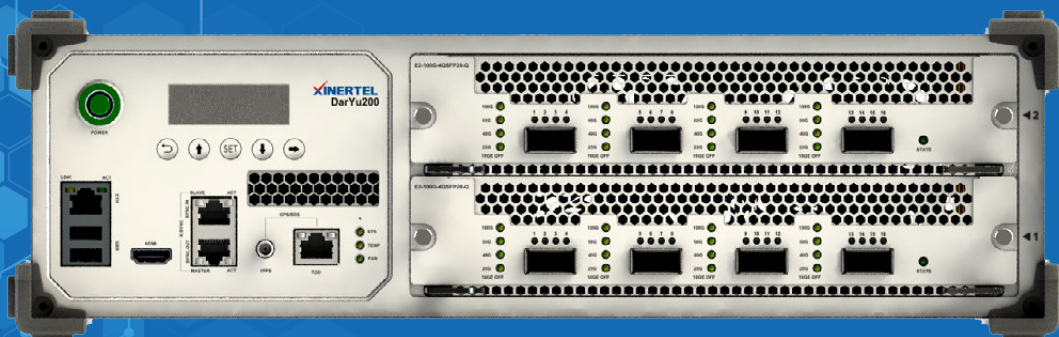


DarYu 200



The DarYu 200 is a portable chassis which supports Xinertel's new generation of 1G to 100G multi-rate test modules. With built-in LCD screen, intelligent power supplies, fan control, and fast firmware upgrades, DarYu 200 reduces the costs of network equipment effectively.

With the new generation of test software RENIX and X series test modules, DarYu 200 supports L2-7 traffic test and protocol simulation for network devices and network systems, providing comprehensive test solutions in terms of functionality, performance, and security to meet the testing needs in the process of research and development, experimentation, and quality control.

Key Features

- A unified platform for high-performance L2-7 test, supporting large-scale routing and switch protocol simulation and application test(E2 series test module supports L2-3 test, E3 series test module supports L4-7 test)
- Supports 400G/200G/100G/50G/40G/25G/10G/5G/2.5G/1GE(400G/200G/40G/25G/10G/2.5G/1G ports under planning)
- 2.5U height, strong portability
- Support for multiple chassis cascades of daisy chains for easy expansion for large-scale test
- Supports multiple management IP modification methods
- Support to download client software via web browsers
- Support API for Renix and Tcl and Python

Ordering information

Product Name	Product Description	Product classification
DarYu 200 chassis	DarYu 200 2-slot chassis	DarYu 200 Chassis
E2-100G-4QSFP28-Q	4-port, 5-speed 100G/50G/40G/25G/10G test module (planned)	DarYu 200 Chassis test module

Specifications

Slot	2 slots
Dimensions (WxDxH)	390mm x 113mm x 420mm
Weight	Chassis only: about 10.5kg Chassis with 2 test modules: about 15kg
Switch/Display	<ul style="list-style-type: none"> • Rear AC power supply • Power, Fan, Temp, Link LED indicator, LCD • Reset button of the chassis • LCD control button of the chassis
I/O	<ul style="list-style-type: none"> • 1 HDMI display interface • 1 RJ45 10/100/1000M management interface • 1 SYNC-OUT, 1 SYNC-IN chassis cascade interface • 1 RJ45 GPS RS232 serial port • 1 PPS input BNC • 2 USB Type A
Temperature	Working: 0 ° C to 35 ° C Storage: -40 ° C to 70 ° C
Humidity	Working: 20% to 85%; Storage: 20% to 85%
Chassis power supply	1 x 110V AC/220V AC 50/60Hz @10A single-phase power input
Noise	The noise of the chassis is ≤ 69dba at typical speed and ≤ 85dba at full speed
Operating system	CentOS6.7 and above, 64bit
Network management	<ul style="list-style-type: none"> • IPv4 management network; support panel button to modify IP address and query status • Support Telnet/SSH terminal to modify IP and query status • Support external display and keyboard to modify IP and query status • Support web page download client, modify IP, query status • Support License management and hardware management through client software

Hardware and electrical characteristics	E2-100G-4QSFP28-Q
Port speed	Fiber port: 100G/50G/40G/25G/10G (planned)
Port density	4
Interface standards	<ul style="list-style-type: none"> • 100G: 100GBASE-SR4, 100GBASE-LR4 • 40G: 40GBASE-SR4, 40GBASE-LR4 • 25G: 25GBASE-SR • 10G: 10GBASE-SR QSFP28 to SFP28 breakout cable options: Clause 74 BASE-R FEC, Clause 91 RS- FEC, and Clause 108 RS-FEC
User reservation	Occupied by single port
Port speed switching	Switch speed by port group, 2 ports in a group
Dimensions (W x H x D)	229.9mm x 45.32mm x 289.4mm
Temperature	0° C to 35° C
Humidity	20% to 85%
Traffic	E2-100G-4QSFP28-Q
Max streams per port	100G/50G/40G: 16K 25G/10G: 8K
Frame length (byte)	64-16383
Frame length controls	Fixed, Increment, Decrement, Random, Auto, and IMIX
Dynamic fields	4 dynamic fields are available for each stream ; Support multiple dynamic controls such as Fixed, increment, Decrement, List, and Random.
Transmit mode	Continuous, Burst, and Time Burst modes based on port; Continuous and Burst modes based on flow
Bandwidth modification	Modify by port or flow
Latency and jitter	LIFO, FIFO, LILO, and FILO
Timestamp resolution	2.5 nanoseconds
Built-in protocol templates	VLAN, ICMP, PPPoE, GRE, DHCP, L2TP, IPv6, MPLS, GTP, GOOSE, VXLAN, OSPF, TCP and UDP, etc.
Customized frame	Support customizing the frame, and the edited frame template can be saved; Customized field can be checked with checksum.
Customized payload	Support importing the 16K bytes customized payload and the first 256 bytes can be adjusted with jumping
Flow control	Full duplex flow control
Packet error generation	CRC error, Oversize frame

Statistics	E2-100G-4QSFP28-Q
Statistical streams per port	100G/50G/40G: 16K 25G/10G: 8K
Statistical pattern	Csv statistics, chart statistics, automatic saving of csv files
Statistics(Port)	Tx/Rx Frames, Tx/Rx Frame Rate, Rx Bandwidth, Error Frame Statistics, Filter Statistics, and Customized Statistics, FCS Error Statistics, TCP/UDP Checksum Errors, Pause Frame Statistics, etc.
Statistics(Flow)	Tx/Rx Frames, Tx/Rx Flow rate, Rx Bandwidth, Error frame statistics, Real-time packet loss statistics, out of order statistics, delay, jitter and customized statistics, etc.
Statistics operation	Support sorting of statistical results, performing mathematical operations such as addition, subtraction, multiplication, and division, and customizing the number of statistical entries for each page, etc.
Traffic capture	E2-100G-4QSFP28-Q
Capture buffer (Byte)	100G/50G/40G: 2MB25G/10G port 512K
Capture pattern	Capture of data and receive frames of the control plane; Capture of transmitted and received frames of the control plane; Capture based on filter templates; Capture filtered error packets; Capture buffer overwriting; Support specifying the number of downloaded capture packets.
Protocol emulation	E2-100G-4QSFP28-Q
Routing and MPLS	RIPv1v2, RIPv6, OSPFv2, OSPFv3, ISISv4, ISISv6, BGP, BGP4+, LDP, MPLS L3VPN, VPLS, VLL, 6VPE, 6PE
Access	PPPoE Client/Server, DHCPv4 Client/Server, DHCPv6 Client/Server, DHCPv6 PD Client/Server, L2TPv2, 802.1x
Multicast	IGMPv1/v2/v3, MLDv1/v2, IGMP/MLD Querier, PIM-SM
Data center	VXLAN, OpenFlow, OVSD, EVPN, LACP
Other	BFD, 802.1ag, 802.1ah, IPv6 automatic configuration
Test suite	RFC2544, RFC2889, RFC3918, Asymmetric Test, Smart Scripter
Stateful L47 Protocol	HTTP, HTTPS, TCP, FTP, DNS, Mail (SMTP/POP3/IMAP), SSH, TFTP, Telnet, UDP, Application replay, etc
Software platform	E2-100G-4QSFP28-Q
Client software	Renix, ALPS
API	Tcl, Python3.x, GUIToTcl, GUIToPython
GUI language	English, Simplified Chinese
Hardware platform	E2-100G-4QSFP28-Q
Chassis	DarYu 200
Chassis operating system	Linux CentOS 7.1