

# BigTao Series P Product Manual

**| We make network testing easier**



# ABOUT XINERTEL

Beijing Xinertel Technology Co., Ltd. is a national high-tech enterprise with independent intellectual property rights. It is also recognized China's National High-Tech Enterprise, as one of the "Beijing Specialized and Innovative Small and Medium-sized Enterprises", "ZhongGuanChun High-Tech Enterprise" and "ZhongGuanChun Innovation Enterprise". Since its establishment in 2007, Xinertel has been focusing on the field of communication network testing, dedicated to providing customers with high-quality IP network testing products and testing solutions.

Xinertel continuous development is driven by its commitment to technological innovation and product quality. With solid technical accumulation and leading research and development capabilities, Xinertel pioneered the fully automated communication product production testing solution, leading to multiple technological breakthroughs in domestic network testers. This has earned high recognition from customers and positioned Xinertel as a leading supplier of network testers in terms of port's shipment volume.

Xinertel always adhere to the principles of "focus, innovation, cooperation, and service", and Customer-first philosophy. The company is committed to providing customers with the best cost-effective products and satisfactory services. For any customers with special product requirements, Xinertel can provide customized network testing products or solutions. At Xinertel, customer satisfaction is our ultimate pursuit.

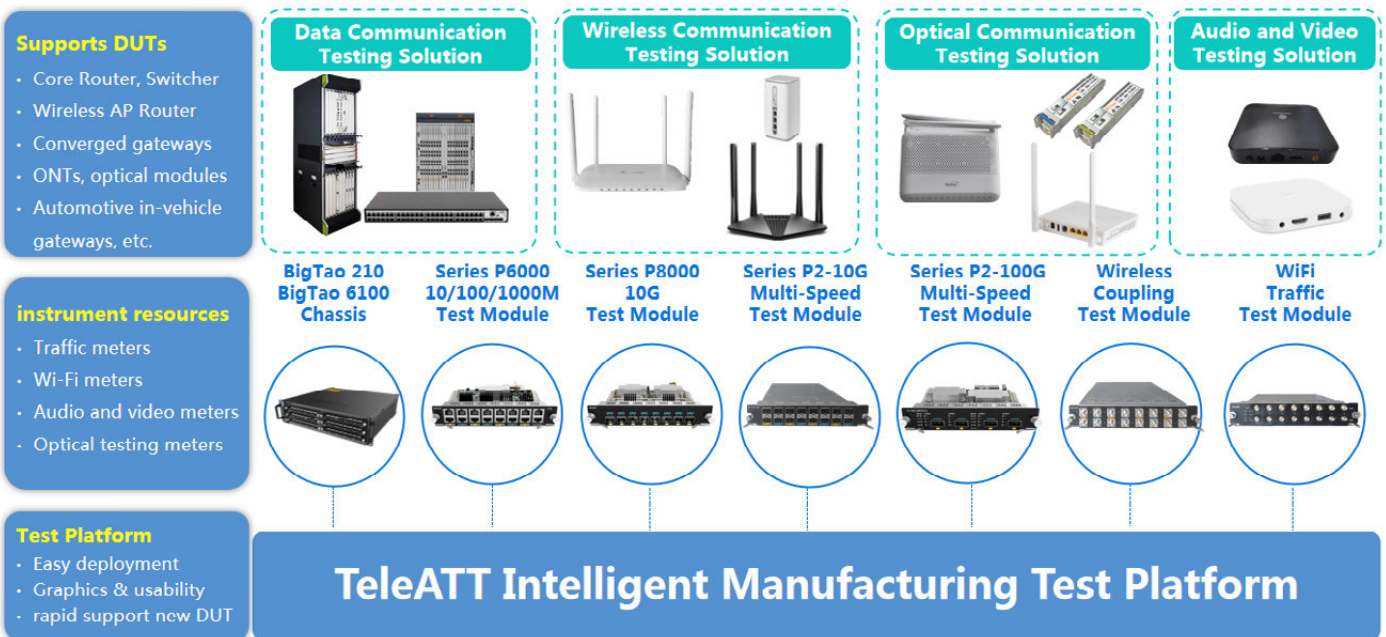
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# Product Overview

Xinertel delivers comprehensive intelligence manufacturing testing solutions for electronic product manufacturers in the data communication, optical product, audio&video industries. This includes production testing software platform, hardware platform, instruments, testing modules, and integrated solutions. These solutions support manufacturers in enhancing their production testing competitiveness across the entire process, from chip testing to board testing, system testing, and reliability testing. Xinertel is committed to making manufacturing capabilities become the core competitiveness of customer products, and assisting clients in achieving commercial success.

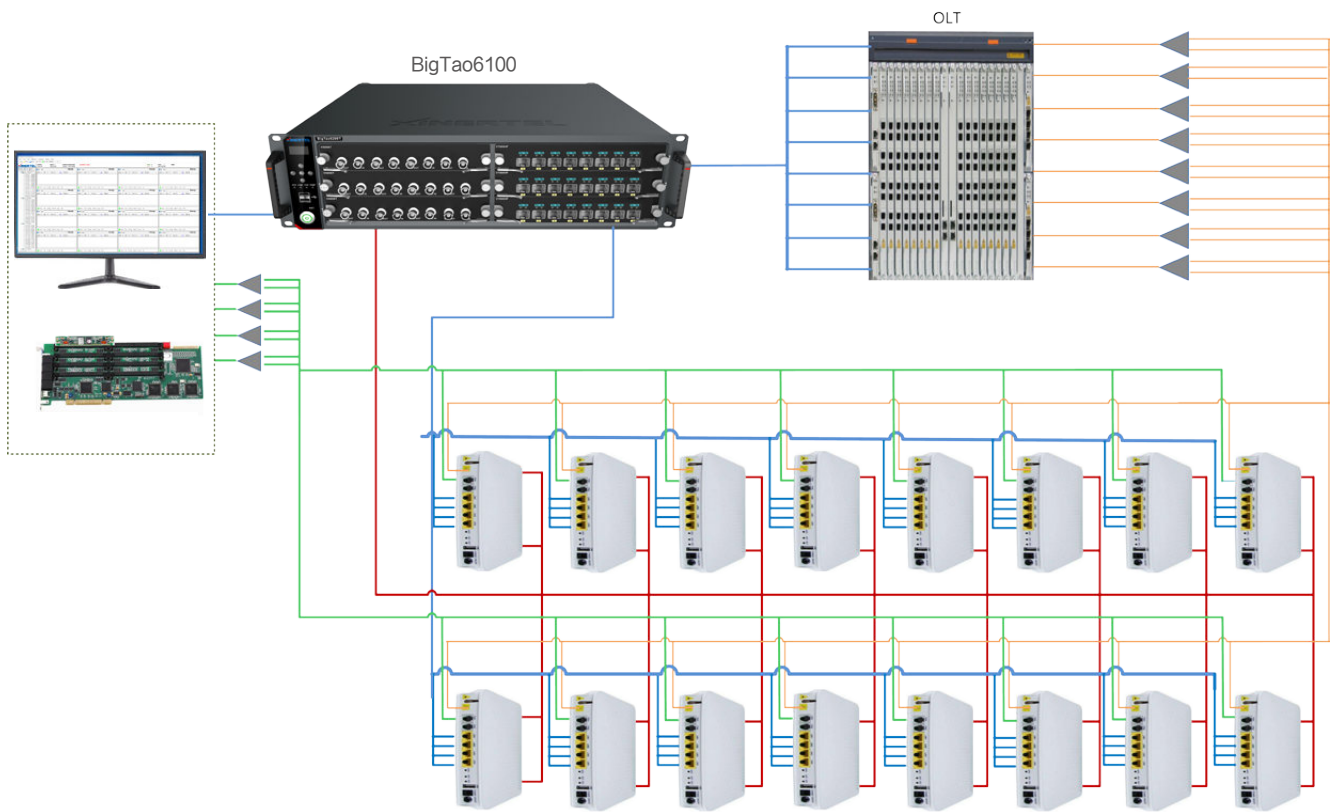
## Empowers ICT equipment manufacturers to make manufacturing a core competitiveness



**Series BigTao Chassis** : deliver rack and portable chassis. The BigTao6100 chassis supports 6 slots, and achieve up to 96 ethernet test ports with 10/5/2.5/1GE speed when fully configured, making it the highest overall port density test product in the industry's production testing scenario, greatly achieving full capacity

- **Series P6000 gigabit Testing Module**: supports testing capabilities for ethernet interfaces ranging from 10M to 1000M. Connector type include copper RJ45 and Fibre optical
- **Series P8000 10G Testing Module**: supports testing capabilities for 10G fiber optical ethernet interfaces.
- **Series P2-10G Testing Module**: supports testing capabilities for ethernet interfaces upto 10G, include 10G/5G/2.5G/1G/100M. Connector type support copper RJ45 and Fibre optical
- **Series P2-100G Testing Module**: supports testing capabilities for ethernet interfaces upto 100G, include 100G/50G/40G/25G/10G.
- **Wireless Communication Testing Module**: supports WiFi traffic or coupled testing, providing comprehensive coverage of Tx and Rx quality.
- **TeleATT Intelligent Manufacturing Test Platform**: supports graphics configuration and provides a rich testcase library, and quickly adapts for new DUT models. Meet the low-cost and efficient testing requirements in the field of network equipment manufacturing.

## An ONT manufacturing testing application case



### Functional highlights

- Supports a maximum of 6 test modules and a maximum of 96 10G/5G/2.5G/1GE/100M ports
- Supports up to 16 DUTs, parallel, and automated manufacturing testing
- One stop integration test: include dozens of test cases such as Telnet functional testcase, VOIP interface testcase, traffic testcase, Wi-Fi coupling testcase. Thereby reducing manufacture procedure and saving costs.
- Support MES system integration and automatically uploads test-logs, and provides precise control of manufacture procedure.

## BigTao210



Xinertel BigTao210 portable chassis is a new generation of production test chassis with Xinertel global leading architecture. It uses Modular design, provides two slots, supports any combination of test modules from 10M to 100G speed, and is the smallest chassis to support Xinertel new 100G multi-speed modules (10G/25G/40G/50G/100G) .

BigTao210 is small and portable, the side of the special increase in portable handle, greatly meet the needs of field testing. At the same time using professional noise reduction technology, the maximum operating noise only 65 decibels, can be placed in the office for testing. Using the latest energy-saving technology, green environmental protection, the maximum power consumption of full load only 150W, can effectively reduce the cost of long-term network testing.

BigTao210 can implement Layer2-3 traffic test for network equipment and network system with the TeleATT and the Series P wired traffic testing modules, wireless coupling power testing module, and Wi-Fi traffic testing module, which are the large-scale automation test software of Xinertel product line, to meeting the low-cost and high-efficiency testing requirements in the network equipment manufacturing field. By providing customized services such as factory MES system integration and secondary development base on API interface, it can further enhance the quality control and efficiency improvement of network communication products during the manufacturing phase.

### Key Features

- Support two 10M~100G ethernet traffic testing modules
- Support wireless coupling and Wi-Fi testing modules
- Portable chassis with low power consumption and low noise
- Support dozens of regular test cases based on flexible and configurable testing modules
- Support multi-product automatic synchronous and asynchronous testing
- Support automatic and manual testing modes
- Support MES integration and automatic upload of test logs
- Support secondary development based on API interface



## Specification List

Slot	2 Slots
size	340mm x 400mm x 95mm
Weight	Empty chassis (with panel) : about 6.6kg With full slots and cards : about 9.2kg
Switch / display	<ul style="list-style-type: none"> <li>• Rear AC power switch</li> <li>• Power, Fan, Temp, Link LED Indicator light , OLED display screen</li> <li>• Chassis Reset Button</li> <li>• Chassis OLED control button</li> </ul>
IO interface	<ul style="list-style-type: none"> <li>• 1 DB15 display interface</li> <li>• 1 RJ45 10/100/1000M BaseT Management interface</li> <li>• 1 RJ45 10/100/1000M 1588 Clock input interface</li> <li>• 1 RJ45 RS232 Serial port</li> <li>• 1 SYNC-OUT、 1 SYNC-IN Chassis cascade interface</li> <li>• 1 DB9 GPS RS232 Serial port</li> <li>• 1 1PPS、 1 10MHz input BNC</li> <li>• 1 IRIG-B DC TTL input BNC</li> <li>• 2 USB Type A interfaces</li> </ul>
Operating temperature range	Work: 0° C to 35° C Store: -40° C to 70° C
humidity	Work: 20% to 85% Relative humidity, no condensation Store: 20% to 85% Relative humidity
Chassis power supply	1 route 110VAC / 220VAC 50 / 60HZ@3A single-phase power input
Noise	Full-load noise of the whole machine ≤ 65dba
Operating system	CentOS6.7 and above, 64bit
Network management	<ul style="list-style-type: none"> <li>• Compatible with IPV4 and IPV6 Management Network</li> <li>• Support Panel keys to modify Ip Address and Query Status</li> <li>• Support Telnet / SSH Terminal to Modify Ip and Query Status</li> <li>• Support external display and keyboard to modify Ip and Query Status</li> <li>• Support web page download client, modify Ip, Query Status</li> <li>• Support License management and Hardware Management by client software</li> </ul>
User operating software	TeleATT: Automatic Network Flow Testing Software for manufactory
Minimum PC requirements	OS: Microsoft Windows XP/ Windows 7 and above CPU: Intel Atom N2600 @1.60GHZ and above Memory: 2 GB and above
Support test modules	<ul style="list-style-type: none"> <li>• Series P6000 1G basic test modules ( 10M/100M/1000M )</li> <li>• Series P8000 10G basic test modules ( 10G )</li> <li>• Series P2-10G multi-speed basic test modules ( 100M/1G/2.5G/5G/10G )</li> <li>• Series P2-100G multi-speed basic test modules ( 10G/25G/40G/50G/100G )</li> <li>• P6216W/P6008W Wi-Fi test modules</li> </ul>

## BigTao6100



BigTao6100 rackmount chassis is a next generation testing chassis with a Xinertel' s globally leading architecture. It uses a modular design, providing 6 slots that support various rates of wired traffic testing modules ranging from 10M to 100G in any combination. It also supports wireless coupling test module and Wi-Fi traffic test module. It is the highest port density rackmount chassis in the industry with the same size.

BigTao6100 chassis has high-efficiency hardware architecture, unique fan/noise control and energy-saving technology, while providing high-efficiency operation, can effectively reduce noise and power consumption, for enterprises to save costs. The BigTao6100 chassis will not only run all the existing the series P2 test modules, but also all the previous the series P test modules, and will also be compatible with the 200G / 400G test modules that will be developed in the future to provide maximum capability protection to customers' assets.

BigTao6100 can implement Layer2-3 traffic test for network equipment and network system with the TeleATT and the series P wired traffic testing modules, wireless coupling power testing modules, and Wi-Fi traffic testing modules, which are the large-scale automation test software of Xinertel product line, to meeting the low-cost and high-efficiency testing requirements in the network equipment manufacturing field. By providing customized services such as factory MES system integration and secondary development base on API interface, it can further enhance the quality control and efficiency improvement of network communication products during the manufacturing phase.

### Key Features

- Support six 10M~100G Ethernet traffic testing modules
- Support wireless coupling and Wi-Fi testing modules
- High port density, saving investment
- Support dozens of regular test cases based on flexible and configurable testing modules
- Support multi- product automatic synchronous and asynchronous testing
- Support automatic and manual testing modes
- Support MES integration and automatic upload of test logs
- Support secondary development based on API interface



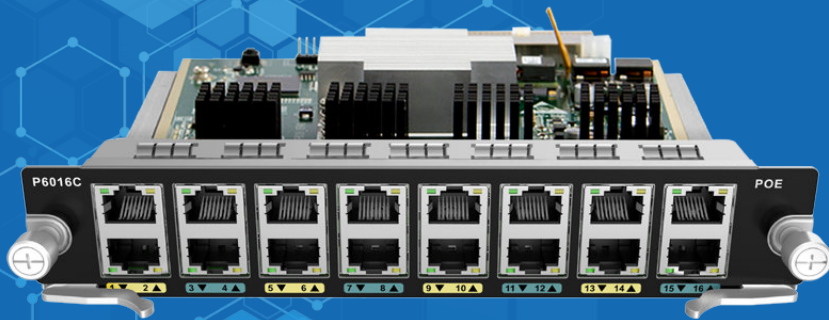
**High port density**



## Specification List

Slot	6 Slots
size	446mm x 413mm x 132mm
Weight	Empty chassis (with panel) : about 12.5kg With full slots and cards : about 20kg
Switch / display	<ul style="list-style-type: none"> <li>• Rear AC power switch</li> <li>• Power, Fan, Temp, Link LED Indicator light , OLED display screen</li> <li>• Chassis Reset Button</li> <li>• Chassis OLED control button</li> </ul>
IO interface	<ul style="list-style-type: none"> <li>• 1 DB15 display interface</li> <li>• 1 RJ45 10/100/1000M BaseT Management interface</li> <li>• 1 RJ45 10/100/1000M 1588 Clock input interface</li> <li>• 1 RJ45 RS232 Serial port</li> <li>• 1 SYNC-OUT、 1 SYNC-IN Chassis cascade interface</li> <li>• 1 DB9 GPS RS232 Serial port</li> <li>• 1 1PPS、 1 10MHz input BNC</li> <li>• 1 IRIG-B DC TTL input BNC</li> <li>• 2 USB Type A interfaces</li> </ul>
Operating temperature range	Work: 0° C to 35° C Store: -40° C to 70° C
humidity	Work: 20% to 85% Relative humidity, no condensation Store: 20% to 85% Relative humidity
Chassis power supply	1 route 110VAC / 220VAC 50 / 60HZ@3A single-phase power input
Noise	Full-load noise of the whole machine ≤ 65dba
Operating system	CentOS6.7 and above, 64bit
Network management	<ul style="list-style-type: none"> <li>• Compatible with IPV4 and IPV6 Management Network</li> <li>• Support Panel keys to modify Ip Address and Query Status</li> <li>• Support Telnet / SSH Terminal to Modify Ip and Query Status</li> <li>• Support external display and keyboard to modify Ip and Query Status</li> <li>• Support web page download client, modify Ip, Query Status</li> <li>• Support License management and Hardware Management by client software</li> </ul>
User operating software	TeleATT: Automatic Network Flow Testing Software for manufactory
Minimum PC requirements	OS: Microsoft Windows XP/ Windows 7 and above CPU: Intel Atom N2600 @1.60GHZ and above Memory: 2 GB and above
Support test modules	<ul style="list-style-type: none"> <li>• Series P6000 1G basic test modules ( 10M/100M/1000M )</li> <li>• Series P8000 10G basic test modules ( 10G )</li> <li>• Series P2-10G multi-speed basic test modules ( 100M/1G/2.5G/5G/10G )</li> <li>• Series P2-100G multi-speed basic test modules ( 10G/25G/40G/50G/100G )</li> <li>• P6216W/P6008W Wi-Fi test modules</li> </ul>

## BigTao Series P6000



The Series P6000 test module support up to 16 gigabit interfaces, including optical(SFP) and electrical(RJ45) media, and is suitable for BigTao210 and BigTao6100. With the special automatic test software: TeleATT, it can support more than 30 kinds of testcases, such as aggregation, interaction, loop back, as well as various package configurations and frame length templates, and support batch synchronous and asynchronous testing on the production line to achieve full automation of the test process to ensure a comprehensive, efficient and automated.

### Key Features

- 10/100/1000M Copper RJ45 interface
- 100/1000M Fiber SFP interface
- Support ethernet 2–3-layer flow test
- 100% load generation, analyzation, and capture functions based on hardware
- Support routing forwarding between testing service ports and chassis control ports
- Support multi-product automatic synchronous and asynchronous testing
- Support MES integration and automatic upload of test logs
- Support secondary development based on API interface

### Module List



**P6016C**  
16-Port RJ45 1G Basic Test Module



**P6016F**  
16-Port SFP 1G Basic Test Module



**P6016D**  
12-Port RJ45 and 4-Port SFP  
1G Basic Test Module

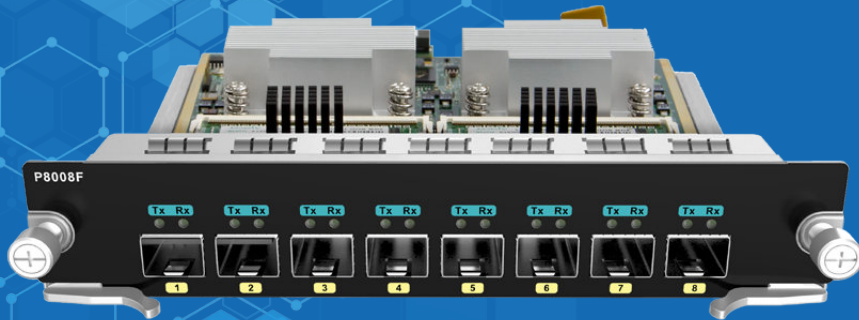


**P6016E**  
8-Port RJ45 and 8-Port SFP 1G  
Basic Test Module

## Specification List

Hardware and Electrical characteristics	
Port type	Copper RJ45 : 10M/100M/1000M; Fiber SFP : 100M/1000M
Port density	Maximum 16 ports per module
Interface standard	1000BASE-SX; 1000BASE-LX; 10/100/1000BASE-T; 100BASE-FX
User reservation	per one port
Speed switching mode	Auto negotiation (RJ45) or Forced rate mode (RJ45, Fiber)
Module weight	1.1 kg
Module size (W*H *D)	196mm x 35.5mm x 271mm
Working temperature range	0° C to 35° C
Working relative humidity	20% to 85%
Power consumption	≤ 29W
Traffic Generation	
Maximum transmit streams	64 per port
Frame size (without CRC)	64-16000(RJ45 interface, SFP gigabit interface); 64-9216(100M SFP optical interface)
Frame size type	Fixed, Increment, Random
Variable field per stream	Support source MAC increment
Traffic schedule modes	Continuous, Packet burst, and Time burst per port
Load profile type	Rate per port, Rate per stream
Frame timestamp resolution	8 ns
User-defined data	Support 128 bytes user defined data
Flow control	Full duplex flow control, Half duplex back pressure
Error Insertion frame	oversize frame
Packet Analyzer	
Maximum receive streams	256 per port
Statistical item(port)	Tx/Rx frame counts and rates, Rx error frame counts
Statistical item(stream)	Tx/Rx stream frame counts and rates, Rx out of sequence errors
Packet Capture	
Capture buffer size	16K bytes per port
Capture type	1) capture received packets at the data and control plane 2) capture transmitted/received packets at control plane 3) Control plane Error packets
Protocol Emulation	
Protocol	ARP/RARP、ICMPv4、Telnet、DHCPv4
NAT	routing forwarding between testing service ports and chassis control ports (ICMPv4、TCP over IPv4) , support various DUT control protocols such as Telnet, Http, SSH, etc.
Software Platform	
Test Software	TeleATT: Automatic Network Flow Testing Software for manufactory TeleExplorer: Layer 2-3 Traffic Testing Software
API interface	TeleAPI ( C / C# ) , HTTP
Language	Simplified Chinese, English
Hardware Platform	
Chassis	BigTao210, BigTao6100

## BigTao Series P8000



The Series P8000 test modules support up to 8 ports 10-Gigabit interfaces, suitable for the BigTao210/6100 chassis. With the special automatic test software: TeleATT, it can support more than 30 kinds of testcases such as aggregation, interaction, loopback, as well as various package configurations and frame length templates, and support batch synchronous and asynchronous testing on the production line to achieve full automation of the test process to ensure a comprehensive, efficient, and automated.

### Key Features

- Support up to 8 10-Gigabit ports per module
- Support ethernet 2–3-layer flow test
- 100% load generation, statistics, and capture functions based on hardware
- Support routing forwarding between testing service ports and chassis control ports
- Support multi-product automatic synchronous and asynchronous testing
- Support MES integration and automatic upload of test logs
- Support secondary development based on API interface

### Module List



**P8004F**  
4-Port SFP+ 10G Basic Test Module



**P8008F**  
8-Port SFP+ 10G Basic Test Module

## Specification List

Hardware and Electrical characteristics	
Port type	Fiber SFP : 10G
Port density	Maximum 8 ports per module
Interface standard	10GBASE-SR/SW、10GBASE-LR/LW
User reservation	per one port
Speed switching mode	Single speed: 10 Gigabit
Module weight	1.2 kg
Module size (W*H *D)	196mm x 35.5mm x 271mm
Working temperature range	0° C to 35° C
Working relative humidity	20% to 85%
Power consumption	≤ 29W
Traffic Generation	
Maximum transmit streams	256 per port
Frame size (without CRC)	61-16000
Frame size type	Fixed, Increment, Random
Variable field per stream	Support source MAC increment
Traffic schedule modes	Continuous, Packet burst, and Time burst per port
Load profile type	Rate per port, Rate per stream
Frame timestamp resolution	8 ns
User-defined data	Support 128 bytes user defined data
Flow control	Full duplex flow control
Error Insertion frame	CRC error, undersize frame, oversize frame
Packet Analyzer	
Maximum receive streams	1024 per port
Statistical item(port)	Tx/Rx frame counts and rates, Rx error frame counts
Statistical item(stream)	Tx/Rx stream frame counts and rates, Rx out of sequence errors
Packet Capture	
Capture buffer size	32K bytes per port
Capture type	1) capture received packets at the data and control plane 2) capture transmitted/received packets at control plane 3) Control plane Error packets
Protocol Emulation	
Protocol	ARP/RARP、ICMPv4、Telnet、DHCPv4
NAT	routing forwarding between testing service ports and chassis control ports (ICMPv4、TCP over IPv4) , support various DUT control protocols such as Telnet, Http, SSH, etc.
Software Platform	
Test software	TeleATT: Automatic Network Flow Testing Software for manufactory TeleExplorer: Layer 2-3 Traffic Testing Software
API interface	TeleAPI ( C / C# ) , HTTP
Language	Simplified Chinese, English
Hardware Platform	
Chassis	BigTao210, BigTao6100

## BigTao Series P2-10G



The series P2-10G modules support up to 16 multi-speed modes interfaces(10G /5G/2.5G/1G/100M). include optical and electric media, suitable for the BigTao series chassis. With the special automatic test software: TeleATT, it can support more than 30 kinds of testcases such as aggregation, interaction, loopback, as well as various package configurations and frame length templates, and support batch synchronous and asynchronous testing on the production line to achieve full automation of the test process to ensure a comprehensive, efficient, and automated.

### Key Features

- Support up to 16 multi-speed modes ports per card(10G/5G/2.5G/1G/100M)
- Support ethernet 2–3-layer flow test
- 100% load generation, statistics, and capture functions based on hardware
- Support routing forwarding between testing service ports and chassis control ports
- Support multi-product automatic synchronous and asynchronous testing
- Support MES integration and automatic upload of test logs
- Support secondary development based on API interface

### Module List



**P2-10G-8C-Q**  
8-Port RJ45 10G Quint Speed Basic Test Module



**P2-10G-16F**  
16-Port SFP+ 10G Quadra Speed Basic Test Module



**P2-10G-8F**  
8-Port SFP+ 10G Quadra Speed Basic Test Module



**P2-10G-4F**  
4-Port SFP+ 10G Quadra-Speed Basic Test Module



**P2-10G-16C**  
16-Port RJ45 10G Quint-Speed Basic Test Module



**P2-10G-8C**  
8-Port RJ45 10G Quint Speed Basic Test Module

## Specification List

Hardware and Electrical characteristics	
Port type	P2-10G-16F/8F/4F: 10G/2.5G/1G(SFP+) ; 10G/5G/2.5G/1G/100M(RJ45) P2-10G-16C/8C/8C-Q: 10G/5G/2.5G/1G/100M
Port density	P2-10G-16*: 16 ports/card; P2-10G-8*: 8 ports/card; P2-10G-4*: 4 ports/card
Interface standard	100MBASE-T, 1000MBASE-T, 2.5GBASE-T, 5GBASE-T, 10GBASE-T, 1GBASE-R, 2.5GBASE-R, 10GBASE-R
User reservation	Per one port
Speed switching mode	Copper RJ45: Auto negotiation or Forced speed mode; Fiber SFP+: Manual switch ; RJ45-SFP+: Auto negotiation
Module weight	1.1 kg
Module size (W*H *D)	196mm x 35.5mm x 271mm
Working temperature range	0° C to 35° C
Working relative humidity	20% to 85%
Power consumption	16-port module: ≤ 60 W ; 8/4-port module: ≤ 35 W
Traffic Generation	
Maximum transmit streams	P2-10G-Q: 256 P2-10G-16F/8F/4F/16C/8C: 128
Frame size (without CRC)	61-16000
Frame size type	Fixed, Increment, Random
Variable field per stream	Support source MAC increment
Traffic schedule modes	Continuous, Packet burst, and Time burst per port
Load profile type	Rate per port, Rate per stream
Frame timestamp resolution	8 ns
User-defined data	Support 128 bytes user defined data
Flow control	Full duplex flow control
Error Insertionframe	CRC error, undersize frame, oversize frame
Packet Analyzer	
Maximum receive streams	P2-10G-Q: 512 per port, P2-10G-16F/8F/4F/16C/8C: 256 per port
Statistical item(port)	Tx/Rx frame counts and rates, Rx error frame counts
Statistical item(stream)	Tx/Rx stream frame counts and rates, Rx out of sequence errors
Packet Capture	
Capture buffer size	32K bytes per port
Capture type	1) capture received packets at the data and control plane 2) capture transmitted/received packets at control plane 3) Control plane Error packets
Protocol Emulation	
Protocol	ARP/RARP、ICMPv4、Telnet、DHCPv4
NAT	routing forwarding between testing service ports and chassis control ports (ICMPv4、TCP over IPv4) , support various DUT control protocols such as Telnet, Http, SSH, etc.
Software Platform	
Test software	TeleATT: Automatic Network Flow Testing Software for manufactory TeleExplorer: Layer 2-3 Traffic Testing Software
API interface	TeleAPI ( C / C# ) , HTTP
Language	Simplified Chinese, English
Hardware Platform	
Chassis	BigTao210, BigTao6100

## BigTao Series P2-100G



The series P2-100G modules can support up to 4 100G-interfaces and can be compatible or split into 4\*100G/4\*50G/4\*40G/16\*25G/16\*10G multiple interface configurations, suitable for the BigTao series chassis. With the special automatic test software: TeleATT, it can support more than 30 kinds of testcases such as aggregation, interaction, loopback, as well as various package configurations and frame length templates, and support batch synchronous and asynchronous testing on the production line to achieve full automation of the test process to ensure a comprehensive, efficient, and automated.

### Key Features

- Support QSFP28 100G NRZ interface
- Compatible with 40G/50G interface
- Split support for 10G/25G interface
- Support ethernet 2–3-layer flow test
- 100% load generation, statistics, and capture functions based on hardware
- Support multi-product automatic synchronous and asynchronous testing
- Support MES integration and automatic upload of test logs
- Support secondary development based on API interface

### Module List



**P2-100G-4QSFP28-Q**  
4-Port Quadra Speed  
100G/40G/25G/10G Basic  
Test Module



**P2-100G-2QSFP28-Q**  
2-Port Quadra Speed  
100G/40G/25G/10G Basic  
Test Module



**P2-100G-4QSFP28-T**  
4-Port Triple Speed 100G/40G/10G  
Basic Test Module



**P2-100G-2QSFP28-T**  
2-Port Triple Speed 100G/40G/10G  
Basic Test Module



**P2-100G-4QSFP28-D**  
4-Port Double Speed 100G/25G  
Basic Test Module



**P2-100G-2QSFP28-D**  
2-Port Double Speed 100G/25G  
Basic Test Module



**P2-100G-4QSFP28-S**  
4-Port Single Speed 100G Basic  
Test Module



**P2-100G-2QSFP28-S**  
2-Port Single Speed 100G Basic  
Test Module



## Specification List

Hardware and Electrical characteristics	
Port type	QSFP28: 100G/50G/40G/25G/10G
Port density	4/2 ports per card (Max)
Interface standard	100G : 100GBASE-SR4, 100GBASE-LR4 50G : 50GBASSE-LR1 40G : 40GBASE-SR4, 40GBASE-LR4 25G : 802.3by 25GBASE-SR 10G : 10GBASE-SR 100G FEC : 100GBase-SR4 RS-FEC91 50G FEC : 50GBASSE-LR1 BASE-KR FEC&RS-FEC (528,514) or Soft FEC RS (544 , 514) 25G FEC : 25GBase-SR RS-FEC108、25GBase-SR FEC CL74、25GBase-SR RS-FEC CL91
User reservation	Per one port
Speed switching mode	Two ports one group. Switching speed by group
Module weight	1.2 kg
Module size (W*H *D)	196mm x 35.5mm x 271mm
Working temperature range	0° C to 35° C
Working relative humidity	20% to 85%
Power consumption (W)	≤ 45 W
Traffic Generation	
Maximum transmit streams	100G/50G/40G: 1024; 25G/10G: 256 per port
Frame size (without CRC)	64-16000
Frame size type	Fixed, Increment, Random
Variable field per stream	Support source MAC increment
Traffic schedule modes	Continuous, Packet burst, and Time burst per port
Load profile type	Rate per port, Rate per stream
Frame timestamp resolution	8 ns
User-defined data	Support 128-byte user defined field
Flow control	Full duplex flow control
Error Insertion frame	oversize frame
Packet Analyzer	
Maximum receive streams	100G/50G/40G: 2048; 25G/10G: 512 per port
Statistical item(port)	Tx/Rx frame counts and rates, Rx error frame counts
Statistical item(stream)	Tx/Rx stream frame counts and rates, Rx out of sequence errors
Packet Capture	
Capture buffer size	32K bytes per port
Capture type	1) capture received packets at the data and control plane 2) capture transmitted/received packets at control plane 3) Control plane Error packets
Protocol Emulation	
Protocol	ARP/RARP、ICMPv4、Telnet、DHCPv4
Software Platform	
Test software	TeleATT: Automatic Network Flow Testing Software for manufactory TeleExplorer: Layer 2-3 Traffic Testing Software
API interface	TeleAPI ( C / C# ) , HTTP
Language	Simplified Chinese, English
Hardware Platform	
Chassis	BigTao210, BigTao6100

## P6008W Wi-Fi Traffic Test Module



The P6008W Wi-Fi Traffic Test Module support 8 group Radio interface,two SMA one group; suitable for BigTao210 and BigTao6100 chassis. and supports Wi-Fi6/Wi-Fi5 protocols and testcases such as device's Tx transmission power, Rx packet loss rate, and wireless throughput without shielded box. and is primarily used for Wi-Fi traffic testing of wireless routers, PON terminals, and other similar products When combined with wired traffic test module. and support batch synchronous and asynchronous testing to achieve full automation of the manufacturing test process to ensure a comprehensive, efficient, and automated.

### Key Features

- Support Wi-Fi6 (compatible with Wi-Fi5, Wi-Fi4, etc.) protocols
- Support checking Wi-Fi connection protocol type, channel, bandwidth, signal quality, power, etc.
- Support statistics of sent/received packet count in traffic testing
- Support automated synchronous and asynchronous testing
- Support MES integration and automatic upload of test logs
- Support secondary development based on API interface

### Specification List

Hardware and electrical characteristics	
Port Type	SMA Female
Port density	16 (2 ports 1 group)
User reservation	Per one group
Module Weight (kg)	1.3
Module size (W*H *D)	196mm x 35.5mm x 271mm
Working temperature range	0° C to 35° C
Working relative humidity	20% to 85%
Power consumption (W)	≈ 20 W
RF metrics	
Frequency range	300M-6G
Power range	-30 ~ +15dBm
Power precision	<0.5dB
Port isolation	60dBm
EVM (dB)	<-46dB (when power is -10dBm)

Traffic Statistics	
Wi-Fi protocols	Wi-Fi6、 Wi-Fi5
Authentication protocols	open, WPA
access SSID performance	3 秒
2.4G input power	-25 ~ -5 dBm
5.8G input power	-35 ~ -15dBm
Check Items	Wi-Fi protocol type, Channel, bandwidth, signal quality, power
Statistical item(port)	Tx/Rx stream frame counts
Software Platform	
Test software	TeleATT: Automatic Network Flow Testing Software for manufactory
API interface	TeleAPI ( C / C# ), HTTP
Language	Simplified Chinese, English
Hardware Platform	
Chassis	BigTao210, BigTao6100

# P6216W Coupling Test Module

The P6216W Coupling Test Module provides 16 SMA ports and supports the testing of the Tx power metrics. Through expansion, it can meet the testing requirements of next-generation wireless products and is suitable for BigTao210 and BigTao6100 chassis. It is primarily used for production testing of similar products such as wireless routers and PON terminals. With the HunterATE/TeleATT software platform, supports automated one-station integration system-test, and greatly improving manufacturing test efficiency.



## Key Features

- Testing frequency range: 400M~6G, supporting Wi-Fi4, Wi-Fi5, Wi-Fi6, Wi-Fi6e, and more.
- 16 independent testing channels, supporting parallel testing of 16 DUTs.
- Support integration with BigTao210/6100 chassis.
- Support integrated testing with wired traffic
- Support MES integration, automatic upload of test logs
- Support secondary development based on API interfaces

## Specification List

Hardware and electrical characteristics	
Port Type	SMA Female
Port density	16
User reservation	Per one port
Module Weight	1.2kg
Module size (W*H *D)	196mm x 35.5mm x 271mm
Working temperature range	0° C to 35° C
Working relative humidity	20% to 85%
Power consumption	≈ 10 W
RF metrics	
Frequency range	400M-6000MHZ
Frequency resolution	1HZ
Power range	-40 ~ +15dBm
Power Precision	±0.5dB
Standing Wave Ratio (SWR)	≈ 1.7
Signal sample period	≤ 0.25 second
Software Platform	
Test software	TeleATT: Automatic Network Flow Testing Software for manufactory
API interface	TeleAPI ( C / C# ), HTTP
Language	Simplified Chinese, English
Hardware Platform	
Chassis	BigTao210, BigTao6100

## Hunter CW1600 Coupling Test Instrument



Hunter CW1600 Coupling Test Instrument provides 16 SMA ports, and supports the testing of the Tx power metrics. Through expansion, it can meet the testing requirements of next-generation wireless products. It is primarily used for production testing of similar products such as wireless routers and PON terminals. With the HunterATE/TeleATT software platform, supports automated one-station integration system testing, and greatly improving manufacturing test efficiency.

### Key Features

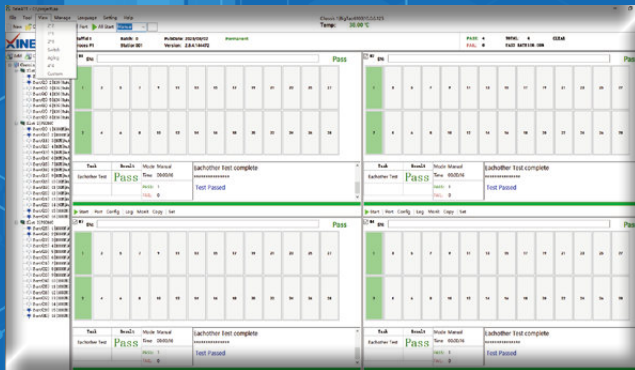
- Testing frequency range: 500M~6G, supporting Wi-Fi4, Wi-Fi5, Wi-Fi6, Wi-Fi6E, and more
- Support testing of 16 DUTs
- Support integrated with traffic test modules for one-station system tests
- Support MES integration, automatic upload of test logs
- Support secondary development based on API interfaces

### Specification List

Hardware and electrical characteristics	
Port Type	SMA Female
Port density	16
User reservation	Per one port
Module Weight	3 kg
Module size (W*H *D)	440mm*66mm*270mm
Working temperature range	-0°C ~+35°C
Working relative humidity	20% to 85%
Power consumption	10W
Management interface	USB
RF metrics	
Frequency range	500MHZ---6000MHZ
Frequency resolution	1HZ
Power range	±0.2dBm
Power Precision	-45dBm---+15dBm
Standing Wave Ratio (SWR)	Typ.1.20/Max.1.25 ( 0.5-3GHZ )
	Typ.1.30/Max.1.45 ( 3-6GHZ )
Software Platform	
Test software	TeleATT: Automatic Network Flow Testing Software for manufactory
Language	Simplified Chinese, English

## TeleATT

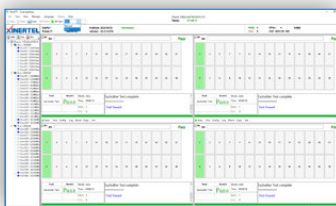
TeleATT is automatic network flow testing software for manufactory, delivers more than 30 kinds of testcases such as aggregation, interaction, loopback, as well as various package configurations and frame length templates with BigTao chassis and series P test modules. and supports batch synchronous and asynchronous testing on the production line to achieve full automation of the test process to ensure a comprehensive, efficient, and automated.



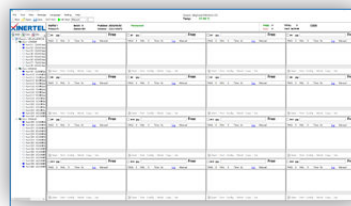
### Key Features

- Support up to 16 devices test
- Support multi-product automatic synchronous and asynchronous testing
- Support MES integration and automatic upload of test logs
- Support secondary development based on API interface
- Delivers more than 30 kinds of testcases (convergence test, routing test, wireless coupling, telnet function test, etc.)

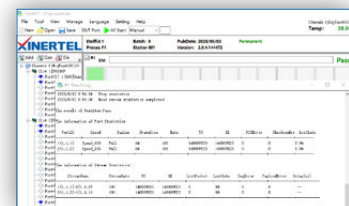
### GUI overview



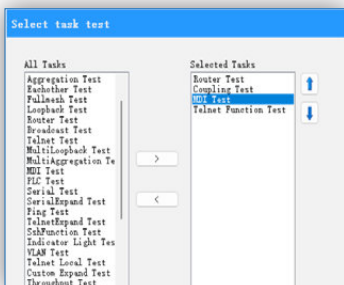
One click automatic test



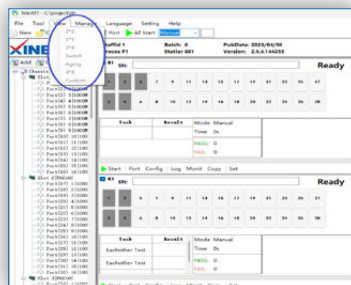
Multi window parallel testing



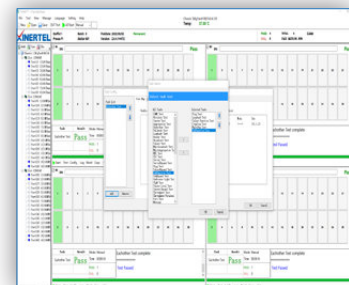
Quick view of test log



Preset a variety of test tasks



Flexible switching of multi view



Support integrated function test

## Specification list

Chassis management	
Chassis	BigTao 210、BigTao 6100
Management	Add, remove, connect, and disconnect
Operation	Restart, close, upgrade software
License management	Upload, download, clean up, merge, and delete license
Testcase	
Testcases list	Aggregation Test, Fullmesh Test, Loopback Test, Router Test, Broadcast Test, Throughput Test, VLAN Test, MultiWan Test, MDI Test, Ping Test, Telnet Function Test, SSH Function Test, Coupling Test, Wireless traffic Test, Web Check, Port Test, Custom Expand Test, etc.
software interface	
Secondary development	String command base on telnet, python, XML script
GUI language	English, Simplified Chinese