



XenaScale

L4-7 Gigabit Stateful TCP Test Chassis

Product Order Numbers

2U	12 x 10G	XS240-12x10G*
	4 x 10G + 2 x 40G	XS240-4x10G-2x40G*
	Enable 2 x 1G	XS-P20-2G
	Enable 2 x 10G	XS-P40-20G
	Enable 1 x 40G	XS-P80-40G

* specify optical or copper when ordering



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

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 for TCP.

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.

XenaConnect is included for ad-hoc test execution and remote management of test equipment located in multiple locations. Xena also offers an open scripting API (XenaScripting) for automating testing from any scripting environment and browser-based operation via XenaWeb.

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.

Features and Benefits

- Stateful TCP traffic load generation with extreme performance – 24 million TCP connections**
- Scalable performance via license upgrade
- Supports dual-speed 1G, 10 & 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 blasting
- HTTP get/put/head/post blasting
- Extensive live stats and test reports
- Wire-speed traffic capture with programmable filter and trigger criteria
- Switched and routed network topologies, TCP proxy and NAT support
- Includes free traffic generation and analysis software included (XenaConnect)
- XenaScripting – automated Command Line Interface (CLI) scripting from any scripting tool environment such as Tcl, Python, Perl, VBA, Ruby, Bash and Java

Extreme Performance:

- 24 million Concurrent Connections (CC)**
- 10 million Connections Per Second (CPS)***
- 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



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

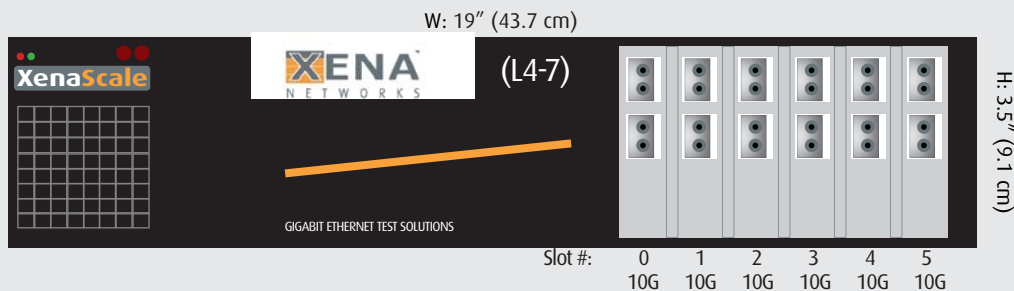
PRODUCT NUMBER	DESCRIPTION
1 XS240-12x10G	XenaScale 6-slot chassis (non-modular), unit controller, AC power, excl. tvcrs <ul style="list-style-type: none"> Slot 0: L4-7 Test Ports 2 x SFP+, 2 x 10GBASE-SR/LR/DAC or 2 x RJ45 10000/1000/100M BaseT[®], 4 Packet Engines, use XS-P40-20G Slot 1: L4-7 Test 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.

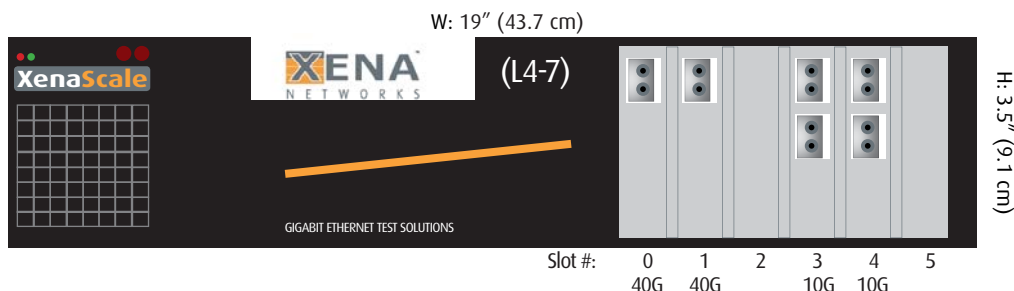
1 LAYER 4-7

- 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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