



XenaScale

L4-7 Gigabit Stateful TCP Test Chassis

Product Order Numbers

2U	XS240-12x10G	12 x 10G ports
	XS240-4x10G-2x40G	4 x 10G + 2 x 40G ports
	XS-P20-2G	License for 2 x 1G
	XS-P40-20G	License for 2 x 10G
	XS-P80-40G	License for 1 x 40G



XenaScale is a scalable Gigabit TCP test chassis that offers extreme performance for stateful traffic load testing, analysis and characterization of Ethernet equipment and network infrastructure. XenaScale supports 1/10/40G L4-7 interfaces.

XenaScale offers stateful end-to-end testing of network appliances such as switches, firewalls, routers, NAT routers, proxies, load-balancers, bandwidth shapers, and more. The platform is also suitable to characterize entire network infrastructure performance.

Developers of Ethernet-based network appliances can characterize their performance by measuring connection establishment and teardown rates, packet forwarding rate at large numbers of connections and identify performance bottlenecks. The platform is also ideal for rapid validation of performance or regression testing.

Developers of TCP-based application servers such as web- and FTP servers can measure TCP connection rates. HTTP get blasting can be used to verify web server performance and robustness. Users can also replay their own PCAP files to the DUT for performance verification.

XenaConnect is included for ad-hoc test execution and remote management of test equipment located in multiple locations. XenaAppMix helps to test with real-world applications and protocols for highly scalable application emulation.

Flexible Upgrade Path

XenaScale can be easily upgraded for greater performance thanks to Xena's flexible licensing model which lets you easily upgrade XenaScale by simply updating your license. This helps you protect your investment by spreading out capital expenditure across multiple quarters, and optimize your budget by purchasing additional performance when required.

XenaScale is used for simulating millions of real-world end-user environments to test and validate infrastructure, a single device, or an entire system.

Features and Benefits

- Stateful TCP traffic load generation with extreme performance – 24 million TCP connections *
- Scalable performance via license upgrade
- Supports dual-speed 1G & 40G SFP optical or copper Ethernet interfaces for L4-7
- Configuration and tuning of Ethernet, IP and TCP header fields for advanced traffic scenarios
- Stateful TCP connection
- Extensive live stats and test reports
- Wire-speed traffic capture with up to 4 million packets capacity
- Switched and routed network topologies, TCP proxy and NAT support
- Free traffic generation and analysis software included (XenaConnect)
- Scalable application emulation for performance testing with real-world protocols, applications, and traffic mixes from XenaAppMix

Extreme Performance:

- 24 million Concurrent Connections (CC)*
- 10 million Connections Per Second (CPS)**
- 6 million HTTP Connections Per Second
- 7.5 million HTTP Transactions Per Second (TPS)***
- Capture capacity: 4 million x 128 bytes buffers / 200,000 full-size buffers

* 24M TCP Clients and 24M TCP Servers on one XenaScale
 ** Measured at 1M CC per 10G port
 *** Measured at 10 transactions per connection



XenaScale supports optical or copper interfaces for 1G, 10G and 40G in the following configurations:

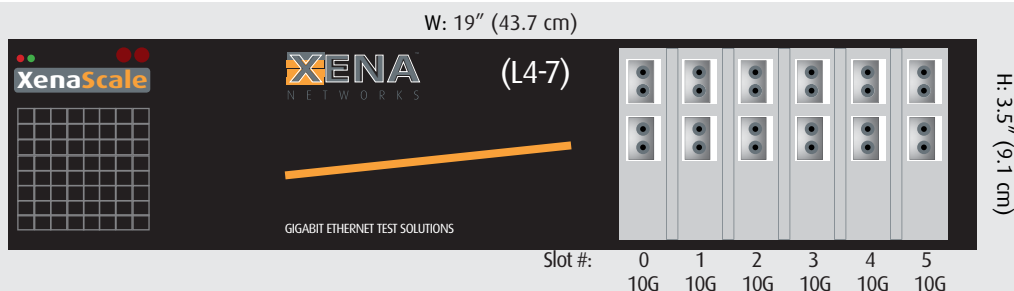
PRODUCT NUMBER	DESCRIPTION
1 XS240-12x10G	XenaScale 6-slot chassis (non-modular), unit controller, AC power, excl. tvcrs <ul style="list-style-type: none"> Slot 0: L4-7 Test Ports 2 x SFP+, 2 x 10GBASE-SR/LR/DAC or 2 x RJ45 10000/1000/100M BaseT[®], 4 Packet Engines, use XS-P40-20G Slot 1: L4-7 Test Ports 2 x SFP+, 2 x 10GBASE-SR/LR/DAC or 2 x RJ45 10000/1000/100M BaseT[®], 4 Packet Engines, use XS-P40-20G Slot 2: L4-7 Test Ports 2 x SFP+, 2 x 10GBASE-SR/LR/DAC or 2 x RJ45 10000/1000/100M BaseT[®], 4 Packet Engines, use XS-P40-20G Slot 3: L4-7 Test Ports 2 x SFP+, 2 x 10GBASE-SR/LR/DAC or 2 x RJ45 10000/1000/100M BaseT[®], 4 Packet Engines, use XS-P40-20G Slot 4: L4-7 Test Ports 2 x SFP+, 2 x 10GBASE-SR/LR/DAC or 2 x RJ45 10000/1000/100M BaseT[®], 4 Packet Engines, use XS-P40-20G Slot 5: L4-7 Test Ports 2 x SFP+, 2 x 10GBASE-SR/LR/DAC or 2 x RJ45 10000/1000/100M BaseT[®], 4 Packet Engines, use XS-P40-20G
2 XS240-4x10G-2x40G	XenaScale 6-slot chassis (non-modular), unit controller, AC power, excl. tvcrs <ul style="list-style-type: none"> Slot 0: L4-7 Test Port 1 x QSFP+, 40GBASE-SR4/LR4/DAC, 8 Packet Engines, use XS-P80-40G Slot 1: N/A Slot 2: L4-7 Test Port 1 x QSFP+, 40GBASE-SR4/LR4/DAC, 8 Packet Engines, use XS-P80-40G Slot 3: N/A Slot 4: L4-7 Test Port 2 x SFP+, 2 x 10GBASE-SR/LR/DAC or 2 x RJ45 10000/1000/100M BaseT[®], 4 Packet Engines, use XS-P40-20G Slot 5: L4-7 Test Port 2 x SFP+, 2 x 10GBASE-SR/LR/DAC or 2 x RJ45 10000/1000/100M BaseT[®], 4 Packet Engines, use XS-P40-20G
3 XS-P20-2G	License to enable 2 x 1G L4-7 Test Ports, and 2 Packet Engines on XenaScale chassis. Performance level 20 with 2M cc, and 1M cps@1M cc (*)
4 XS-P40-20G	License to enable 2 x 10G L4-7 Test Ports, and 4 Packet Engines on XenaScale chassis. Performance level 40 with 4M cc, and 2M cps@1M cc (**)
5 XS-P80-40G	License to enable 1 x 40G L4-7 Test Port, and 8 Packet Engines on XenaScale chassis. Performance level 80 with 16M cc, and 7 cps@4M cc (**)
SUPPORTED TRANSCEIVERS	
<ul style="list-style-type: none"> E10GSFSPSR E10GSFPLR E40GQSFPSPSR 	<ul style="list-style-type: none"> Intel® Ethernet SFP+ SR Optic (1000BASE-SX 1G Ethernet & 10GBASE-SR 10G Ethernet) Intel® Ethernet SFP+ LR Optic (1000BASE-LX 1G Ethernet & 10GBASE-LR 10G Ethernet) Intel® Ethernet QSFP+ (40GBASE-SR4 - 4x10GbE and 1x40GbE)

* specify optical or copper when ordering

** with a XenaScale L4-7 Test port configured as a client, connected to a second L4-7 Test Port configured as a server.

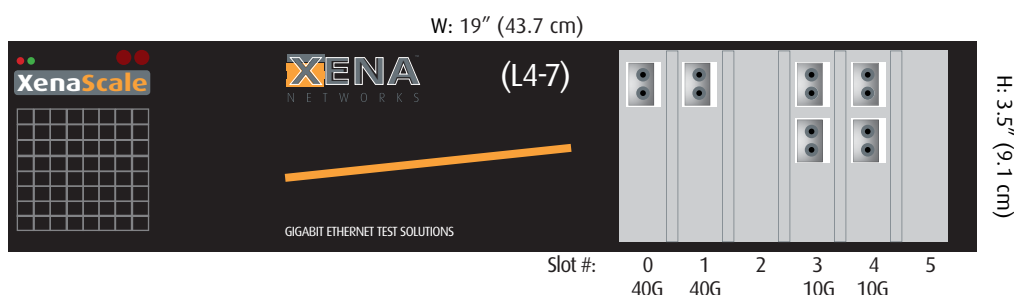
1 LAYER 4-7

- 6 slots, each with 2 ports of 1/10G SR/LR/DAC or 10000/1000/100M BaseT



2 LAYER 4-7

- 2 slots, each with 1 port of 40G SR/LR/DAC and
- 2 slots, each with 2 ports x 10G SR/LR/DAC or 10000/1000/100M BaseT



Software-Enabled Capacity Upgrades

- 3** Enable 2 x 1G test ports with 2 Packet Engines
- 4** Enable 2 x 10G test ports with 4 Packet Engines
- 5** Enable 1 x 40G test ports with 8 Packet Engines

SPECIFICATIONS

Dimensions

- Test port slots: 6
- W: 19" (43.7 cm)
- H: 3.5" (9 cm)
- D: 17.6" (44.8 cm)
- Weight: 50 lbs (22.7 kg)

Power

- AC Voltage: 100-240V
- Frequency: 50-60Hz
- Power: 238W (idle) / 329W (running)
- Max. Current: 0.8A with 120V supply, and 0.4A with 240V supply

Environmental

- Operating Temperature: 10 to 35° C
- Storage Temperature: -40 to 70° C
- Humidity: 8% to 90% non-condensing

Regulatory

- FCC (US), CE (Europe)



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