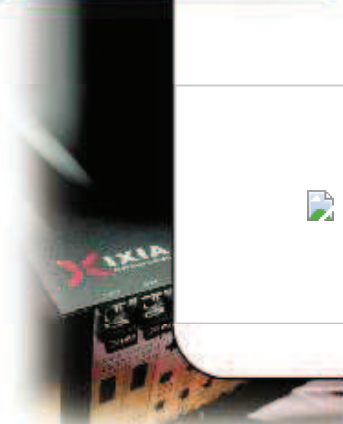


When the test really counts

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IXIA 400™ Chassis Traffic Generator/Analyzer

The IXIA 400 is a desktop version of Ixia's flagship product, the IXIA 1600, incorporating its power and functionality in a highly portable configuration. Providing a remarkable 16-port density, the chassis holds any four of Ixia's wide range of Load Modules: OC-3c/12c Packet Over SONET, Gigabit Ethernet, or 10/100 Ethernet.

[View the IXIA 400 PDF Data Sheet](#)

The IXIA 400 incorporates a built-in Pentium class PC for local management and control, as well as a 10/100 Ethernet interface for remote management over TCP/IP networks. The chassis' highly scalable architecture supports daisy-chaining of up to 256 chassis that can be synchronized to within 10 nanoseconds. Thus, even the most complex systems can be tested thoroughly and cost-effectively.



Features:

- Multiport/Multilayer Traffic Generator and Performance Analyzer
- Portable (4 Load Module slots)
- Multi-user login with remote access
- High port density:
 - 16 10/100 Mbps Ethernet ports
 - 8 Gigabit Ethernet ports
 - 8 OC-3c/12c POS ports
- 256 traffic streams per port (over 16 million packets per traffic stream)
- 32,000 traffic flows per port
- Real-Time Latency on a packet-by-packet basis
- Real-Time RoundTrip Flow™
- QoS emulation and measurement
- Support for Packet Over SONET, Gigabit Ethernet and 10/100 Ethernet
- Per port wire-speed transmit and receive
- Simultaneous testing of multilayer protocols
- Built-in PC used for configuration
- Popular Windows Explorer-like interface for configuration, data capture, and real-time analysis for Windows 95/98/NT™
- Tcl/Tk support within Sun Solaris™, Microsoft™, and Linux™ environments
- Daisy chaining of up to 256 chassis with 10 nanoseconds synchronization
- Multilayer protocol packet generation and decode support

Benefits:

- Maximize your investment by allowing multiple users to share common hardware resources
- No need to buy specially configured PC for configuration, data capture, and real-time analysis
- Save time and costs by providing software-only upgrades for future enhancements
- Reduce testing time by providing easy-to-use graphical user interface and automated Tcl scripts

Highly Manageable

Front panel displays give immediate indication of link state, transmission or reception of packets, and error conditions. Ixia's powerful IxExplorer™ MS-Windows 95/98/NT™ based software provides easy configuration, control, and status. The IXIA 400 offers an optional suite of test scripts written in the industry-standard scripting language, Tcl. These scripts implement the popular Benchmark Working Group (BMWG) performance tests specified in RFC 2544 and RFC 2285. Other optional Tcl test scripts include Ixia's IP Multicast Test, Quality of Service Test (QoS), Advanced Tcl Script Suite (ATSS), Multiport Advanced Test Suite (MATS). Additionally, the Ixia Tcl/Tk ScriptMate application provides a graphical interface to the Tcl test suite.

IxExplorer Software

The IXIA 400 chassis is managed and controlled with the IxExplorer Windows-based software. IxExplorer is a client-server application that can be run directly on the chassis with a keyboard and monitor or on any Windows95/98/NT™ client over a TCP/IP network. The user can operate the IXIA 400 using either the Microsoft Windows Explorer style interface, or a graphical view of the chassis. IxExplorer configures and controls traffic generation, monitors statistics, and views and decodes captured packets. The scalable interface can be used across multiple chassis concurrently for seamless operation of large configurations.

IxExplorer Packet Generation

With Packet Streams tools, the user can configure each port to transmit any packet condition, whether valid packets, undersized (as low as 12 bytes), oversized (up to 65,536 bytes), or error packets (alignment, dribble bit, bad CRC, or no CRC). Each port can have up to 256 different streams, or 32,000 flows, and each stream is capable of generating up to 16 million unique packets. Users can easily configure packets with incrementing, decrementing, or random MAC and IP addresses for simultaneously testing Layer 2 and Layer 3 Ethernet switches. The entire packet contents are user-defined and can generate IP addresses with real-time checksum calculation for effective testing of sophisticated IP switches, supporting millions of IP addresses.

IxExplorer Receive Mode

Each port supports protocol analysis by using filters, triggers, and protocol decodes. Furthermore, receive ports can operate in real-time latency mode, calculating and displaying packet-by-packet latency at full Gigabit speed.

Multilayer Support

The IXIA 400 provides unparalleled multilayer testing capability. Its unique real-time RoundTrip Flow™ (RTF) functionality enables the emulation of a variety of QoS-centered devices, e.g., web servers, load

balancers, or switches. An important benefit of the RTF feature is Ixia's ability to graphically display results in real time, through the IxExplorer GUI, providing instantly accessible and clearly interpretable performance characteristics of up to 56,000 flows per port, including, real-time latency (min, max, avg.), bits per second, frame rate, etc. These flows can be characterized as TCP, UDP, and other protocols such as HTTP and RTR, utilizing the TCP/UDP sockets.

Multi-Users

Multiple concurrent users can own ports. This allows hardware port resources to be shared.

Protocol Editors

Protocol editors are available for IP, UDP, IPX, TCP, ARP and others. Each port can generate ARP, Ping, RIP, and other user-defined packets at a user-specified frequency. In addition, each port can be assigned a MAC and an IP address, and can then respond to ARP and Ping.

IXIA 400 Specifications

General

Fully integrated PC with LAN 10/100 NIC

Physical

Load Module Slots	4
Size	10.25"w x 5.75"h x 16"d (26.1cm x 14.6cm x 40.6cm)
Weight (empty)	10lbs. (4.5kg)
Avg. Shipping Wt.	16lbs. (7.3 kg)

Environmental

Temperature

Operating:	50°F to 104°F, (10°C to 40°C)
Storage:	50°F to 122°F, (10°C to 50°C)

Humidity

Operating:	0% to 85%, non-condensing
Storage:	0% to 85%, non-condensing

Vibration: 0 to 500Hz

Front Panel Switches

On/Off momentary power push button

Back Panel Switches

On/Off rocker switch

Front Panel Indicators

Power, Master, External Clock

Back Panel Connectors

Power:	Male receptacle
Mouse & Keyboard:	PS/2 6-pin DIN
Monitor:	HD-DB15 Super VGA
Printer:	Female DB25 parallel port
Ethernet:	RJ45 10/100Mbps
Serial:	2 male DB9 ports

Contact Ixia for information about the Ixia family of products.