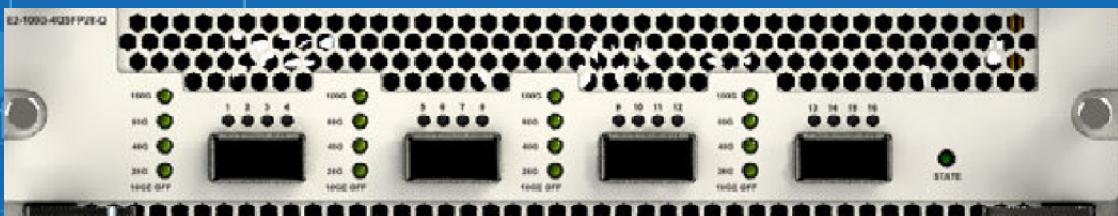


E2-100G Test Module



The Xinertel E2-100G high-performance testing module offers industry-leading Layer 2-3 traffic generation and analysis capabilities. It supports large-scale routing and switching protocol emulation and traffic simulation, enabling benchmark testing (such as RFC2544/RFC2889/RFC3918), functional testing, performance testing, and long-term stability and reliability testing of 100GE network devices. Additionally, it supports testing and verification of the functionality and performance of RDMA networks and lossless switches.

Key Features

- Native QSFP28 100G interface, supporting 4 x 100G L2/L3 testing ports or 2 x 100G RoCE testing ports
- Supports generation and transmission of RoCEv2 traffic
- Supports QoS configuration for L2(VLAN) and L3(DSCP)
- Supports ECN/PFC enablement and priority configuration
- Supports traffic endpoint selection based on QP
- Supports extreme performance testing of protocols such as routing, multicast, access, MPLS, VxLAN, and Segment Routing(SR)
- FPGA-based 100% line-rate traffic generation, statistics, and capture functionality
- Supports benchmark testing suites such as RFC2544, RFC2889, and RFC3918

Models

Product name	Product description	Product classification
E2-100G-4QSFP28-Q test module	4 port 100G test module	DarYu 200 series test module

Specifications

Hardware and Electrical Characteristics	
Port speed	Native 100G QSFP28, support 100/50G
Port density	4
User reservation	Reservation by port
Weight(kg)	2.2
Dimensions(W x H x D)	206mm x 284mm x 46mm
Temperature	0° C to 35° C
Humidity	5% to 70%
Max power consumption (W)	80W
Traffic	
Max streams per port	16K
Frame length(byte)	64-16383
Frame length controls	Fixed, Increment, Decrement, Random, Auto, and IMIX
Dynamic fields	6 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 user-defined frame, and the edited frame template can be saved; Supports the checksum check of custom fields
Customized payload	Support importing the 16K bytes customized payload and the first 128K bytes can be adjusted with jumping
Flow control	Full duplex flow control
Packet error generation	CRC error, Oversize frame
Statistics	
Single port statistics stream number	16K
Statistical form	Table statistics, chart statistics, and automatic saving of EXCEL files
Statistics item(port)	Numberofsent/receivedframes, send/receiveframerate, receivebandwidth, errorframestatistics, filteringstatistics, customstatistics, etc., FCSerrorstatistics, TCP/UDP Checksumerrors, Pauseframestatistics, averagedelaystatistics
Statistical item(stream)	Send/receiveframes, send/receiveflowrate, receivebandwidth, errorframestatistics, real-timepacketlossstatistics, outofsequencestatistics, delayjitteranduser-definedstatistics
Statistical operation	Support sorting of statistical results, addition, subtraction, multiplication, division and other mathematical operations, user-defined paging statistics, etc
Capture	
Capture buffer(Byte)	2M
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.