# IXIA A Keysight Business

# VISION X NETWORK PACKET BROKER

DATA SHEET

# SCALABLE VISIBILITY FOR DATA CENTERS TODAY AND TOMORROW

Ixia's Vision X is the next-generation network visibility solution. It delivers expandability and flexibility that meets the ever-evolving needs of the data center.

Vision X is a high-density, modular chassis comprised of customizable front modules and multi-speed port choices. It also supports a rear, advanced packet processing module, extending the total packet processing capacity of the chassis.

With a small data center footprint, Vision X conserves both power and rack space. Its footprint, along with its upgradable chassis, will improve your overall ROI now and in the future.

### **KEY FEATURES:**

- Automated filter compiler that simplifies configuration using either the powerful GUI or REST API
- Zero-loss, advanced packet processing improves tool efficiency through deduplication, packet trimming, and header stripping without dropping packets
- Space efficient 3RU design saves rack space in your data center

## **HIGHLIGHTS**

- High-density 100GE, 3RU modular chassis
- · 4 front modules, 1 rear module
- Hot-swappable fans, power, and modules
- Up to 2 Tbps of advanced packet processing
- PTP 1588 Time Stamping
- IFC clustering with other Vision platforms to offer single pane of glass management



# Port Flexibility

Main switch + 4 x NetStack modules:

- Up to 60 100GbE
- Up to 108 50GbE
- Up to 76 40GbE
- Up to 108 10/25GbE

Main switch + 4 x PacketStack modules:

- Up to 44 100GbE
- Up to 88 50GbE
- Up to 76 40GbE
- Up to 108 10/25GbE

#### PRODUCT CAPABILITIES:

# **NETSTACK CAPABILITIES**

The Ixia gold-standard baseline filtering functionality for network packet brokers



#### **Dynamic Filter Compiler**

Patented technology that resolves rule overlaps automatically and hence makes configuration simple and eliminates human errors



## **Three Stages of Filtering**

Filter at ingress ports, in the middle and at egress ports for the maximum flexibility in designing complex Boolean logic without the need of using extra ports for loopback



### Aggregation

Consolidate incoming traffic to optimize port usage and simplify filter logic.
Support 1:1, 1:Many, Many:1 and Many:Many traffic mapping



## Replication

At the ingress port as well as at the dynamic filter. Replication at the ingress allows the same input to connect to multiple dynamic filters. Replication at the dynamic filter allows multiple tools to get identical traffic from the same dynamic filter



#### Load-balancing

Sophisticatedly distributes traffic across tools ports for monitoring in a session aware manner to preserve traffic integrity and also to maximize up-time with fail-over protection



# Source Port Labelling (VLAN Tagging and Untagging)

VLAN tag management (ingress tagging and egress stripping)

### **PACKETSTACK CAPABILITIES**

Line-rate (up to 2Tbps), intelligent packet processing. Modify every packet at line-rate using any combination of Ixia's PacketStack (AFM) capabilities.

Flexibly assign advanced packet processing to any port or dynamic filter in 100Gbps increments.



#### **Deduplication**

400Gbps capacity per module (100G increments) and up to 2Tbps per chassis



#### **Header Stripping**

Includes FabricPath, ETag, VNTag, GTP, MPLS, VxLAN, L2GRE, ERSPAN, LISP

Generic Header Stripping can be used to strip protocols headers not in above list. Examples are: L3GRE, GENEVE, JMirror, PBB-TE, VSL, OTV, PPPoE



### **Packet Trimming (Slicing)**

To modify packet slice or retain only relevant data



# **Timestamping**

Timestamping (local, NTP, PTP 1588)



#### Tunneling

L2GRE based tunneling termination over WAN/LAN



# **Data Masking**

Protect PII and sensitive data with an offset

#### **SPECIFICATIONS**

# **GENERAL SPECIFICATIONS**

#### **Performance**

- Fully non-blocking 6.4Tb switch capacity
- o Line-rate across all ports with filtering enabled
- 10GbE/25GbE/40GbE/50GbE/100GbE support

### Management

- SNMP v1, v2, v3 support
- Local, RADIUS, and TACACS+ support (members and groups)
- · Granular access control features
- · Event monitoring and logging
- Syslog
- · IT Automation control with REST API
- · 2 management interfaces

# **PHYSICAL SPECIFICATIONS**

### Size and Weight

- · 3RU high rack mountable
- Dimensions: 5.25"H x 17.5"W x 31"D (inches)
- Weight: 125 lbs. (57 kg)

# Safety certifications and compliance

- ROHS, NEBS Level 3
- IEC/UL/CSA 60950-1, IEC/UL/CSA 62368-1, CE, FCC Part 15B Class A, ICES-003 Class A, AS/NZS CISPR 32 & 24, KN 32 & 35, BSMI, GR-1089 Issue 7, GR-63-CORE Issue 5, AT&T TEER, Verizon TEEER, ETSI EN 300-019-2-1, ETSI EN 300-019-2-2, ETSI EN 300-019-2-3, ETSI EN 753, ATT-TP-76200

### **AC Power**

- Quad hot swappable AC power supplies
- Input AC Voltage: 90-240 VAC RMS
- Maximum power, each power supply: 100 VAC input - 1260W

100 VAC Input - 1200VV

110-120 VAC input – 1400W 200-240 VAC input – 1500W

 Maximum heat/power dissipation for system: 3500W/11942BTU/hour

#### **DC Power**

- Quad hot swappable DC power supplies
- Operating input voltage: -40 to -72 VDC
- Maximum power, each power supply: 1500W
- Maximum heat/power dissipation for system: 3500W/11942BTU/hour

# **OPERATING SPECIFICATIONS**

#### **Temperature**

- Operating: 5°C to 40°C
- Short-term\*: -5°C to 55°C (\*not to exceed 96 consecutive hours)
- Short-term\* with fan failure: -5°C to 40°C (\*not to exceed 96 consecutive hours)

#### Humidity

- Operating: 5% to 85%, (non-condensing)
- Short-term\*: 5% to 90% (non-condensing, \*not to exceed 96 hours)

# ORDERING INFORMATION

# **VISION X CHASSIS**

PART NUMBER	DESCRIPTION
SYSVX-BASE-AC	IXIA Vision X Base system, AC. Includes chassis, 12-port 100G Switch card, 4 AC power supplies, 5 fans and 4+1 smart blanks
SYSVX-BASE-DC	IXIA Vision X Base system, DC Includes chassis, 12-port 100G Switch card, 4 DC power supplies, 5 fans and 4+1 smart blanks
SYSVX-CHAS-AC	IXIA Vision X Chassis Base system. Includes chassis, 4 AC power supplies, 5 fans and 4+1 smart blanks, main switch card <b>not</b> included
SYSVX-CHAS-DC	IXIA Vision X Chassis Base system. Includes chassis, 4 DC power supplies, 5 fans and 4+1 smart blanks, main switch card <b>not</b> included

# VISION X INTERFACE MODULES, LICENSES, OPTIONS & ACCESSORIES

# MAIN SWITCH AND INTERFACE MODULES

PART NUMBER	DESCRIPTION
MVX-SWCH	IXIA Vision X Switch Card with (12) 100G ports
MVX-NS12PC	IXIA Vision X, NetStack 12-port 100G module
MVX-PS8PC	IXIA Vision X, PacketStack 8-port 100G module (Front)
MVX-PS-R	IXIA Vision X, Rear PacketStack module

# PORT AND FEATURES LICENSES

PART NUMBER	DESCRIPTION
LIC-VX-2PC	IXIA Vision X, Port license for (2) 100G ports
LIC-VX-PS2C	IXIA Vision X, 200Gbps PacketStack feature license. Includes Data Masking, Packet Trimming, Packet Timestamping, Add trailer with original packet length, Trailer Stripping
LIC-VX-DDUP	IXIA Vision X, (1) Packet Deduplication feature license
LIC-VX-STRP	IXIA Vision X, (1) Header stripping feature license

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LIC-VX-TUNL	IXIA Vision X, (1) Tunneling feature license
LIC-VX-SPR	IXIA Vision X, (1) Cold spare system license
LIC-VX-IFC	IXIA Vision X, (1) Fabric connectivity feature license

# **POWER SUPPLY**

PART NUMBER	DESCRIPTION
MVX-DCPS	IXIA Vision X, (1) DC Power Supply
MVX-ACPS	IXIA Vision X, (1) AC Power Supply

# **FAN MODULE**

PART NUMBER	DESCRIPTION
MVX-FAN	IXIA Vision X, (1) FAN module

# **ACCESSORIES**

PART NUMBER	DESCRIPTION
MVX-CBLM	IXIA Vision X, (1) Cable Management
MVX-SBF	IXIA Vision X, (1) Smart Blank (Front)
MVX-SBR	IXIA Vision X, (1) Smart Blank (Rear)

Learn more at: www.ixiacom.com

For more information on Ixia products, applications, or services, please contact your local Ixia or Keysight Technologies office.

The complete list is available at: www.ixiacom.com/contact/info