InfiniLoad-3200

Next Generation Converged IP Testing Appliance

Product Overview

As networks, applications and services are converging to a single IP based infrastructure, network equipment manufacturers, data center operators, service providers and enterprises are under the pressure to deliver products with superior reliability, interoperability and performance.

InfiniCORE's InfiniLoad-3200 Testing appliance provides a unified open testing platform for customers to deliver a full range of L2-L7 test solutions for data, signaling, voice, video and security applications.

The InfiniLoad-3200 is a modular built appliance delivering up to 8 cutting edge purposefully designed network processing modules. Each module provides quad SFP/SFP+ ports to connect to 1Gb, 10Gb LAN and 9.953 Gb WAN (STM-64/OC-192) that are capable of generating line rate stateless and stateful traffic. With stateful traffic, like HTTP and FTP, the InfiniLoad-3200 can function as both test client and server. The InfiniLoad-3200 provides a Web based user interface for test configuration, monitoring and reporting.

Main Features and Performance Highlights

	Features	Benefits
Stateless Traffic Generation	Up to 320Gbps of wire speed stateless traffic generation capabilities for a wide variety of protocols including ARP, ICMP, IGMP, UDP, TCP with customizable payload with 802.1 Q and Q-in-Q capabilities; Supports RFC-2544.	Ideal for testing switches, routers, firewall, NAC, traffic shaping and VPN devices.
Stateful Traffic Generation	Up to 320Gbps of stateful traffic synthesis for wide variety of TCP and HTTP based protocols and applications.	Load testing Web and FTP servers with application realism; Testing gateway and intermediate network devices such as load balancer, firewall, IDS and IPS devices.
Support full range of Ethernet Speed from 10Mbps to 10Gbps	Up to 32x SFP/SFP+ 1Gbps/10Gbps Ethernet interfaces that are capable of 10/100/1000bps with SFP modules and 10Gbps LAN and WAN with SFP+ modules.	Convenient and easy to fit into the carrier, server and data center environment.
Test Automation, Unified Test APIs and Centralized Management with Comprehensive Test Reports	Support CLI and web GUI based device management; It also supports Windows based management and report generation system with comprehensive scripting system.	Easy to use and fully support test automation; 3rd party can create separate test suite and profession report.
Modular Scalable Architecture	Support 4, 8, 12, 16, 20, 24, 28, and up to full 32 ports configuration.	Tailor the hardware configuration to customer's testing needs.
Green and Cost Effective	Device consumes a fraction of power in full operational state and provides unprecedented price performance.	Reduce CAPEX and OPEX.

L4-L7 Testing Package—TCP Blaster

Feature	Description
Configuration	Each port can be configured as TCP Blaster Client and/or Server.
Stateful Traffic Generation Capability	Up to 500,000/Sec Session Setup Rate; Up to 16M Concurrent Sessions; 10G Bps throughput.
End Point Simulation Capability	Millions of IP and MAC addresses.
Measurements	Packet Rate; Retransmission Rate; TCP State Transition Rate; Latency; Payload Error
Blaster Actions	Connect; Listen; Send; Receive; Receive with Pattern Match; Reset; FIN; Purge; Wait; Match.
Load Profile	SIMUser; Connection Per Second; Ramp Up; Ramp Down; Stair; Burst Load Pattern; Capable of Multi-phases.

L4-L7 Testing Package—HTTP Blaster

Feature	Description
Configuration	Each port can be configured as HTTP Blaster Client and/or Server.
Stateful Traffic Generation Capability	Up to 350,000/Sec Session Setup Rate; Up to 16M Concurrent Sessions; 10G Bps throughput.
End Point Simulation Capability	Millions of IP and MAC addresses.
HTTP Protocol Support	HTTP 1.0 and HTTP 1.1.
HTTP Browser Support	Safari; Firefox; IE; Chrome; Custom Browser Type.
HTTP Server Simulation	Flexible HTTP payload definition; Variable Length Payload Definition.
Measurements	Packet Rate; Retransmission Rate; TCP State Transition Rate; Latency; Payload Error; HTTP Error Code Statistics; Latency to 1st Byte Back.
Blaster Actions	HTTP GET; HTTP POST; HTTP PUT.
Load Profile	SIMUser; Connection Per Second; Ramp Up; Ramp Down; Stair; Burst Load Pattern; Capable of Multi-phases

InfiniLoad-3200 Feature Specification

User Interface

Feature	Description
Integrated Web UI	Standard Browser Based Web User Interface Supports Google Chrome, Apple Safari and Mozilla Firefox; Supports Test case configuration, execution, monitoring and report generation.
Infiniload Test Automation Environment	Ruby Based Test Automation Scripting Environment supports TCL/Expect script through Ruby TCL/PTY library.
Command Line Interface	Support Cisco style Command Line Interface (CLI) for device management.
Multi User Support	Support port reservation and test execution in multi-user environment.

L2-L3 Test Package—Packet Generator and Analyzer

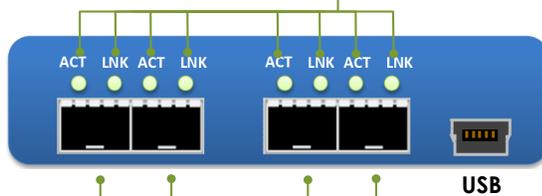| Feature	Description
Min / Max Frame Transmit Speed	1 frame per second to 100% of line rate of 10Gbps at minimum frame length
Min / Max Frame Size	60-10,000 Bytes
Statistics	Transmit Octets; Frames; Broadcast Frames; Unicast Frames; Multicast Frames; Frame Length Histogram; Receive Octets; Frames; Broadcast Frames; Unicast Frames; Multicast Frames; Frame Length Histogram; Total Error Frames; Short, Oversize, Jabber, FCS Error, Symbol Error Frames IP/UDP/TCP Checksum Error.
Measurements	Packet Rate; Throughput; Packet Loss; Packet Order; Packet Latency; Data Integrity; Frame Length Histogram.
Capture Triggers	Packet Arrival; CRC Error; Checksum Error; Capture Memory Size: 512MB Per Port.
Frame Constructor	Link Layer: 802.3; Ethernet II; 802.1Q; 802.1QinQ; Custom Tag (Marvell, Broadcom or private); FCoE; Network Layer and Transport Layer: IPv4; IPv6; UDP; TCP; ICMP; IGMP Tunnel: GRE; L2TP; MPLS; Flexible PCAP based frame constructor with variety of templates available.
Load Definition	Fixed Bit Rate; Fixed Frame Rate; Burst; Multi Burst; Continuous Burst.
Frame Size Definition	Fixed; Increment; Decrement; Random; IMIX.
Embedded Testing Package	RFC-2544
Test Automation	Programmable GUI Based Test Automation with support of verification rules

InfiniLoad-3200 External Interface Specification

Function	Compliance	Type	Quantity
10/100/1Gbps, 10Gbps Testing Port	IEEE 802.3ae 10 Gigabit Ethernet IEEE 802.3aq 10GBASE-LRM SFP+ MSA, Revision 4.1 Direct-Attach Copper Cable Support up to 3 Meters 10/100/1G SFP	10G SFP+ 1G SFP	4, 8, 12, 16, 20, 24, 28, or 32
10/100/1000Mbps Management Port	10/100/1000BASE-T Category 5 UTP	Copper RJ-45	3
Console Port	115200 Baud	Serial	1
USB Port	USB 2.0 High Speed; USB 3.0 High Speed	USB 2.0 USB 3.0	2 2
VGA Port	VGA Monitor	DB-15	1
128GB Storage	SATA-II	SSD	1

InfiniLoad-3200 Rear Panel Features

Traffic Module

10G/1G SFP+/SFP LEDs
Provide 10G/1G Traffic port status

Optional Tool Ports

ACT LNK ACT LNK   ACT LNK ACT LNK

T1   T2

USB

10G/1G SFP+/SFP Traffic Ports

TM-1 XG1 XG2 XG3 XG4
TM-3 XG9 XG10 XG11 XG12
TM-5 XG17 XG18 XG19 XG20
TM-7 XG25 XG26 XG27 XG28

TM-2 XG5 XG6 XG7 XG8
TM-4 XG13 XG14 XG15 XG16
TM-6 XG21 XG22 XG23 XG24
TM-8 XG29 XG30 XG31 XG32
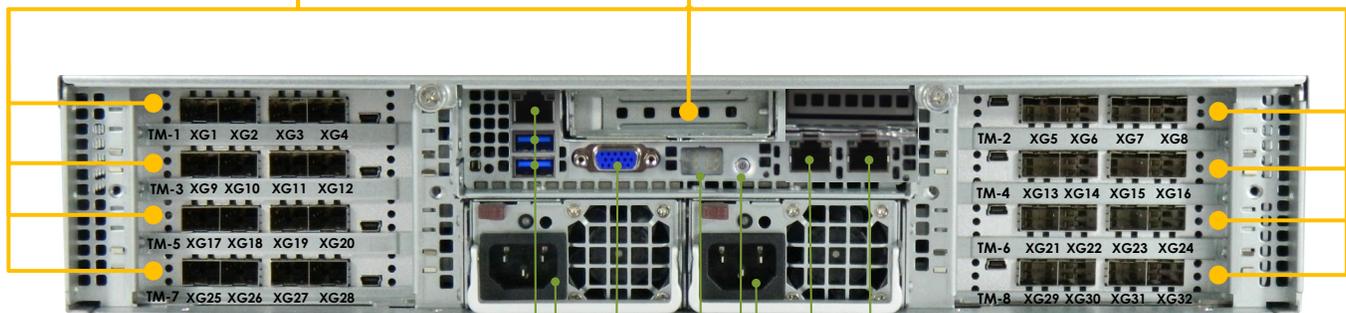
Management 10/100/1000 RJ-45 Port
USB Port
USB Port
Provide Ethernet connection for management Interfaces
For use with USB devices

AC Power Supply
For Use with Supplied Power Cord

VGA Port
For Connecting to Monitor

10/100/1000 RJ-45 LAN Port1/Port2
Provide Ethernet connections
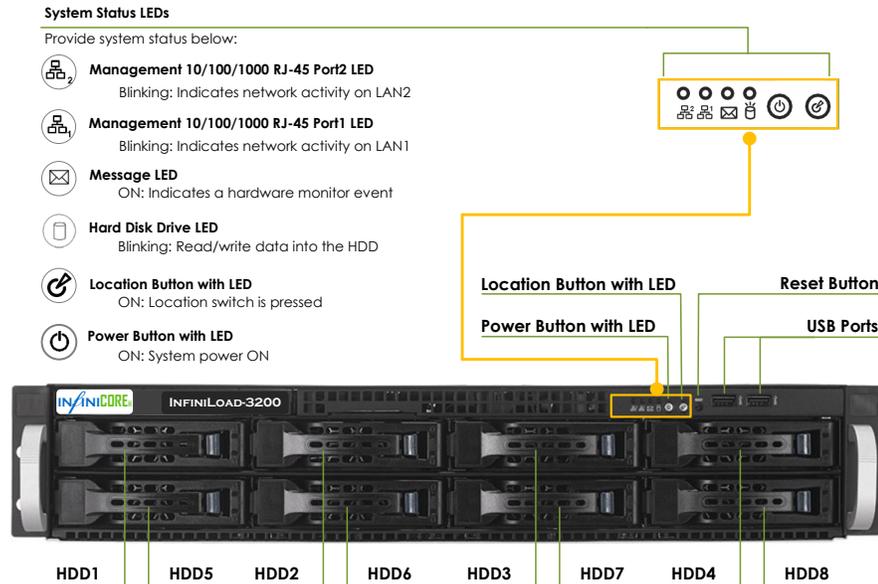
AC Power Supply
For Use with Supplied Power Cord

Power Button with LED
For Turn on or Turn off Power

LED Display
System Status Indicator

InfiniLoad-3200 Front Panel Features

System Status LEDs
Provide system status below:

Management 10/100/1000 RJ-45 Port2 LED
Blinking: Indicates network activity on LAN2

Management 10/100/1000 RJ-45 Port1 LED
Blinking: Indicates network activity on LAN1

Message LED
ON: Indicates a hardware monitor event

Hard Disk Drive LED
Blinking: Read/write data into the HDD

Location Button with LED
ON: Location switch is pressed

Power Button with LED
ON: System power ON

Location Button with LED

Power Button with LED

Reset Button

USB Ports

HDD1　HDD5　HDD2　HDD6　HDD3　HDD7　HDD4　HDD8

InfiniLoad-3200 Standard Peripherals

Part Name	Quantity
UTP Cat 6. Ethernet Cable	1
Rail Mounting Kit	1
CD (User Manual, software package)	0 or 1
USB System Recovery Thumb Drive	0 or 1

InfiniLoad-3200 Physical and Environmental Specification

Item	Description
Dimension (Width x Depth x Height)	19 x 29.5 x 3.5 (inches) 483 x 750 x 87 (millimeters)
Net Weight (without Hard Drives)	42 (pounds)/ 19 (kilograms)
Environment	Operating Temperature: 10º ~ 35º C (50º ~ 95º F) Non Operating Temperature: -40º ~ 70º C (-40º ~ 158º F) Humidity: 20 ~ 90% (Non-condensing)

InfiniLoad-3200 Order Information

Part Number	Traffic Ports	L4-L7 Package	Form Factor	Operating Temperature
Infiniload-3200-4	4 SFP/SFP+	NO	2U Rack Mountable	10º C ~ 35º C
Infiniload-3200-8	8 SFP/SFP+	NO	2U Rack Mountable	10º C ~ 35º C
Infiniload-3200-12	12 SFP/SFP+	NO	2U Rack Mountable	10º C ~ 35º C
Infiniload-3200-16	16 SFP/SFP+	NO	2U Rack Mountable	10º C ~ 35º C
Infiniload-3200-20	20 SFP/SFP+	NO	2U Rack Mountable	10º C ~ 35º C
Infiniload-3200-24	24 SFP/SFP+	NO	2U Rack Mountable	10º C ~ 35º C