## V6000 series board



The V6 series board card is a new generation of test board card with global leading architecture, which can meet the requirements of equipment manufacturers from basic function test, consistency test to high-density port performance test. At the same time, it can verify whether the network system can achieve the expected goal when the enterprise, the operator and the data center deploy the network solution.

## **Key Features**

- 10 / 100 / 1000M RJ45 self-adaption (electrical interface)
- 100 / 1000M SFP (optical interface)
- Support 2-3 layer traffic test and protocol simulation
- 100% line speed traffic generation, statistics and capture function based on FPGA
- Support RFC2544, RFC2889, RFC3918 and other benchmarking test suites
- Support Chinese and English operating software
- Support Chinese and English test report system

## Model List



**V6004C Test Module** 4 Port , RJ45 1 Gigabit Function Test Module



**V6008C Test Module** 8 Port , RJ45 1 Gigabit Function Test Module



V6008M Test Module 4 Port RJ45 and 4 Port SFP 1 Gigabit Function Test Module



**V6016F Test Module** 16 Port , SFP 1 Gigabit Function Test Module



**V6004F Test Module** 4 Port , SFP 1 Gigabit Function Test Module



**V6016C Test Module** 16 Port , RJ45 1 Gigabit Function Test Module



**V6016M Test Module** 8 Port RJ45 and 8 Port SFP 1 Gigabit Function Test Module



## Specification list

Specification list	
Hardware and electrical characteristics	
Port Rate	electrical port : 10M/100M/1000M optical port : 100M/1000M
Port Density	up to 16 interfaces per slot(MAX)
Interface Standard	1000BASE-SX、1000BASE-LX、10/100/1000BASE-T、100BASE-FX
Port Occupancy	Occupied by single port
Rate Switching	Self-adaption
Module Weight (kg)	1.1
Module Size (w * h * d)	196mm x 35.5mm x 271mm
Operating Temperature Range	0° C to 35° C
Working Relative Humidity	20% to 85%
Maximum Power Consumption (W)	31 watts
Traffic transmission	
Number of Streams per Port	64
Frame Length Range (bytes)	Electrical port: 60-16383; 1000M optical port: 60-16383; 100M optical port: 60-9215.
	Support fixed, increasing, decreasing, random, automatic, IMIX and other frame length types
Frame Length Type	
VFDs Per Stream	Each stream supports 4 VFDs; Support fixed, increment, decrement, list and random modes.
Generation Model	Port-based: Continuous, Burst and Time burst Stream-based: Continuous, Burst
Speed Regulation Mode	Based on Port, based On Stream;
Delay and Jitter Settings	Four delay modes are supported: LIFO (store and forward), FIFO (cut-through), LILO and FILO
Frame Time Stamp Resolutio	8 ns ;
Built-in Frame Template	Built-in multiple frame templates, such as VLAN, ICMP, PPPOE, GRE, DHCP, L2TP, IPv6, MPLS, GTP, GOOSE, VXLAN, OSPF, TCP, UDP.
Custom Data	Support user-defined message, and the edited message template can be saved; Support the checksum checking of user-defined field;
User Defined Data	Support 32k bytes user-defined data, in which the first 256 bytes support configuration jump
Error Frame	CRC error, undersize frame, oversize frame;
Flow Control	Full duplex flow control, half duplex back pressure;
Traffic Statistics	
Number of Statistics Streams per Port	
Number of Statistics Streams per Port Statistical Form	256 Table statistics, chart statistics, automatic saving of Excel files;
Statistical Form	Table statistics, chart statistics, automatic saving of Excel files;  Tx/Rx frames, Tx/Rx frame rate, Rx bandwidth, error frame statistics, filtering statistics and custom statistics, FCS error statistics, TCP / UDP Checksum error, Pause frame statistics and
Statistical Form Statistics Item (port)	Table statistics, chart statistics, automatic saving of Excel files;  Tx/Rx frames, Tx/Rx frame rate, Rx bandwidth, error frame statistics, filtering statistics and custom statistics, FCS error statistics, TCP / UDP Checksum error, Pause frame statistics and average delay;  Tx/Rx frames, Tx/Rx stream rate, Rx bandwidth, error frame statistics, real-time packet loss statistics, out of order statistics, delay jitter and custom statistics, etc;  Support sorting statistics results, adding, subtracting, multiplying and dividing, and
Statistical Form  Statistics Item (port)  Statistics Item (stream)	Table statistics, chart statistics, automatic saving of Excel files;  Tx/Rx frames, Tx/Rx frame rate, Rx bandwidth, error frame statistics, filtering statistics and custom statistics, FCS error statistics, TCP / UDP Checksum error, Pause frame statistics and average delay;  Tx/Rx frames, Tx/Rx stream rate, Rx bandwidth, error frame statistics, real-time packet loss statistics, out of order statistics, delay jitter and custom statistics, etc;
Statistical Form  Statistics Item (port)  Statistics Item (stream)  Statistical Operation	Table statistics, chart statistics, automatic saving of Excel files;  Tx/Rx frames, Tx/Rx frame rate, Rx bandwidth, error frame statistics, filtering statistics and custom statistics, FCS error statistics, TCP / UDP Checksum error, Pause frame statistics and average delay;  Tx/Rx frames, Tx/Rx stream rate, Rx bandwidth, error frame statistics, real-time packet loss statistics, out of order statistics, delay jitter and custom statistics, etc;  Support sorting statistics results, adding, subtracting, multiplying and dividing, and customizing paging statistics quantity;
Statistical Form  Statistics Item (port)  Statistics Item (stream)  Statistical Operation  Traffic Capture  Capture Buffer Size (bytes)  Capture Type	Table statistics, chart statistics, automatic saving of Excel files;  Tx/Rx frames, Tx/Rx frame rate, Rx bandwidth, error frame statistics, filtering statistics and custom statistics, FCS error statistics, TCP / UDP Checksum error, Pause frame statistics and average delay;  Tx/Rx frames, Tx/Rx stream rate, Rx bandwidth, error frame statistics, real-time packet loss statistics, out of order statistics, delay jitter and custom statistics, etc;  Support sorting statistics results, adding, subtracting, multiplying and dividing, and customizing paging statistics quantity;
Statistical Form  Statistics Item (port)  Statistics Item (stream)  Statistical Operation  Traffic Capture Capture Buffer Size (bytes)	Table statistics, chart statistics, automatic saving of Excel files;  Tx/Rx frames, Tx/Rx frame rate, Rx bandwidth, error frame statistics, filtering statistics and custom statistics, FCS error statistics, TCP / UDP Checksum error, Pause frame statistics and average delay;  Tx/Rx frames, Tx/Rx stream rate, Rx bandwidth, error frame statistics, real-time packet loss statistics, out of order statistics, delay jitter and custom statistics, etc;  Support sorting statistics results, adding, subtracting, multiplying and dividing, and customizing paging statistics quantity;  512M (per port)  Capture the Rx frame of data and control plane; Capture Tx and Rx frame of control plane; Capture frame based on filter template; Capture frame based on error message; Support cycle capture; Support downloading a specified number of captured messages;
Statistical Form  Statistics Item (port)  Statistics Item (stream)  Statistical Operation  Traffic Capture  Capture Buffer Size (bytes)  Capture Type	Table statistics, chart statistics, automatic saving of Excel files;  Tx/Rx frames, Tx/Rx frame rate, Rx bandwidth, error frame statistics, filtering statistics and custom statistics, FCS error statistics, TCP / UDP Checksum error, Pause frame statistics and average delay;  Tx/Rx frames, Tx/Rx stream rate, Rx bandwidth, error frame statistics, real-time packet loss statistics, out of order statistics, delay jitter and custom statistics, etc;  Support sorting statistics results, adding, subtracting, multiplying and dividing, and customizing paging statistics quantity;  512M (per port)  Capture the Rx frame of data and control plane; Capture Tx and Rx frame of control plane; Capture frame based on filter template; Capture frame based on error message; Support cycle capture:
Statistical Form  Statistics Item (port)  Statistics Item (stream)  Statistical Operation  Traffic Capture Capture Buffer Size (bytes)  Capture Type  Protocol simulation	Table statistics, chart statistics, automatic saving of Excel files;  Tx/Rx frames, Tx/Rx frame rate, Rx bandwidth, error frame statistics, filtering statistics and custom statistics, FCS error statistics, TCP / UDP Checksum error, Pause frame statistics and average delay;  Tx/Rx frames, Tx/Rx stream rate, Rx bandwidth, error frame statistics, real-time packet loss statistics, out of order statistics, delay jitter and custom statistics, etc;  Support sorting statistics results, adding, subtracting, multiplying and dividing, and customizing paging statistics quantity;  512M (per port)  Capture the Rx frame of data and control plane; Capture Tx and Rx frame of control plane; Capture frame based on filter template; Capture frame based on error message; Support cycle capture; Support downloading a specified number of captured messages;  RIPv1v2, RIPng, OSPFv2, OSPFv3, ISISv4, ISISv6, BGP, BGP4+
Statistical Form  Statistics Item (port)  Statistics Item (stream)  Statistical Operation  Traffic Capture Capture Buffer Size (bytes)  Capture Type  Protocol simulation  Routing	Table statistics, chart statistics, automatic saving of Excel files;  Tx/Rx frames, Tx/Rx frame rate, Rx bandwidth, error frame statistics, filtering statistics and custom statistics, FCS error statistics, TCP / UDP Checksum error, Pause frame statistics and average delay;  Tx/Rx frames, Tx/Rx stream rate, Rx bandwidth, error frame statistics, real-time packet loss statistics, out of order statistics, delay jitter and custom statistics, etc;  Support sorting statistics results, adding, subtracting, multiplying and dividing, and customizing paging statistics quantity;  512M (per port)  Capture the Rx frame of data and control plane; Capture Tx and Rx frame of control plane; Capture frame based on filter template; Capture frame based on error message; Support cycle capture; Support downloading a specified number of captured messages;  RIPv1v2、RIPng、OSPFv2、OSPFv3、ISISv4、ISISv6、BGP、BGP4+、 LDP、MPLS L3VPN、VPLS、VLL、6VPE、6PE PPPoE Client/Server、DHCPv4 Client/Server、DHCPv6 PD Client/
Statistical Form  Statistics Item (port)  Statistics Item (stream)  Statistical Operation  Traffic Capture Capture Buffer Size (bytes)  Capture Type  Protocol simulation  Routing  Access	Table statistics, chart statistics, automatic saving of Excel files;  Tx/Rx frames, Tx/Rx frame rate, Rx bandwidth, error frame statistics, filtering statistics and custom statistics, FCS error statistics, TCP / UDP Checksum error, Pause frame statistics and average delay;  Tx/Rx frames, Tx/Rx stream rate, Rx bandwidth, error frame statistics, real-time packet loss statistics, out of order statistics, delay jitter and custom statistics, etc;  Support sorting statistics results, adding, subtracting, multiplying and dividing, and customizing paging statistics quantity;  512M (per port)  Capture the Rx frame of data and control plane; Capture Tx and Rx frame of control plane; Capture frame based on filter template; Capture frame based on error message; Support cycle capture; Support downloading a specified number of captured messages;  RIPv1v2、RIPng、OSPFv2、OSPFv3、ISISv4、ISISv6、BGP、BGP4+、 LDP、MPLS L3VPN、VPLS、VLL、6VPE、6PE PPPOE Client/Server、DHCPv4 Client/Server、DHCPv6 Client/Server、DHCPv6 PD Client/Server、L2TPv2、802.1x
Statistical Form  Statistics Item (port)  Statistics Item (stream)  Statistical Operation  Traffic Capture Capture Buffer Size (bytes)  Capture Type  Protocol simulation  Routing  Access  Multicast	Table statistics, chart statistics, automatic saving of Excel files;  Tx/Rx frames, Tx/Rx frame rate, Rx bandwidth, error frame statistics, filtering statistics and custom statistics, FCS error statistics, TCP / UDP Checksum error, Pause frame statistics and average delay;  Tx/Rx frames, Tx/Rx stream rate, Rx bandwidth, error frame statistics, real-time packet loss statistics, out of order statistics, delay jitter and custom statistics, etc;  Support sorting statistics results, adding, subtracting, multiplying and dividing, and customizing paging statistics quantity;  512M (per port)  Capture the Rx frame of data and control plane; Capture Tx and Rx frame of control plane; Capture frame based on filter template; Capture frame based on error message; Support cycle capture; Support downloading a specified number of captured messages;  RIPv1v2, RIPng, OSPFv2, OSPFv3, ISISv4, ISISv6, BGP, BGP4+, LDP, MPLS L3VPN, VPLS, VLL, 6VPE, 6PE  PPDE Client/Server, DHCPv4 Client/Server, DHCPv6 Client/Server, DHCPv6 PD Client/Server, L2TPv2, 802.1x  IGMPv1/v2/v3, MLDv1/v2, IGMP/MLD Querier, PIM-SM  VXLAN, OpenFlow, OVSDB, EVPN, LACP
Statistical Form  Statistics Item (port)  Statistics Item (stream)  Statistical Operation  Traffic Capture Capture Buffer Size (bytes)  Capture Type  Protocol simulation  Routing  Access  Multicast Data Center	Table statistics, chart statistics, automatic saving of Excel files;  Tx/Rx frames, Tx/Rx frame rate, Rx bandwidth, error frame statistics, filtering statistics and custom statistics, FCS error statistics, TCP / UDP Checksum error, Pause frame statistics and average delay;  Tx/Rx frames, Tx/Rx stream rate, Rx bandwidth, error frame statistics, real-time packet loss statistics, out of order statistics, delay jitter and custom statistics, etc;  Support sorting statistics results, adding, subtracting, multiplying and dividing, and customizing paging statistics quantity;  512M (per port)  Capture the Rx frame of data and control plane; Capture Tx and Rx frame of control plane; Capture frame based on filter template; Capture frame based on error message; Support cycle capture; Support downloading a specified number of captured messages;  RIPv1v2、RIPng、OSPFv2、OSPFv3、ISISv4、ISISv6、BGP、BGP4+、 LDP、MPLS L3VPN、VPLS、VLL、6VPE、6PE PPDG Client/Server、DHCPv4 Client/Server、DHCPv6 PD Client/ Server、L2TPv2、802.1x  IGMPv1/v2/v3、MLDv1/v2、IGMP/MLD Querier、PIM-SM  VXLAN、OpenFlow、OVSDB、EVPN、LACP  Automatic configuration of BFD, 802.1ag, 802.3ah and IPv6
Statistical Form  Statistics Item (port)  Statistics Item (stream)  Statistical Operation  Traffic Capture Capture Buffer Size (bytes)  Capture Type  Protocol simulation  Routing  Access  Multicast Data Center Others Test Suites	Table statistics, chart statistics, automatic saving of Excel files;  Tx/Rx frames, Tx/Rx frame rate, Rx bandwidth, error frame statistics, filtering statistics and custom statistics, FCS error statistics, TCP / UDP Checksum error, Pause frame statistics and average delay;  Tx/Rx frames, Tx/Rx stream rate, Rx bandwidth, error frame statistics, real-time packet loss statistics, out of order statistics, delay jitter and custom statistics, etc;  Support sorting statistics results, adding, subtracting, multiplying and dividing, and customizing paging statistics quantity;  512M (per port)  Capture the Rx frame of data and control plane; Capture Tx and Rx frame of control plane; Capture frame based on filter template; Capture frame based on error message; Support cycle capture; Support downloading a specified number of captured messages;  RIPv1v2, RIPng, OSPFv2, OSPFv3, ISISv4, ISISv6, BGP, BGP4+, LDP, MPLS L3VPN, VPLS, VLL, 6VPE, 6PE  PPDE Client/Server, DHCPv4 Client/Server, DHCPv6 Client/Server, DHCPv6 PD Client/Server, L2TPv2, 802.1x  IGMPv1/v2/v3, MLDv1/v2, IGMP/MLD Querier, PIM-SM  VXLAN, OpenFlow, OVSDB, EVPN, LACP
Statistical Form  Statistics Item (port)  Statistics Item (stream)  Statistical Operation  Traffic Capture Capture Buffer Size (bytes)  Capture Type  Protocol simulation  Routing  Access  Multicast Data Center Others	Table statistics, chart statistics, automatic saving of Excel files;  Tx/Rx frames, Tx/Rx frame rate, Rx bandwidth, error frame statistics, filtering statistics and custom statistics, FCS error statistics, TCP / UDP Checksum error, Pause frame statistics and average delay;  Tx/Rx frames, Tx/Rx stream rate, Rx bandwidth, error frame statistics, real-time packet loss statistics, out of order statistics, delay jitter and custom statistics, etc;  Support sorting statistics results, adding, subtracting, multiplying and dividing, and customizing paging statistics quantity;  512M (per port)  Capture the Rx frame of data and control plane; Capture Tx and Rx frame of control plane; Capture frame based on filter template; Capture frame based on error message; Support cycle capture; Support downloading a specified number of captured messages;  RIPv1v2, RIPng, OSPFv2, OSPFv3, ISISv4, ISISv6, BGP, BGP4+, LDP, MPLS L3VPN, VPLS, VLL, 6VPE, 6PE  PPDE Client/Server, DHCPv4 Client/Server, DHCPv6 Client/Server, DHCPv6 PD Client/ Server, L2TPv2, 802.1x  IGMPv1/v2/v3, MLDv1/v2, IGMP/MLD Querier, PIM-SM  VXLAN, OpenFlow, OVSDB, EVPN, LACP  Automatic configuration of BFD, 802.1ag, 802.3ah and IPv6  RFC2544, RFC2889, RFC3918, Asymmetric Performance, Smart Script
Statistical Form  Statistics Item (port)  Statistics Item (stream)  Statistical Operation  Traffic Capture Capture Buffer Size (bytes)  Capture Type  Protocol simulation  Routing  Access  Multicast Data Center Others Test Suites  software platform Client	Table statistics, chart statistics, automatic saving of Excel files;  Tx/Rx frames, Tx/Rx frame rate, Rx bandwidth, error frame statistics, filtering statistics and custom statistics, FCS error statistics, TCP / UDP Checksum error, Pause frame statistics and average delay;  Tx/Rx frames, Tx/Rx stream rate, Rx bandwidth, error frame statistics, real-time packet loss statistics, out of order statistics, delay jitter and custom statistics, etc;  Support sorting statistics results, adding, subtracting, multiplying and dividing, and customizing paging statistics quantity;  512M (per port)  Capture the Rx frame of data and control plane; Capture Tx and Rx frame of control plane; Capture frame based on filter template; Capture frame based on error message; Support cycle capture; Support downloading a specified number of captured messages;  RIPV1v2, RIPng, OSPFv2, OSPFv3, ISISv4, ISISv6, BGP, BGP4+, LDP, MPLS L3VPN, VPLS, VLL, 6VPE, 6PE  PPDE Client/Server, DHCPv4 Client/Server, DHCPv6 Client/Server, DHCPv6 PD Client/ Server, L2TPv2, 802.1x  IGMPv1/v2/v3, MLDv1/v2, IGMP/MLD Querier, PIM-SM  VXLAN, OpenFlow, OVSDB, EVPN, LACP  Automatic configuration of BFD, 802.1ag, 802.3ah and IPv6  RFC2544, RFC2889, RFC3918, Asymmetric Performance, Smart Script  Renix test platform: Layer2-3 traffic test and protocols simulation
Statistical Form  Statistics Item (port)  Statistics Item (stream)  Statistical Operation  Traffic Capture Capture Buffer Size (bytes)  Capture Type  Protocol simulation  Routing  Access  Multicast Data Center Others Test Suites software platform Client API Development	Table statistics, chart statistics, automatic saving of Excel files;  Tx/Rx frames, Tx/Rx frame rate, Rx bandwidth, error frame statistics, filtering statistics and custom statistics, FCS error statistics, TCP / UDP Checksum error, Pause frame statistics and average delay;  Tx/Rx frames, Tx/Rx stream rate, Rx bandwidth, error frame statistics, real-time packet loss statistics, out of order statistics, delay jitter and custom statistics, etc;  Support sorting statistics results, adding, subtracting, multiplying and dividing, and customizing paging statistics quantity;  512M (per port)  Capture the Rx frame of data and control plane; Capture Tx and Rx frame of control plane; Capture frame based on filter template; Capture frame based on error message; Support cycle capture; Support downloading a specified number of captured messages;  RIPv1v2, RIPng, OSPFv2, OSPFv3, ISISv4, ISISv6, BGP, BGP4+, LDP, MPLS L3VPN, VPLS, VLL, 6VPE, 6PE  PPPOE Client/Server, DHCPv4 Client/Server, DHCPv6 Client/Server, DHCPv6 PD Client/ Server, L2TPv2, 802.1x  IGMPv1/v2/v3, MLDv1/v2, IGMP/MLD Querier, PIM-SM  VXLAN, OpenFlow, OVSDB, EVPN, LACP  Automatic configuration of BFD, 802.1ag, 802.3ah and IPv6  RFC2544, RFC2889, RFC3918, Asymmetric Performance, Smart Script  Renix test platform: Layer2-3 traffic test and protocols simulation TCL, Python3.x, GUIToTCL, GUIToPython
Statistical Form  Statistics Item (port)  Statistics Item (stream)  Statistical Operation  Traffic Capture Capture Buffer Size (bytes)  Capture Type  Protocol simulation  Routing  Access  Multicast Data Center Others Test Suites software platform Client API Development GUI Language	Table statistics, chart statistics, automatic saving of Excel files;  Tx/Rx frames, Tx/Rx frame rate, Rx bandwidth, error frame statistics, filtering statistics and custom statistics, FCS error statistics, TCP / UDP Checksum error, Pause frame statistics and average delay;  Tx/Rx frames, Tx/Rx stream rate, Rx bandwidth, error frame statistics, real-time packet loss statistics, out of order statistics, delay jitter and custom statistics, etc;  Support sorting statistics results, adding, subtracting, multiplying and dividing, and customizing paging statistics quantity;  512M (per port)  Capture the Rx frame of data and control plane; Capture Tx and Rx frame of control plane; Capture frame based on filter template; Capture frame based on error message; Support cycle capture; Support downloading a specified number of captured messages;  RIPV1v2, RIPng, OSPFv2, OSPFv3, ISISv4, ISISv6, BGP, BGP4+, LDP, MPLS L3VPN, VPLS, VLL, 6VPE, 6PE  PPDE Client/Server, DHCPv4 Client/Server, DHCPv6 Client/Server, DHCPv6 PD Client/ Server, L2TPv2, 802.1x  IGMPv1/v2/v3, MLDv1/v2, IGMP/MLD Querier, PIM-SM  VXLAN, OpenFlow, OVSDB, EVPN, LACP  Automatic configuration of BFD, 802.1ag, 802.3ah and IPv6  RFC2544, RFC2889, RFC3918, Asymmetric Performance, Smart Script  Renix test platform: Layer2-3 traffic test and protocols simulation
Statistical Form  Statistics Item (port)  Statistics Item (stream)  Statistical Operation  Traffic Capture Capture Buffer Size (bytes)  Capture Type  Protocol simulation  Routing  Access  Multicast Data Center Others Test Suites software platform Client API Development GUI Language hardware platform	Table statistics, chart statistics, automatic saving of Excel files;  Tx/Rx frames, Tx/Rx frame rate, Rx bandwidth, error frame statistics, filtering statistics and custom statistics, FCS error statistics, TCP / UDP Checksum error, Pause frame statistics and average delay;  Tx/Rx frames, Tx/Rx stream rate, Rx bandwidth, error frame statistics, real-time packet loss statistics, out of order statistics, delay jitter and custom statistics, etc;  Support sorting statistics results, adding, subtracting, multiplying and dividing, and customizing paging statistics quantity;  512M (per port)  Capture the Rx frame of data and control plane; Capture Tx and Rx frame of control plane; Capture frame based on error message; Support downloading a specified number of captured messages;  RIPv1v2, RIPng, OSPFv2, OSPFv3, ISISv4, ISISv6, BGP, BGP4+, LDP, MPLS L3VPN, VPLS, VLL, 6VPE, 6PE PPDE Client/Server, DHCPv4 Client/Server, DHCPv6 Client/Server, DHCPv6 PD Client/Server, L2TPv2, 802.1x IGMPv1/v2/v3, MLDv1/v2, IGMP/MLD Querier, PIM-SM VXLAN, OpenFlow, OVSDB, EVPN, LACP Automatic configuration of BFD, 802.1ag, 802.3ah and IPv6 RFC2544, RFC2889, RFC3918, Asymmetric Performance, Smart Script  Renix test platform: Layer2-3 traffic test and protocols simulation TCL, Python3.x, GUIToTCL, GUIToPython English, simplified Chinese
Statistical Form  Statistics Item (port)  Statistics Item (stream)  Statistical Operation  Traffic Capture Capture Buffer Size (bytes)  Capture Type  Protocol simulation  Routing  Access  Multicast Data Center Others Test Suites software platform Client API Development GUI Language	Table statistics, chart statistics, automatic saving of Excel files;  Tx/Rx frames, Tx/Rx frame rate, Rx bandwidth, error frame statistics, filtering statistics and custom statistics, FCS error statistics, TCP / UDP Checksum error, Pause frame statistics and average delay;  Tx/Rx frames, Tx/Rx stream rate, Rx bandwidth, error frame statistics, real-time packet loss statistics, out of order statistics, delay jitter and custom statistics, etc;  Support sorting statistics results, adding, subtracting, multiplying and dividing, and customizing paging statistics quantity;  512M (per port)  Capture the Rx frame of data and control plane; Capture Tx and Rx frame of control plane; Capture frame based on filter template; Capture frame based on error message; Support cycle capture; Support downloading a specified number of captured messages;  RIPv1v2, RIPng, OSPFv2, OSPFv3, ISISv4, ISISv6, BGP, BGP4+, LDP, MPLS L3VPN, VPLS, VLL, 6VPE, 6PE  PPPOE Client/Server, DHCPv4 Client/Server, DHCPv6 Client/Server, DHCPv6 PD Client/ Server, L2TPv2, 802.1x  IGMPv1/v2/v3, MLDv1/v2, IGMP/MLD Querier, PIM-SM  VXLAN, OpenFlow, OVSDB, EVPN, LACP  Automatic configuration of BFD, 802.1ag, 802.3ah and IPv6  RFC2544, RFC2889, RFC3918, Asymmetric Performance, Smart Script  Renix test platform: Layer2-3 traffic test and protocols simulation TCL, Python3.x, GUIToTCL, GUIToPython