XGS2 CHASSIS PLATFORM

FLEXIBLE, PORTABLE 2-SLOT CHASSIS

Ixia test systems deliver the industry's most comprehensive solutions for the security, performance, functional, and conformance testing of networks, devices, and networked applications. The 2-slot XGS2 chassis platform provides highly flexible and portable chassis that powers load modules and test applications to create an Ixia test system. The XGS2 platform provides the foundation for a complete benchtop or rackmount test environment.

XGS2-SDL Chassis

The XGS2 chassis has a front-to-back airflow system to ensure that all of Ixia's highest-density load modules operate efficiently. A true modular construction maximizes the XGS2 platform's serviceability as each major system component is self-contained and field-replaceable with the fan assembly, synchronization module, power supply, and chassis controller module designed to be readily installed and removed.

The XGS2 platform chassis run the same applications and accept the same XM form factor (XMFF) load modules as their bigger XGS12 platform counterparts making it easy to integrate in existing set ups. Ixia load modules are hot-swappable, ensuring a highly-scalable and multi-user testing environment.

HIGHLIGHTS

- Compact 3RU form factor supports broad range of speeds—400/100/50/40/25/10/1GE/100M

- Supports Ixia applications for performance, functional, conformance, and security testing

- 3 chassis models:
    - XGS2-SD standard performance
    - XGS2-SDL standard performance
    - XGS2-HSL high performance

- Ultra-high performance 3RU chassis assembly with new high-speed backplane supports high-bandwidth requirements

- Hot-swappable load modules can be changed without disrupting chassis operation

- Redundant power supply to ensure uninterrupted testing

- Field serviceable with modular power supplies, chassis controller, fan assembly, and synchronization modules

- 400GE-ready

KEY FEATURES

- **Unified platform for Security and L2-7 testing:** Executes a wide array of security, data, routing, and bridging protocol emulation; and signaling, voice, video, and application testing

- **Extensive interface support:** From 100Mbps to 400Gbps

- **Hot-swap capability:** Actively swap load modules in and out of the test bed without disrupting ongoing test that is using installed modules

- **High performance:** High-speed backplane to support the high bandwidth requirements of large-scale application tests

- **Highly serviceable with modular components:**

  - Chassis controller module is a self-contained, field-replaceable unit that manages load modules, port configurations, and statistics reporting

  - Fan Module is a self-contained, field replaceable unit for temperature control

  - Power Supply Modules are self-contained, field replaceable units

  - Sync Module is self-contained and allows synchronizing the XGS2 chassis with other Ixia chassis

- **Highly-expandable:** Daisy-chain the XGS2 with these other Ixia chassis: XGS2-HS, XGS2-HSL, XGS2-SD, XGS2-SDL, XGS12-SD, XGS12-SDL, XGS12-HS, XGS12-HSL, XG12, XM12 HP, XM2, and 400Tv2

- **Precision timing:** Time synchronization using signal antenna: GPS with Metronome Timing System and AFD1 or IRIG-B with AFD2 unit.

  Note: External synchronization is not supported on HSL and SDL chassis models

BENEFITS

- **Lower cost:** Allows use of Ixia load modules in a small footprint chassis

- **Improved cooling:** A new design that uses front-to-back airflow similar to other devices installed in equipment rackmounts provides better cooling

- **Easy to service:** Field-replaceable modular chassis synchronization unit

- **Compatibility:** Support same Ixia applications and load modules as XGS12 platform which means no time spent on learning new UIs and APIs when introducing XGS2 in an existing test setup

TARGETED USERS

- Enterprises and carriers validating DDoS defenses and optimizing next-generation firewalls (NGFW), intrusion prevention systems (IPS), and other security devices in their network infrastructure

- Enterprises, carriers, Internet service providers (ISPs), and cloud service providers (CSPs) executing product qualification/acceptance testing or pre-deployment hot-staging of network equipment

- Engineering and quality assurance (QA) groups developing and testing Higher Speed Ethernet 400GE/100GE/50GE/40GE/25GE, and high-density 10GE/5GE/2.5GE/1GE/100M products

- Engineering and QA groups developing and testing high-performance Layer 2-7 devices

- Manufacturing groups executing production-quality and repetitive testing

- Technical marketing and sales for proof of concept (PoC), field, interoperability, and trade-show demonstrations

- Customer support departments troubleshooting customer issues

- Certification and interoperability labs providing third-party equipment test and validation

INVESTMENT PROTECTION

The XGS2 chassis platform delivers increased performance for test applications while at the same time maintaining compatibility with existing Ixia test systems. Test applications, configurations, and automation scripts are compatible, allowing easy migration of existing test beds to the new system without loss of capital investment.

APPLICATION SUPPORT

The XGS2 chassis platforms support the following Ixia test applications:

- **BreakingPoint**® (only on XGS2-HS and XGS2-HSL models with PerfectStorm Fusion load modules) for global visibility into emerging threats and applications, along with advance insight into the resiliency of an organization's IT infrastructure under operationally-relevant conditions and malicious attacks

- **IxLoad**® for performance testing of content-aware devices (e.g., load balancers, web servers, video servers) running protocols such as HTTP, FTP, SMTP, SIP, MPEG2 video, and many more

- **IxNetwork**® for scalability and performance testing of routing, switching, security, data center and broadband access infrastructure solutions

- **IxExplorer**® for granular, highly-flexible data-plane testing and analysis

SPECIFICATIONS

FEATURES	DETAILS
Slots	2 (compatible with Ixia XMFF load modules[i])
Size	- 17.5 in. width (19.0 in. with rackmount bracket installed) x 5.1 in. height x 26.5 in. depth - 3 rackmount units (3RU)

FEATURES	DETAILS
Weight	- XGS2-SD and XGS2-SDL weighs 53 lbs. (24 kg) 69.3 lbs. (31.5 kg) average shipping weight - XGS2-HSL each weighs 55 lbs. (25 kg) 71.3 lbs. (32.4 kg) average shipping weight
Power Requirements	- Two 1100W single phase power supplies each rated 10A@110VAC; 60/50 Hz - Two 1100W single phase power supplies each rated 5A@220VAC; 60/50 Hz - Supports an additional power supply that can be purchased for redundancy
Timing Source	Internal or synchronized with another Ixia chassis, or external with the Ixia Metronome Timing System or AFD1 appliance for GPS time sources, or the Ixia AFD2 appliance for BITS and IRIG-B time format input with additional 1PPS input Note: The Metronome external synchronization is supported on XGS2-SD and XGS2-HSL chassis only
Operating System	- XGS2-SD: Windows 7, 32-bit version - XGS2-SDL: Native IxOS - XGS2-HSL: Native IxOS
Chassis Controller Module	- Field-replaceable - USB ports for connecting accessories
Temperature	- Operating: 41°F to 104°F (5°C to 40°C) - Storage: 41°F to 122°F (5°C to 50°C)
Humidity	- Operating: 0% to 85%, non-condensing - Storage: 0% to 85%, non-condensing
Connectors	- Video: HD-DB15 Super VGA - USB: Two Dual Type A, 4-pin jack connectors - Management: 1000Base-T RJ45 - Serial: One RJ-45 RS-232 port
Switches & Indicators	- Power, Standby, Master, External Clock - LCD screen with chassis status information - Two paired LEDs next to each slot position indicating slot power and card ownership
Fans	One field-replaceable fan-tray assembly that is easily installed and removed

FEATURES	DETAILS
Noise	XGS2 chassis running at maximum fan speed capacity may produce noise levels up to 80 dB(A). This is measured per the GR-63- CORE, Issue 1, and paragraph 5.6.3 specification. The use of appropriate ear protection is recommended to protect against hearing impairment. Consult local health and safety regulations for recommended maximum exposure levels for noise and ear protection devices. Note: Fan speed is variable and adjusted based on present load and temperatures within the chassis.
Regulatory Compliance Specifications	- Safety - US/Canada: UL 60950-1, & CSA C22.2 No. 60950-1-07 - Information Technology Equipment - Safety – International: IEC 60950-1:2005 (Second Edition); Am1:2009 + Am2:2013 (CB Scheme) - EMC US/Canada: FCC Part 15, Subpart B, Class A, ICES-003 - European Directives: Low Voltage: 2006/95/EC EMC: 2004/108/EC RoHS: 2011/65/EU WEEE: 2002/96/EC - EU Product Family Standards for CE compliance: Safety: EN 60950-1:2006/ A11:2009 / A1:2010 / A12:2011 / A2:2013 - EMC: EN 55022: 2010 EN 61000‐3‐2: 2006, A1: 2009 + A2: 2009 EN 61000-3-3: 2008 EN 55024: 2010

PRODUCT ORDERING INFORMATION

940-0010

XGS2-SD, 2-SLOT Standard Performance Chassis BUNDLE. This chassis bundle includes: Chassis frame assembly, Standard Performance Controller Module (942-0049), Fan assembly module, 2 Power supplies, and Std Star Topology Sync module.

940-0013

XGS2-SDL, 2-Slot Standard Performance Chassis BUNDLE. This chassis bundle includes: Rack mountable chassis frame assembly, Standard Performance Controller Module running Native IxOS operating system, Fan assembly module, 2 power supply modules, and Standard Star Topology Sync module. REQUIRES selection of a supported free IxOS software version (IxOS 8.40 EA and later) that is ordered separately. NOTE: An optional redundant power supply (942-5005) can be purchased for increased system availability.

940-0014

XGS2-HSL, 2-SLOT High Speed Chassis BUNDLE. This chassis bundle includes: Chassis frame assembly, High Performance Controller Module (942-0048), Fan assembly module, 2 Power supplies, and Standard Star Topology Sync module. REQUIRES selection of a supported free IxOS software version (IxOS 8.13 EA and later) that is ordered separately. NOTE: An optional redundant power supply (942-5005) can be purchased for increased system availability.

942-5005

Chassis Spare Part, Optional Redundant Power Supply Module for 940-0010 (XGS2-SD), 940-0012 (XGS2-HS), 940-0013 (XGS2-SDL), or 940-0014 (XGS2-HSL).

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[i] For a complete list of all Ixia load modules supported by the XGS2 chassis platforms, please refer to the Ixia Platform Reference guide document and the Product Compatibility Matrix that are available under the Support section of the www.ixiacom.com website.