

## **XGT-200** 10G Ethernet Tester

*ShinewayTech*<sup>®</sup> XGT-200 Ethernet tester provides a complete test for next generation Ethernet solution. There are many different test modules, which can help to verify the performance of their Ethernet. XGT-200 has two 10/100/1000Mb/s electrical interfaces, two 100/1000M SFP optical interfaces and two 10Gbps SFP+. It can generate and analyze the test traffic streams, and provide the result. XGT-200 provides install, maintain services and activate new profession service. XGT-200 can provide a variety of test functions, which can help user to control and know the quality of Ethernet. We believe that the XGT-200 will be the comprehensive and simple Ethernet and advanced IP connectivity test suites for the field technicians.



## **Features**

- Smart and durable, field application ready
- 7 inch HD color touch screen, sun readable
- User-friendly user interface
- PC remote control
- Test profiles and data management, USB/FTP transfer
- Comprehensive testing for Ethernet testing
- Lithium battery up to 4 hours continuous testing

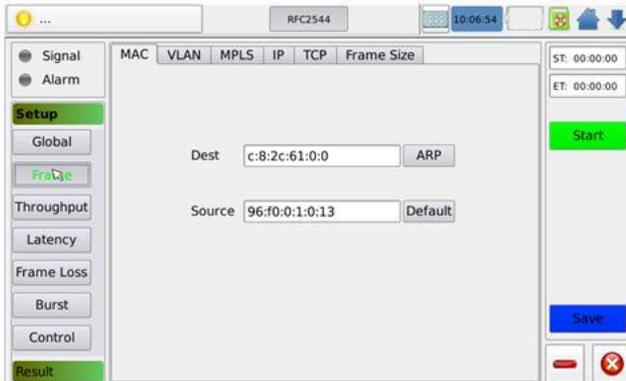
## **Functions:**

- 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 and remote control loopback test
- Statistical analysis report

## **RFC 2544 Test**

XGT-200 series package RFC2544 into an auto-test. User can freely choose throughput,

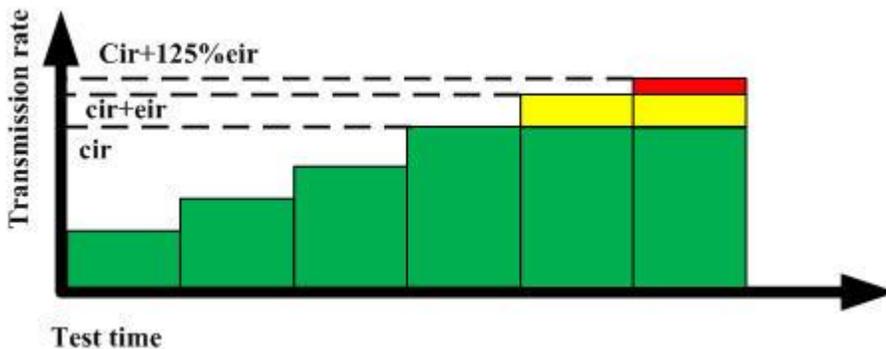
back-to-back, packet loss and latency measurement. All the test results can be clearly showed in the UI.



## ITU-T Y.1564 Test

### Service Configuration Test

The service configuration test consists in sequentially testing each service in order to validate that each is properly provisioned and that all specific SLA parameters are met. Service configuration test to confirm network can be configured a single data stream to set CIR and select a single or mixed packet size for testing; simultaneously the option also can set by the rate subjected to hierarchical e.g., 25%, 50%, 75%, 100%, and 100% + EIR or the maximum single rate test. All the services are sequential execution according to the configure 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.



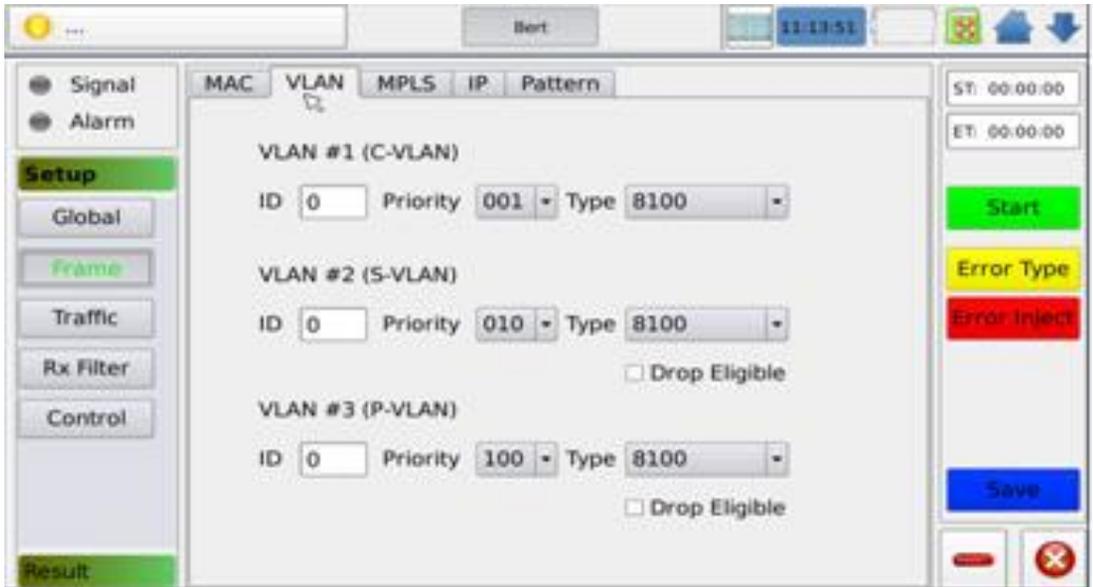
## **BERT**

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 test, and the engineers can do a custom code according to the different application. During the BERT test, user can select the error inject mode to verify the network abnormal frame processing capabilities of testing network or point.



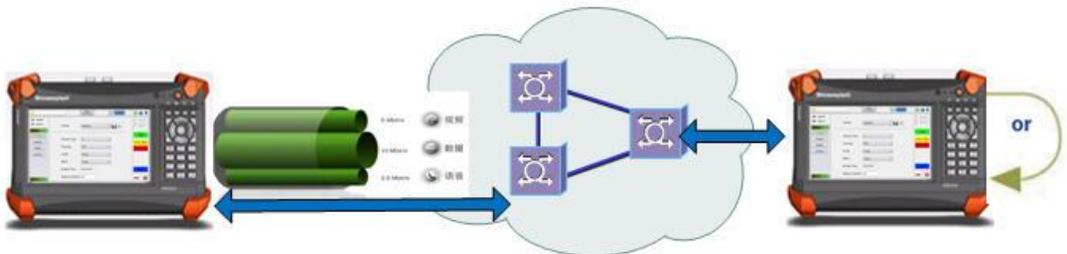
## Q-IN-Q

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



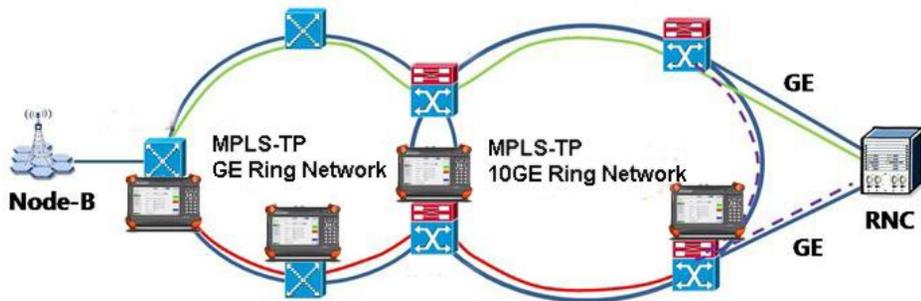
### Multi-stream Background Traffic Generation and Analysis

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.



### Intelligent Detector and Loopback

Independent scanning the test network, discover available XGT-200 device, and send the remote control data via test port, which will be added to the test system to complete the test.



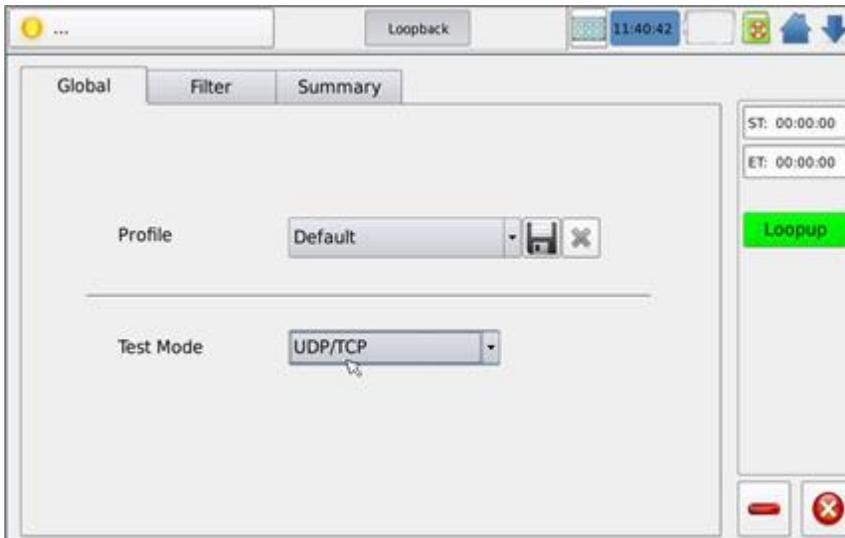
#### **Four Traffic Loopback Test: Layer1, Layer2, Layer3 and Layer4**

Layer1: All data stream are passed through and loopback;

Layer2: All unicast data stream based on source / destination MAC address make a loopback;

Layer3: All unicast data stream 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



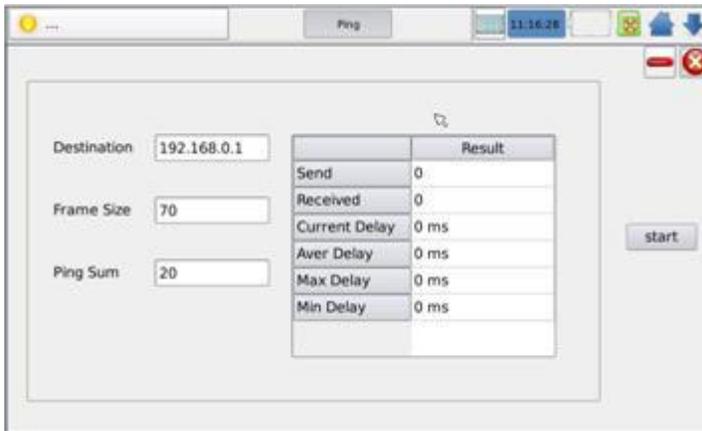
### Through Mode

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 trace route.



## Specifications

<b>Optical Interface</b>	<b>Two GigE Ports</b>		
	1000Base-SX	1000Base-LX	1000Base-ZX
Wavelength(nm)	850	1310	1550
Laser/Connector/Transceivers type	VCSEL/LC/SFP	FP/LC/SFP	DFB/LC/SFP
<b>Electrical Interfaces</b>	<b>Two Ports:10/100BaseT Half/Full Duplex and 1000BaseT Full Duplex, Choose straight or crossover cables</b>		
	10BaseT	100BaseT	1000BaseT
Connector	RJ-45	RJ-45	RJ-45
<b>SFP+ Optical Interface (10G)</b>	<b>Two 10GigE Ports</b>		
	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+
<b>Testing Items</b>			
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, frame loss and latency measurement as per RFC2544; Frame size: RFC-defined sizes, user-configurable 1to7		
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, frame 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 color TFT touch screen (Resolution 960×480)
Data storage	8GB

Interface	USB 2.0 port, RJ-45 LAN
Battery	Rechargeable Lithium battery, 4 hours continuous operation
Power Supply	AC/DC Adapter; Input 100 - 240V AC, 50/60Hz, 2A(Max.); Output 24V DC 90W
Dimension	282×186×75mm
Weight	2.9Kg

\* Specifications subject to change without notice

### **Order Information**

#### **Model:**

XGT-200A: Two full function 10G test port, and 10G test port can make a punch through testing

XGT-200B: One 10G test port, another 10G port only for loopback function

#### **Standard Package**

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

#### **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 Optical Module can be changed.