

IXIA VISION EDGE 40 (E40) NETWORK PACKET BROKER

DATA SHEET

The need for real-time visibility into network data has never been greater. Being able to know how applications and services are performing is no longer a nice to have. It is also imperative to have the ability to quickly quantify threats from within and outside of your network.

Current reality is that compute, storage and networks are now software defined and built by the rack and containers. And, in keeping with demand to deliver lower operating expense and offering the best-of-breed in software-defined flexibility, visibility is lost at every layer as installations get dense and traffic moves east-west within a rack and north-south between racks.

More servers, more switching layers, more virtual platform translate to more visibility blind spots.

Ixia's new Vision Edge 40 (E40) and Vision Edge 100 (E100) network packet brokers are designed to provide rack-level visibility through a solution that allows seamless integration into existing hybrid SDN architectures, offering true flexible multi-speed capability, and a comprehensive feature set for the versatility to adapt to the future, ensuring your Security Fabric's strength, all while offering a compelling total cost of ownership.

KEY FEATURES:

- **High density multi-speed network packet broker** that is designed for deployment in racks to aggregate traffic
- **Exceptionally feature rich** stand-alone packet broker that supports 10G to 40G networks
- **Easy-to-use web-interface** allows you to focus on security rather than configuration
- **Comprehensive wizards** that makes deployment extremely easy
- **Space efficient 1RU** design saves rack space in your data center
- **Inline and out-of-band capable** for flexibility
- Secure serial console port with authentication

HIGHLIGHTS

- High density 1U platform for visibility per rack service
- Supports 10G to 40G networks
- Inline and OOB capable
- Supports scaling your security infrastructure with Ixia Fabric Controller (IFC)
- Fully featured with Ixia's robust NetStack capabilities:
 - Aggregation, replication, filtering and load balancing
 - Ixia's patented filter compiler and three stages of filtering for one of a kind flexibility in managing network and tool traffic profile
- Software defined platform that offers new features without platform change
- Priority-based filtering including inline and HA configurations
- IFC support for joining by system ID



Figure 1: E40 Front








Figure 2: E40 Back

USE CASES

- For top-of-the-rack visibility for a single site deployment with network and tools
- In a leaf-spine architecture, aggregating across multiple racks in a smaller or microscale data center
- In a distributed network, Vision Edge can be used with Vision ONE using Ixia Fabric Controller (IFC) for a single pane of glass management and operation, so tools at the data center can be used for multiple branch monitoring and security
- In a high-availability configuration for the most resilient inline tool deployment, when used in conjunction with Ixia's bypass switches
- With other Vision packet brokers to leverage more advanced packet processing capabilities

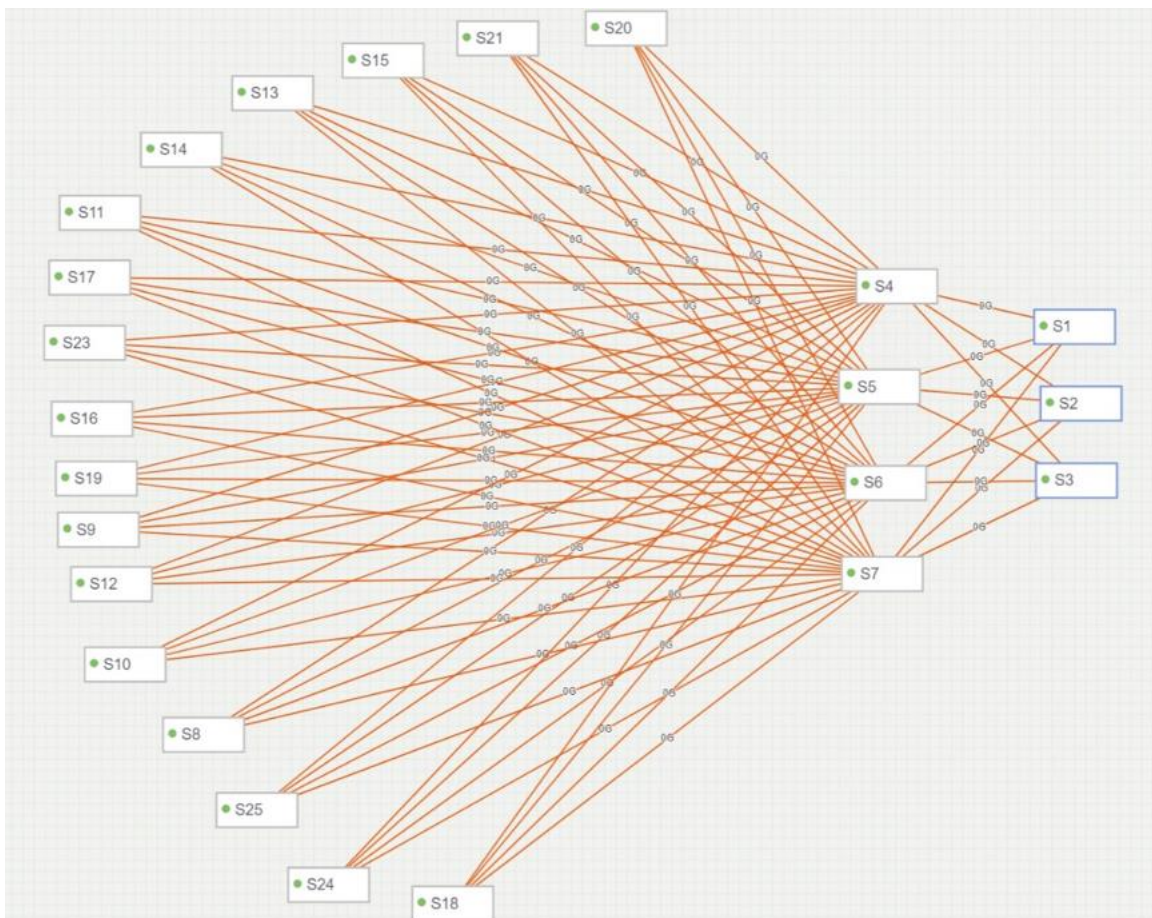
PRODUCT CAPABILITIES

NETSTACK CAPABILITIES	
The Ixia gold-standard baseline filtering functionality for network packet brokers	
 <p>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</p>	 <p>Dynamic Filter Compiler – Patented technology that resolves rule overlaps automatically hence makes configuration simple and eliminates human errors</p>
 <p>Aggregation – consolidate incoming traffic to optimize port usage and simplify filter logic. Support 1:1, 1:Many, Many:1 and Many:Many traffic mapping</p>	 <p>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.</p>
 <p>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</p>	

INLINE CAPABILITIES
<ul style="list-style-type: none"> • Supports failsafe serial service chaining, parallel load balancing with spares, or combined topologies • Customizable heartbeat (HB) support to detect and automatically recover from monitoring and security tool failures • Multiple HB templates allow each tool to have its own unique HB • Asymmetric hashing supports common use cases for lawful interception • Bypass switches and Ixia Vision E40 can have different HB so multi-tier design is possible to increase overall resilience for High Availability (HA)

IXIA FABRIC CONTROLLER (IFC) CLUSTERING

- Ixia Fabric Controller (IFC) clustering offers single pane of glass management for your network packet brokers. NPBs in a distributed environment can be managed and configured, using a single User Interface, as if one centralized visibility and security fabric
- IFC clustering supports any combination of Vision Edge 40/100/10S, Vision ONE/7300/X platforms
- Typical topologies supported include: hub-and-spoke, spine-and-leaf, tree, ring, full mesh, partial mesh, or any **combination** of above
- User configurable number of Controller Node vs. Fabric Node to maximize resiliency
- Supports direct connection for interconnects, or GRE encapsulated interconnects (limited to Vision ONE and 7300 only) when going thru DWDM or WAN devices
- Supports both single hop and multi hop cluster topology
- Best routes are calculated based on least hop-count using Shortest Path First (SPF) algorithm
- Intelligent load balance among Equal Cost Multiple Paths (ECMP) to guarantee session integrity and avoid packet reordering
- User triggered path re-optimization to avoid failed links or nodes



E40 HIGHLIGHTS

- Capable of (3) speeds - 1G, 10G and 40G networks
- (48) 1G or (48) 10G SFP+ ports
- (6) 40G QSFP+ ports *(with a breakout cable, supports both 1G and 10G operation and simplex mode)*
- Up to (72) 10G ports *(when using the 40G ports with 4x10G breakout cable)*
- Up to (18) 40G ports *(when using the 4x10G ports with breakout cable for fan-in to 40G)*
- Hot swap redundant power supplies and fans
- CLI support for Inline and NetStack features
- IFC clustering with other Vision platforms offers single pane of glass management for a cluster of NPBs
- Available in AC and DC models
- Double your ports on all 1G/10G ports including fan-out ports – use RX for Network and TX for Tool port on single port
- Extra 40G ports by combining (4) 10G ports to operate at 40G natively *(when using a breakout cable)*

PORT CONFIGURATION AND DENSITY

System	10G	40G
Standard Ports Per System	48	6
Max Ports Per System	72 (w/40G breakout)	18 (w/40G breakout)

The E40 systems have forty-eight (48) 1G/10G SFP+ data ports and six (6) 40G QSFP+ data ports. With breakout cables, each of the 40G ports can be broken out into four (4) 1G/10G SFP+ ports, making a total of 72, 1G/10G SFP+ ports available.

OPERATING SPECIFICATIONS

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<p>Power</p> <ul style="list-style-type: none"> • 2 redundant hot swap AC power supplies • 2 redundant hot swap -48V DC power supplies • Input voltage: 90 to 264 VAC @ 50-60 Hz • Input voltage: -48 to -72 VDC • Input current: Max 6A @ 100/120 VAC • Input current: Max 3A @ 200/240 VAC • Input current: Max 10A @ -72 VDC • Max Power: 282 W without pluggable optics <p>Regulatory</p> <ul style="list-style-type: none"> • CB, EN 60950 • UL/CUL • CE Class A 	<p>Physical Size, Weight and Environmental</p> <ul style="list-style-type: none"> • WxDxH: 17.4 x 18.6 x 1.71 inches • Weight: 19.72 lbs with two installed PSU • Regulatory and compliance information will be updated and included here in the future • Operating Temperature: 0 to 40 degrees Celsius • Operating Humidity: 5% to 95% non-condensing • Country of Origin: China • Country of shipment to End customer: USA

ORDERING INFORMATION

IXIA VISION E40 SYSTEM	
HARDWARE BUNDLE PART NUMBER	DESCRIPTION
SYSE40-24PX-AC	Ixia Vision E40 System AC Chassis with fixed (48) 1G/10G and (6) 40G ports; Includes license for (24) 1G/10G or (6) 40G ports or any 1G/10G or 40G combination
SYSE4048PX6P4XDC	Ixia Vision E40 System DC Chassis with fixed (48) 1G/10G and (6) 40G ports; Includes license for (24) 1G/10G or (6) 40G ports or any 1G/10G or 40G combination

IXIA VISION E40 PORT AND FEATURES	
LICENSE BUNDLE PART NUMBER	DESCRIPTION
LIC-E40-ADD-24P	Ixia Vision E40, Port license for an additional (24) 1G/10G or (6) 40G ports or any combination of 1G/10G or 40G combination.
LIC-E40-IFC	Ixia Vision E40, Enables Ixia fabric controller (IFC) for direct connect to Vision ONE or Vision 7300/3; licensed per system
LIC-E40-INLINE	Ixia Vision E40, Enables Inline feature; licensed per system. One per system. Requires previous or adjunct purchase of port licenses to operate.

IXIA VISION E40 SPARE AND MODULES	
HARDWARE PART NUMBER	DESCRIPTION
SYSE40-SPR-AC	Ixia Vision E40 System AC Chassis with no ports or features enabled; Requires short term license to be installed to operate when required; PREREQUISITES: Cold space license LIC-V-E40-SPARE for operation
SYSE40-SPR-DC	Ixia Vision E40 System DC Chassis with no ports or features enabled; Requires short term license to be installed to operate when required; PREREQUISITES: Cold space license LIC-V-E40-SPARE for operation
LIC-E40-SPR	Ixia Vision E40, Cold spare system license; NOTE: Includes max configuration; Activation includes all ports, all inline and Ixia Fabric Controller; Short term activation only to operate Vision E40 cold spare system
ME40-ACPS	Ixia Vision E40 System, (1) AC power module, for the Vision E40 chassis
ME40-DCPS	Ixia Vision E40 System, (1) DC power module, for the Vision E40 chassis
ME40-FAN-ASSY	Ixia Vision E40, (1) FAN module, for the Vision E40 chassis

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