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# XGT-200 10G ETHERNET TESTER

## Product Overview

The XGT-200 Ethernet Tester offers comprehensive testing solutions for next-generation Ethernet technologies. Featuring a range of test modules, it is designed to thoroughly verify Ethernet performance. The XGT-200 is equipped with two 10/100/1000Mb/s electrical interfaces, two 100/1000MSFP optical interfaces, and two 10Gbps SFP+ ports. It can generate and analyse test traffic streams, delivering precise results.

The XGT-200 also supports installation, maintenance services, and the activation of new professional services. With its diverse test functions, users can effectively monitor and assess Ethernet quality. The XGT-200 will serve as a comprehensive and user-friendly Ethernet and advanced IP connectivity test suite, tailored for field technicians.


## Features

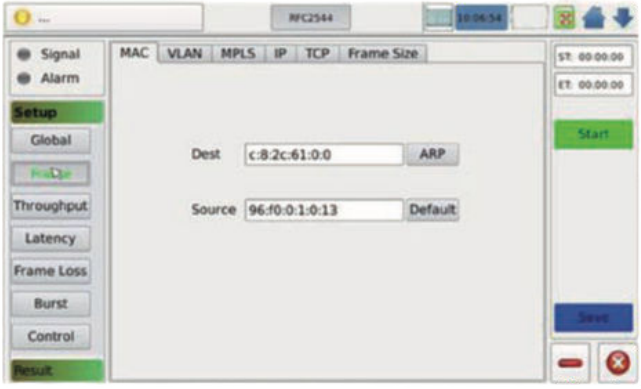
- Smart and durable, suitable for field applications
- 7-inch HD colour touch screen, readable in sunlight
- User-friendly interface
- PC remote control capability
- Test profiles and data management, USB/FTP transfer
- Comprehensive testing for Ethernet testing
- Lithium battery providing up to 4 hours of continuous testing

## Functions

- 10GE SFP+ x2, 10/100/1000BASE-T RJ45 x2,
- 100/1000BASE-X SFP x2
- 10M - 10Gb/s bandwidth, LAN and WAN mode
- Layer 1/2/3/4 BERT test
- Multi-stream traffic generation and analysis
- RFC2544 and Y.1564 test
- OAM test (optional)
- VLAN and VLAN Q-in-Q test
- MPLS test with multiple MPLS tags
- Service disruption time test
- CoS and ToS/DSCP priority test
- Packet capture
- Intelligent detection & remote control loopback test
- Statistical analysis report

### RFC 2544 TEST

XGT-200 series package RFC2544 into an auto-test. Users can select from throughput, back-to-back, packet loss and latency measurements. All test results are clearly displayed on the User Interface.

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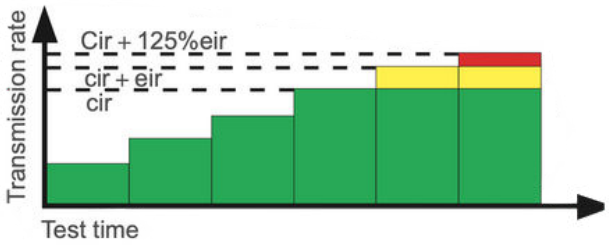
## ITU-T Y.1564 TEST

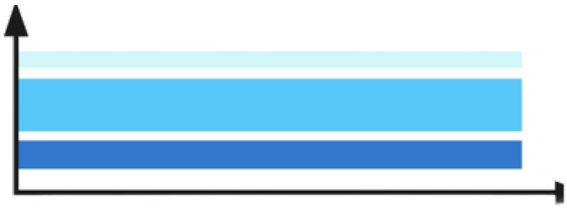
### Service Configuration Test

The service configuration test consists of sequentially testing each service to validate that each is properly provisioned and that all specific SLA parameters are met. To confirm that the network can configure a single data stream to set the CIR and select a single or mixed packet size for testing. Simultaneously, the rate can be set hierarchically (e.g., 25%, 50%, 75%, 100%, and 100% + EIR or the maximum single rate test.) All services are executed sequentially according to the configured order.




### 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. All the processes just need a few minutes, and it also can be make a long time pressure test.

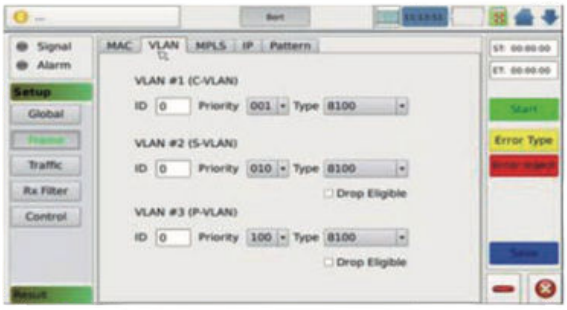


### BERT

XGT-200 can support Layer 2-4 BERT test in the VLAN and MPLS. It can set BERT test data frame layer, frame size, bandwidth, MAC address, five parameters and the load area pseudo-random sequence type. XGT-200 can support standard pseudo-random code (PRBS31, PRBS23, PRBS20, PRBS15, PRBS11 and so on) pressure code tests, and the engineers can do a custom code according to the different applications. During the BERT test, the user can select the error to inject mode to verify the network abnormal frame processing capabilities of the testing network or point.

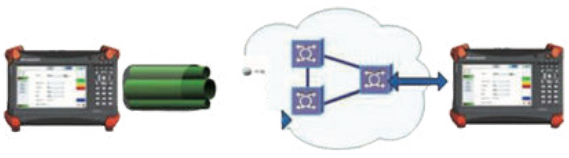

### Q-IN-Q

XGT-200 can support layered applications for metropolitan area network or carrier Ethernet VLAN Q-in-Q and MPLS.




## MULTI-STREAM BACKGROUND TRAFFIC GENERATION AND ANALYSIS

It is applicable to Ethernet frames environment to verify the long-term integrity of the Ethernet circuit. This test can supply throughput, packet loss and other error information, which will help user to verify Ethernet services compliance with regulatory requirements.



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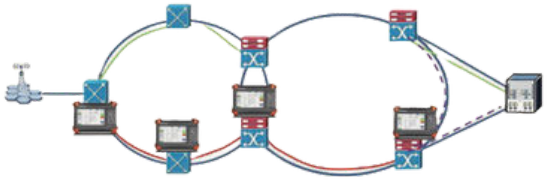
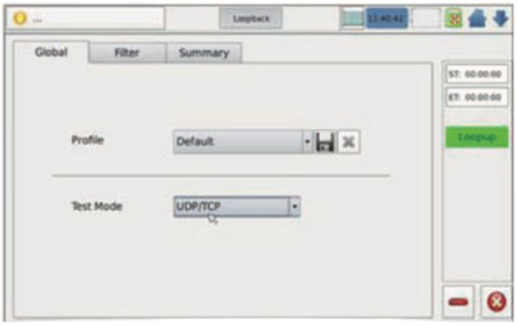
## INTELLIGENT DETECTOR AND LOOPBACK

Independent scanning of the test network, discovering available XGT-200 devices, and sending the remote control data via the test port, which will be added to the test system to complete the test.



## FOUR TRAFFIC LOOPBACK TEST: LAYER1, LAYER2, LAYER3 AND LAYER4

**Layer1:**
All data streams are passed through and loopback;
**Layer2:**
All unicast data streams based on source/ destination MAC address make a loopback;
**Layer3:**
All unicast data streams based on source/destination MAC and IP address make a loopback;
**Layer4:**
All unicast data stream based on MAC/IP address and port number of source/destination make a loopback

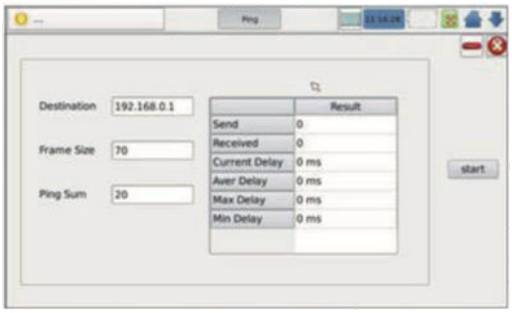



## THROUGH MODE

XGT-200 series support 10M-10G rate realize online monitoring, passive testing, online troubleshooting and online fault injection.


## IP TOOL

XGT-200 can identify point-to-point ping and traceroute.




## Specifications

| OPTICAL INTERFACE | TWO GIGE PORTS | | |
|---|---|---|---|
| | 1000Base-SX | 1000Base-LX | 1000Base-ZX |
| Wavelength(nm) | 850 | 1310 | 1550 |
| Laser/Connector/Transceiv - ers Type | VCSEL/LC/SFP | FP/LC/SFP | DFB/LC/SFP |

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| Electrical Interfaces | Two Ports: 10/100BaseT half/Full Duplex & 1000BaseT Full Duplex, Choose straight or crossover Cables | | |
|---|---|---|---|
| Connector | RJ-45 | RJ-45 | RJ-45 |
| SFP+ Optical Interface(10G) | Two 10GigE Ports | | |
| | 10GBase-SR/SW | 10GBase-LR/LW | 10GBase-ER/EW |
| Wavelength (nm) | 850 | 1310 | 1550 |
| Laser/Connector/Transceivers Type | VCSEL/LC/SFP+ | DFB/LC/SFP+ | CML/LC/SFP+ |
| **Testing Items** | | | |
| Y.1564 | Capability to perform the service configuration test and service performance test as per ITU-T Y.1564.Tests can be performed to loopback or /dual test set mode for bidirectional results. | | |
| RFC2544 | Throughput, back-to-back, packet loss and latency measurement as per RFC2544; Frame size:RFC-defined sizes, user-configurable 1 to 7 | | |
| BERT Bit Error Test | Up to layer 4 supported with or without VLAN Q-in-Q. | | |
| Through mode | Sectionalize traffic between a service provider's network and customer premises equipment. | | |
| Service Disruption Time (SDT) | Disruption time statistics include shortest, longest, last, average, total and pass/ fail thresholds. | | |
| Multi-stream Generation | Capability to transmit and monitor up to 16 streams of Ethernet and IP traffic. | | |
| Traffic Generation and Monitoring | Capability to generate and monitor Traffic of Ethernet and IP; Traffic shaping can be based on those statistics: throughput, packet loss, packet jitter, frame sorting, latency, frame size, traffic type and traffic monitoring | | |
| VLAN stacking | Capability to generate streams with up to two layers of VLAN (including IEEE802.1ad Q-in-Q tagged VLAN) and to filter received traffic by VLAN ID or VLAN priority at any of the stacked VLAN | | |
| Ipv6 Test | Including BERT, RFC2544, Traffic generation and monitoring, Background traffic, Smart Loopback, Ping and trace route | | |
| **General Specifications** | | | |
| Display | 7 inch colour TFT touch screen (Resolution 960×480) | | |
| Data storage | 8GB | | |
| Battery | Rechargeable Lithium battery, 4 hours continuous operation | | |
| Power Supply | AC/DC Adapter; Input 100 to 240V AC, 50/60Hz, 2A(Max.); Output 24V DC 90W | | |
| Dimension | 282×186×75mm | | |
| Interface | USB 2.0 port, RJ-45 LAN | | |
| Weight | 2.9Kg | | |

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## Ordering Information

### Model

XGT-200A: Two full-function 10G test ports and a 10G test port can make a punch through testing
XGT-200B: One 10G test port, another 10G port only for loopback function

### Standard Package includes:

XGT-200 Host, Battery, AC Adapter, Software CD, Carrying Case, Warranty card, User Manual

### Optional:

- CAT6 RJ-45 Gigabit Ethernet Cable
- LC-LC Duplex Patchcord
- 10G SFP+ Optical Module (Wavelength/Transmission Distance: 850nm/550m, 1310nm/10km, 1550nm/40km)
- 1.25G SFP Optical Module (Wavelength/Transmission Distance: 850nm/550m, 1310nm/10km)
- OAM Test Function Module

### Notice:

According to the specific requirements, the specification of the Optical Module can be changed.