

# IXIA VISION EDGE 1S (E1S) EDGE VISIBILITY APPLIANCE

## DATA SHEET

The need for real-time network data visibility into edge sites has never been greater. Being able to know how one's network, applications, and services are performing is no longer "nice to have." In fact, now it is imperative to have the ability to quickly quantify threats within and outside of the network.

Ixia's new Vision Edge 1S (E1S) combines network packet broker functionality, application monitoring, and synthetic monitoring – all in one device. This is perfect for edge site installations that requires remote network performance monitoring combined with selected packet collection to centralized tools.

### KEY FEATURES:

- **Cost effective – as a network packet broker** – designed for easy deployment in distributed edge sites
- **Application intelligence** – detect flow and applications, generate enriched NetFlow (IxFlow) to collectors, and perform remote packet capture
- **Active traffic capable** – generate active traffic to verify network capacity and run regular network performance polling. Supported with a best-in-class traffic generation library
- **Remote controlled, easy-to-use web-interface** – allows efficient provisioning and remote management
- **Comprehensive wizards** – make deployment extremely easy

### HIGHLIGHTS

- 1U compact platform
- Supports 1G to 10G networks
- Supports scaling your security infrastructure to edge sites
- Featured with Ixia's NetStack, PacketStack and AppStack capabilities
- Aggregation, replication, filtering
- AppStack for enriched NetFlow (IxFlow) generation and remote packet capture
- Active traffic generation up to 10G line rate for a Hawkeye monitoring platform
- Central management on the Hawkeye platform








Figure 1: Vision E1S







Figure 2: E1S Front

PRODUCT CAPABILITIES

NETSTACK CAPABILITIES	
The Ixia gold-standard baseline filtering functionality for network packet brokers	
 <p><b>Filtering</b> – 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</p>	 <p><b>Replication</b> – 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</p>
 <p><b>Aggregation</b> – consolidate incoming traffic to optimize port usage and simplify filter logic. Support 1:1, 1:M, M:1 and M:N traffic mapping</p>	

PACKETSTACK CAPABILITIES	
Packet processing to modify packets at line-rate or transport. Capabilities up to <b>10Gbps</b>	
 <p><b>Tunneling</b> L2GRE based tunneling over WAN/LAN (origination and termination)</p>	 <p><b>Header Stripping</b> Includes VLAN, MPLS, L2GRE, ERSPAN</p>

APPSTACK CAPABILITIES	
<ul style="list-style-type: none"> <li>• Perform application-based filtering and generation of NetFlow and IxFlow up to 2Gbps</li> <li>• Identifies network traffic based on application, geography, device information, and service provider</li> </ul>	
 <p><b>Application Flow Reporting</b> – Reports bandwidth utilization by application breakdown providing visibility on link utilization</p>	 <p><b>Packet Capture (Remote)</b> – Apply a filter to capture packets – up to 100Mb per capture</p>
 <p><b>NetFlow and IxFlow</b> – generate flows in standard NetFlow v9/v10 format, or enriched format adding application or geographic information</p>	 <p><b>Real-time Dashboard</b>– comprehensive network traffic information showing traffic volume, bandwidth used by the different applications</p>

**ACTIVE MONITORING CAPABILITIES**

Active traffic generation capability with up to 10G line-rate traffic. Rich library of application simulation allowing network performance validation for service turn up and 24/7 proactive performance monitoring.



**Application Library**

Rich library to use for active/synthetic traffic assessment. Includes everything from layer 3 network performance metric applications to layer 7 application specific verification including http/https, voice, video and traffic mixes

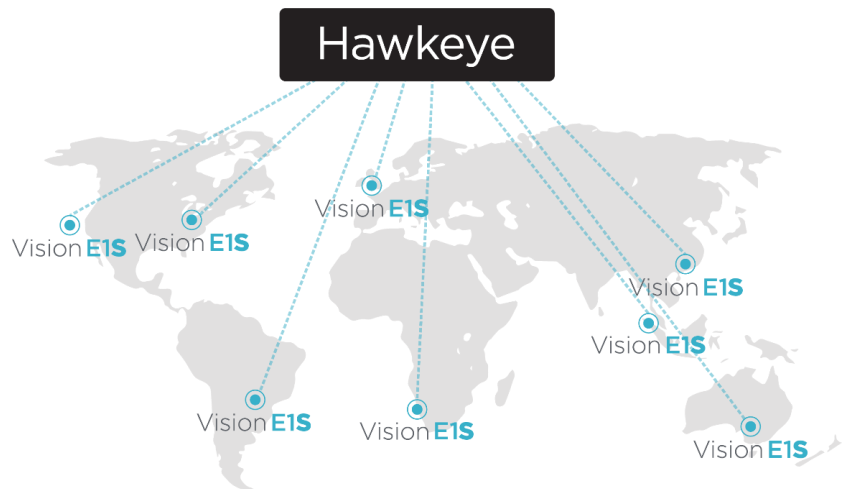


**Distributed Endpoints**

Vision E1S is compatible with the Hawkeye active monitoring solution; E1S can generate up to 10G traffic as an endpoint that can interoperate with other hardware, virtual and software endpoints

**CENTRAL MANAGEMENT**

- On-premises server or cloud-based
- Central, unified management of all Vision E1S devices for all capabilities
- SLA based approach for performance management
- Reporting and analytics of metrics



OPERATING SPECIFICATIONS

VISION E1S	
<p><b>Power</b></p> <ul style="list-style-type: none"> <li>• Redundant (2) AC power supplies</li> <li>• Input AC 110 to 240 @ 50/60 Hz</li> <li>• Power 300W</li> <li>• System cooling: 2 x PWM fans, supports smart fan</li> </ul>	<p><b>Physical Size, Weight</b></p> <ul style="list-style-type: none"> <li>• WxLxH: 442 x 298.25 x 43.6 mm</li> <li>• Weight: 3.08 kg</li> <li>• 1U rack mount - support FIPS 140-2 Level 2 in chassis</li> <li>• Operating Temperature: 0 to 40 degrees Celsius</li> <li>• Operating Humidity: 20% to 90%</li> <li>• Storage Temperature: -20 to 70 degrees Celsius</li> <li>• Storage Humidity: 5% to 90%</li> <li>• Country of Origin: Taiwan</li> </ul>
<p><b>Interfaces</b></p> <ul style="list-style-type: none"> <li>• (4) 10G SFP+ (NetStack + AppStack + Active Monitoring)</li> <li>• (6) 1G BASE-T copper (NetStack + AppAttack)</li> <li>• (2) 1G BASE-T copper (Management + Active Monitoring)</li> <li>• (1) USB 3.0 port</li> <li>• (1) RJ45 serial console port</li> </ul>	
<p><b>Regulatory</b></p> <ul style="list-style-type: none"> <li>• CB, EN/IEC 60950, UL/CUL, CE Class A</li> <li>• CB, EN/IEC 62368, UL/CUL, CE Class A</li> </ul>	
<p><b>Safety</b></p> <ul style="list-style-type: none"> <li>• UL 60950-1, 2nd Edition, 2014-10-14, CAN/CSA C22.2 No. 60950-1-07, 2nd Edition, 2014-10, EN 60950-1:2006 + A1:2010 + A11:2009 + A12:2011 + A2:2013, IEC 60950-1:2005 (Second Edition); Am1:2009 + Am2:2013, UL 62368-1, Second Edition, IEC 62368-1:2014 (Second Edition), EN 62368-1:2014/A11: 2017, CAN/CSA C22.2 No. 62368-1-14</li> </ul>	
<p><b>Emissions</b></p> <ul style="list-style-type: none"> <li>• EN 55032:2012/AC:2013, Class A, CFR 47, FCC Part 15B, Canada: ICES-003: Issue 6:2016, AS/NZ CISPR 32:2015 Class A, KCC – Korea, BSMI – Taiwan, CCC - China</li> </ul>	
<p><b>Immunity</b></p> <ul style="list-style-type: none"> <li>• EN 55024:2010, EN 61000-3-2:201, EN 61000-3-3:2013, EN 61000-4-2, EN 61000-4-3, EN 61000-4-4, EN 61000-4-5, EN 61000-4-6, EN 61000-4-8, EN 61000-4-11.</li> </ul>	

**Environmental**

- The RoHS Directive 2011/65/EU, 2006/1907/EC (REACH)

PERFORMANCE

MAXIMUM SYSTEM CAPACITY			
Performance may vary with use of multiple functions simultaneously and based on the incoming traffic mixes on the NetStack and AppStack functions.			
NetStack/PacketStack	TRAFFIC INGRESS TO EGRESS PERFORMANCE		
	PACKET SIZE	1G INTERFACE	10G INTERFACE
	IMIX (*)	Line rate	Line rate
	512 bytes	Line rate	9 Gbps
	1024 bytes	Line rate	Line rate
1518 bytes	Line rate	Line rate	
(*) IMIX traffic refers to typical Internet traffic mix. For benchmarks the following repartition was used for 17% 64 bytes packets, 51% 570 bytes packets, 32% 1518 bytes packets			
AppStack	Up to <b>2 Gbps</b> of typical application mixed traffic.		
Active Monitoring	Up to <b>line rate</b> for 1G and 10G interfaces for TCP and UDP		

ORDERING INFORMATION

VISION E1S SYSTEM	
HARDWARE	DESCRIPTION
<b>SYS-E1S-AC</b>	IXIA Vision E1S System AC Chassis with fixed (4) 10G SFP+ ports and (6) 1G RJ-45 ports; Contains two redundant AC power supplies and integrated redundant fan units. Includes (1) license for NetStack, PacketStack, AppStack and (3) user seat license for central management with Hawkeye. Seats are not additive (max 3 users per Hawkeye server). Synthetic monitoring is not included. Optional licenses available for additional user seat licenses and synthetic monitoring.

Learn more at: [www.ixiacom.com](http://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](http://www.ixiacom.com/contact/info)