet

Dual-port testing up to 10G

EtherSAM, RFC 2544, traffic generation, EtherBERT, Through mode, Smart Loopback and second-port loopback tool

Pattern and latency measurements

SPEC SHEET



## Setting a new GUI standard: Unprecedented simplicity in configuration setup and navigation

The EtherCHK kits' intelligent situational setup guides technicians through complete, accurate testing processes (e.g., suggestion prompts and help guides). In addition, it reduces navigation by combining associated testing functions on a single screen, and offers intelligent autodiscovery enabling a single technician to perform end-to-end testing.

### Dedicated quick-action buttons

- › Remote discovery to find all the other EXFO units
- › Laser on/off
- › Test reset to clear the results and statistics while running a test
- › Report generation
- › Save or load test configurations
- › Quick error injection

### Assorted notifications

- › Clear indication of link status for single or dual ports
- › Negotiated speed display for single or dual ports
- › Power status available at all times for single or dual ports
- › Pass/fail indication at all times
- › Pattern and clock synchronization
- › Frequency offset with valid-range color indicator
- › Overhead overwrite indicator
- › Error/alarm injection
- › Alarm hierarchy pinpointing the root-cause (when possible)

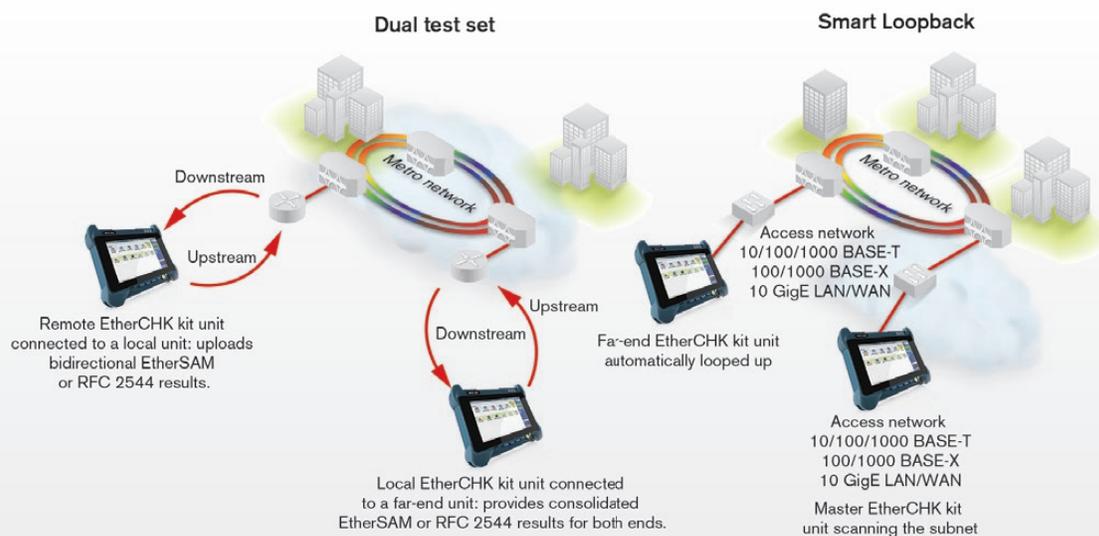
### Streamlined navigation

- › Remote discovery button available at all times; no reason to leave your current location to scan for a remote unit
- › Testing status can be maximized to fill the entire screen by simply clicking on the alarm status button; whether the unit is in your hand or across the room, test results can be easily determined with a simple glance at the display screen
- › RFC 2544 configuration is displayed on a single page, with no need to navigate through multiple screens to view individual RFC subtest results
- › RFC 2544 results and graphs are also available in a single page, eliminating the need to navigate through multiple screens to view individual RFC subtest results
- › Simplified test structure definition using task-based test-application selection, signal configuration, front-end and smart timeslot selection
- › Centralized functions: error/alarm management, performance monitoring and overhead manipulation/monitoring

## Key Ethernet features

### Intelligent network Discovery mode

Using the EtherCHK kits, you can single-handedly scan the network and connect to any available EXFO datacom remote tester. Simply select the unit to be tested and choose whether you want traffic to be looped back via the Smart Loopback or Dual Test Set for simultaneous bidirectional EtherSAM or RFC 2544 results. With this approach, you no longer need an additional technician at the far end to relay critical information—the EtherCHK kits take care of everything.



### Smart Loopback flexibility

The Smart Loopback functionality has been enhanced to offer five distinct loopback modes. Whether you are looking to pinpoint loopback traffic from a user-datagram-protocol (UDP) or transmission control protocol (TCP) layer, or all the way down to a completely promiscuous mode (Transparent Loopback mode), the EtherCHK Series has the flexibility to adjust to all unique loopback situations.



### Dual-port and Through Mode testing

With dual-port testing, one technician can use a single EtherCHK kit module to launch either EtherSAM or RFC 2544, and obtain bidirectional results using just one module. With traffic generation and monitoring, as well as EtherBERT tests, the technician can set up two distinct tests, one on port 1 and the other on port 2. Both ports can also be bound to different interfaces (e.g., 10BASE-T electrical on port 1 and 10 GigE on port 2).



### VLAN/MPLS

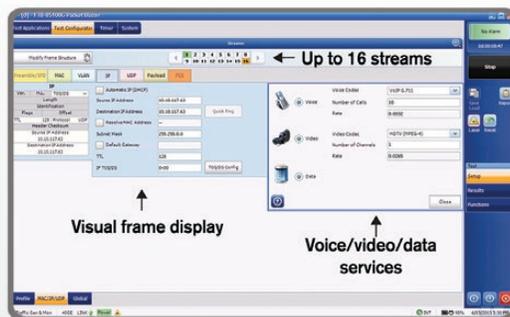
Today's networks are expected to deliver high performance. To meet such high expectations, service providers must rely on various mechanisms, such as Ethernet tagging, encapsulation and labeling. Thanks to these additions, service providers can enhance security, scalability, reliability and performance. The EtherCHK kit supports virtual-local-area-network (VLAN) tags, Q-in-Q VLAN tags and multiprotocol label switching (MPLS).



### TRAFFIC GENERATION AND MONITORING

Unparalleled analog visual gauges combined with user-defined thresholds instantaneously show whether or not the test traffic is in or out of expected ranges.

The EtherCHK kit surpasses the multistream offerings of typical handheld Ethernet testing devices. Up to 32 streams of traffic can be configured by a technician in order to test just about any frame format: Ethernet II, 802.3 SNAP, IPv4, IPv6, three levels of VLANs, MPLS, UDP and TCP. Each stream has an analog visual gauge and user-definable pass/fail thresholds that instantly show whether the test traffic is in or out of the expected ranges of the SLA.





## ETHERSAM: THE NEW STANDARD IN ETHERNET TESTING

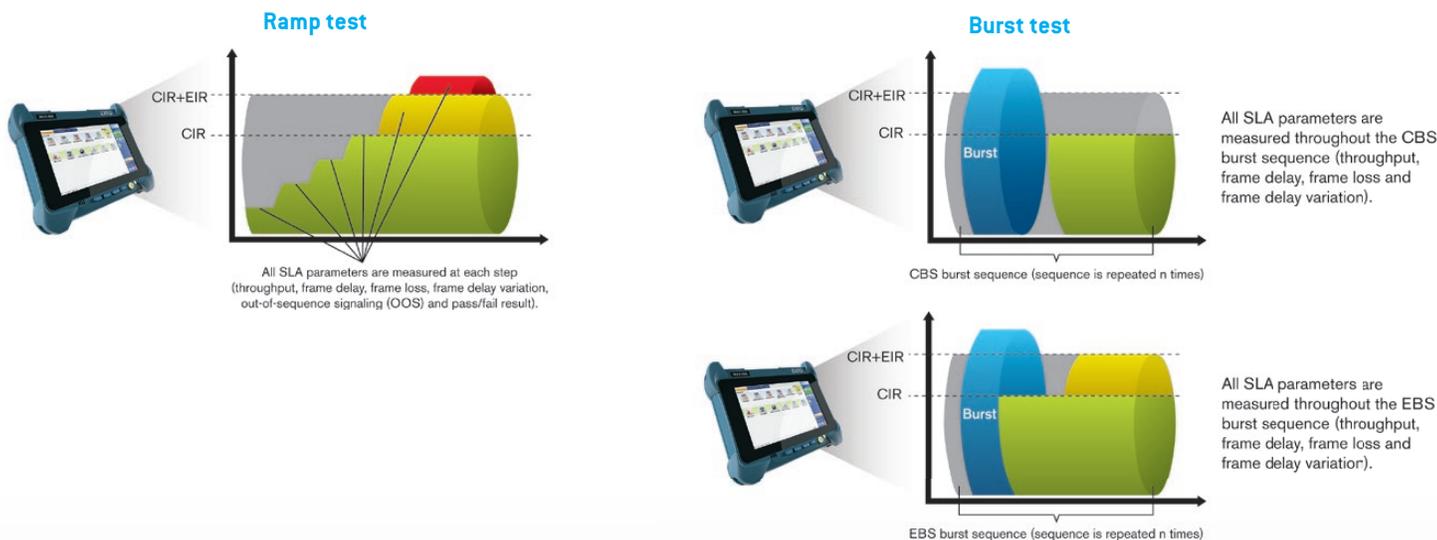
RFC 2544 used to be the most widespread Ethernet testing methodology. However, it was designed for network-device testing in the lab, not service testing in the field. ITU-T Y.1564, the new standard for turning up and troubleshooting Carrier Ethernet services, has a number of advantages over RFC 2544, including validation of critical service-level agreement (SLA) criteria such as packet jitter and quality-of-service (QoS) measurements. This methodology is also significantly faster, saving both time and resources while optimizing QoS.

EXFO's EtherSAM test suite—based on the ITU-T Y.1564 Ethernet service activation methodology—provides comprehensive field testing for mobile backhaul and commercial services.

Contrary to other methodologies, EtherSAM supports new multiservice offerings, and can simulate all types of services that will run on the network while simultaneously qualifying all key SLA parameters for each of these services. Moreover, it validates the QoS mechanisms provisioned in the network to prioritize the different service types, resulting in better troubleshooting, more accurate validation and much faster deployment. EtherSAM is comprised of two phases: the service configuration test and the service performance test.

### Service configuration test

The service configuration test involves sequential testing of each service in order to validate that it is properly provisioned, and that all specific key performance indicators (KPIs) or SLA parameters are met. A ramp test and burst test are performed in order to verify the committed information rate (CIR), excess information rate (EIR), committed burst size (CBS) and excess burst size (EBS).



### Service performance test

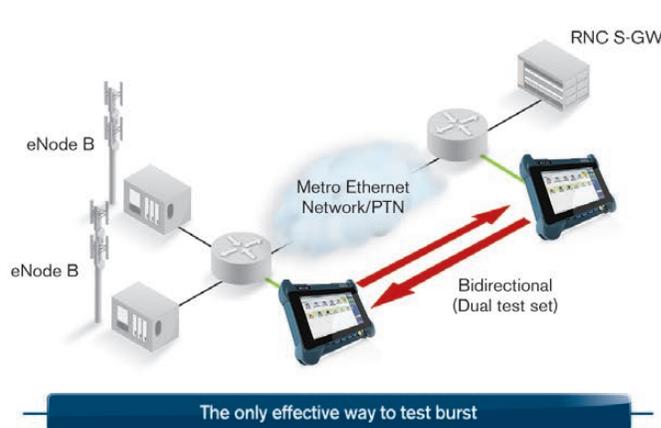
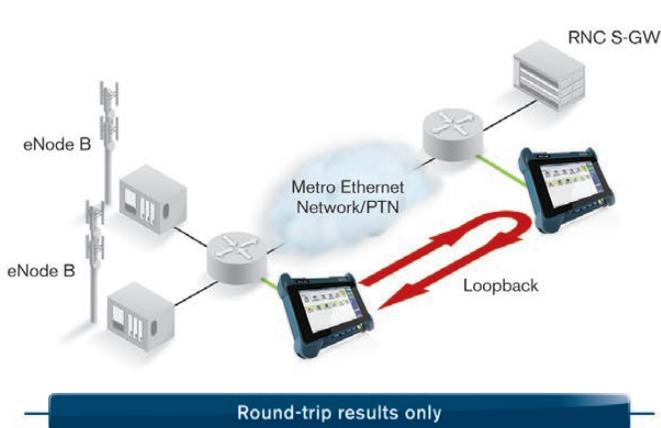
Once the configuration of each individual service is validated, the service performance test simultaneously validates the quality of all the services over time.





## ETHERSAM BIDIRECTIONAL RESULTS

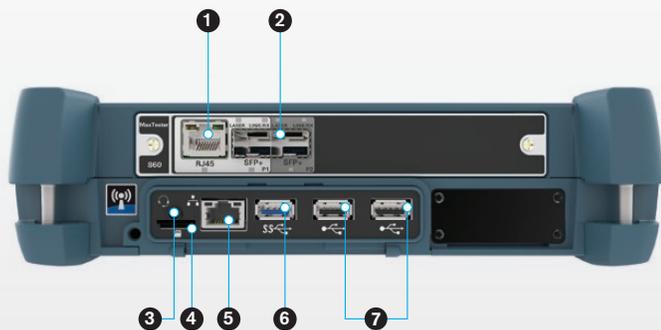
EXFO's EtherSAM approach proves itself even more powerful as it executes the complete ITU-T Y.1564 test with bidirectional measurements. Key SLA parameters are measured independently in each test direction, providing 100% first-time-right service activation—the highest level of confidence in service testing.



## CHOOSE THE RIGHT ETHERCHK FOR YOU

	ETHERCHK-1G	ETHERCHK1-10G
Ethernet 10/100/1000M	•	•
Ethernet 10/100/1000M and 10G		•
Dual-port option		•
Y.1564 (EtherSAM)	•	•
RFC 2544	•	•
Cable test	•	•
IPv6 (optional)	•	•
MPLS (optional)	•	•
EtherBERT	•	•
Multistream traffic generation	•	•

### EtherCHK-1G and EtherCHK1-10G



- 1 **ETHERNET**  
10 to 1000 BASE-T
- 2 **OPTICAL ETHERNET**  
Up to 10 Gbit/s  
1000 BASE-T  
SONET/SDH up to 10G  
OTN OTU1/2
- 3 Mic./Headset jack

- 4 Micro SD card slot
- 5 1 GigE maintenance port
- 6 One USB 3.0 port
- 7 Two USB 2.0 ports

Call 800-794-1800 for sales assistance on your Specialized EtherCHK Kit.

