

Vision ONE

Security without Sacrifice



Amplify your security without changing a cable. Vision ONE provides IT operations the ability to secure any traffic in their network.

Vision ONE acts as the first step to security, providing reliable inline connectivity for security tools such as intrusion prevention systems (IPS), data loss prevention (DLP), and firewalls. It simultaneously connects monitoring tools like intrusion detection systems (IDS) and data recorders.

Integrated intelligence features enable you to access encrypted traffic using SSL decryption, reduce analysis traffic using advanced packet processing, and precisely select traffic by application type, geography, and device criteria using deep packet inspection (DPI). Vision ONE forwards selected traffic in a variety of formats to interoperate with any security tool.

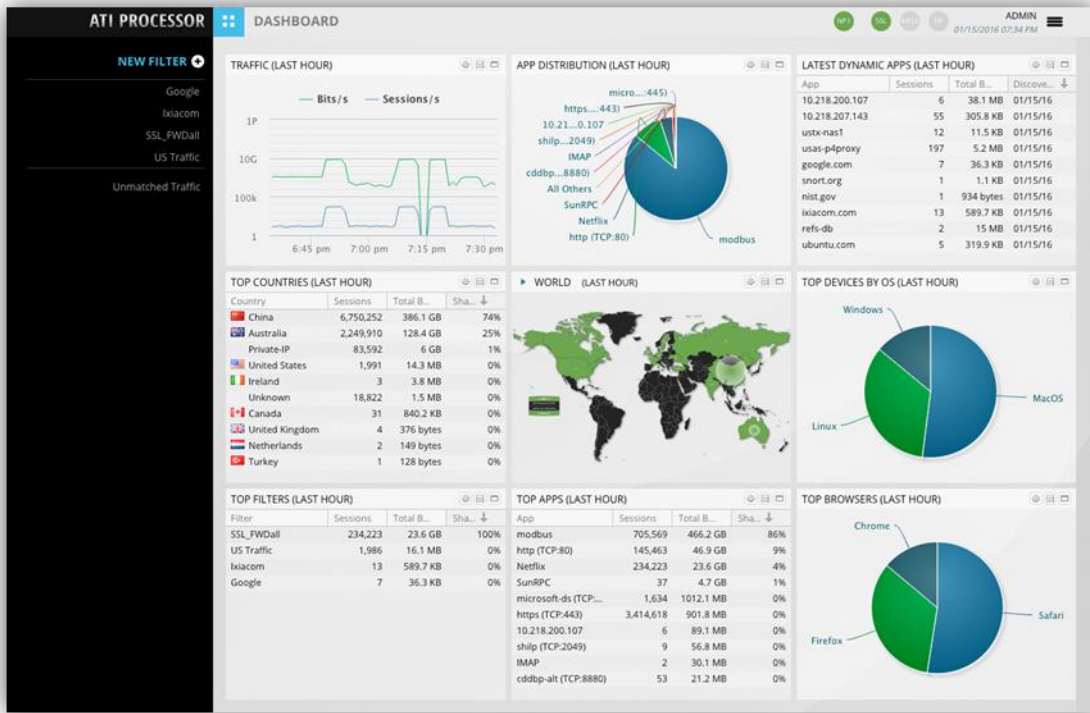
Key Features

- **Powerful GUI** allows you to focus on security rather than configuration—the industry-leading user interface and patented filter compiler make configuration simple for both inline and out-of-band topologies
- **SSL decryption** provides downstream security tools with plain text content so they do not need to support or incur the performance overhead of decrypting traffic to find hidden threats
- **Zero-loss advanced packet processing** improves security tool efficiency through techniques such as deduplication and packet trimming
- **Deep packet inspection** classifies traffic in real time and directs it to the correct tool according to parameters such as application type, geolocation, or even handset type—so tools get the just the traffic type they need, again optimizing your investment in tool infrastructure
- **Sophisticated load balancing** distributes traffic across a number of tools for monitoring or inline in serial or parallel to maximize up-time and ensure that no critical data is lost
- **Space efficient 1RU design** saves rack space in your data center

Highlights

- Extends the reach of security tools to access the entire network
- Supports inline and monitoring use cases
- SSL decryption with stateful, clear text output
- Supports scaling your security infrastructure in more manageable steps
- Enables identification of applications by bandwidth, session, and geography
- Supports simultaneous packet forwarding and generation of NetFlow v9 and v10 records
- Delivers frequent updates via ATI subscription





Ixia's Application and Threat Intelligence Processor (ATIP) provides easy-to-use graphical displays of the traffic captured by Vision ONE

Port Flexibility

- 48 ports of 10GbE/1GbE SFP+
- 4 ports of 40GbE QSFP+; optionally configured as 16 ports of 10GbE
- All ports are bidirectional and fully non-blocking
- Full line-rate across all ports
- Extensive packet filtering capabilities, including:
 - Layer 2: MAC, VLAN, MPLS, or Ethertype
 - Layer 3: IPv4 or IPv6, source / dest / session, DSCP, IP Protocol
 - Layer 4: Port Number, TCP Control
- Suitable for both inline and out-of-band deployments

Full-Rate Intelligent Packet Processing

- Modify every packet at line-rate using any combination of Ixia's Advanced Feature Module (AFM) operations:
 - Deduplication, header stripping, trimming, timestamping, 1G burst protection and data masking
- Flexibly assign 160Gbps total processing capacity to any port in 10Gbps increments

Inline-Specific Features

Supports service chaining, load balancing groups, and combined topologies

- Heartbeat support to detect and automatically recover from monitoring and security tool failures
 - Single-stage or multi-stage heartbeats supported
- Two failure recovery modes
 - Rebalance sessions from the failed tool among all active tools
 - Transition all active sessions from a failed tool to a dedicated standby tool

Ixia's Application and Threat Intelligence (ATI) Processor

- Performs DPI to identify traffic according to:
 - Application, geography, device information, and service provider
 - Application signatures are regularly updated via ATI subscription
- SSL decryption supported ciphers:
 - 3DES
 - RC4
 - AES
 - SHA1/521/384/256/224
 - MD5
- SSL/TLS Decryption Support:
 - SSL/TLS Versions: SSL3.0, TLS1.0, TLS1.1 and TLS1.2
 - Asymmetric Key Exchange: RSA and ECDH
 - Symmetric Keys: AES, 3DES and RC4
 - Hashing algorithms: SHA and MD5
 - Maximum concurrent sessions: Over 1,000,000
 - Private key storage: Encrypted and 'write only'
- Regular expression matching
- Data masking to protect sensitive data such as credit cards and personally identifiable information (PII)
 - Target field identified by user-definable regular expression
 - Default regular expressions provided for commonly request data patterns such as credit card numbers
- Multiple actions can be taken on matching sessions
 - Forward all related packets to an analysis tool
 - Enhanced NetFlow v9 and v10 and IPFIX can be generated and sent to up to 10 collectors
- Simple pricing
 - ATI subscription includes all current and new features and application signatures released

Management

- SNMP v1, v2, v3 support
- Supports IEEE / Precision Time Protocol (PTP) time synchronization
- Local, RADIUS, and TACACS+ support (members and groups)
- Granular access control features
- Event monitoring and logging
- Syslog
- IT Automation control with RESTful API

Specifications

Power for Vision ONE

	AC Power	DC Power
Dual power supplies	✓	✓
Hot swappable	✓	✓
Operating input voltage	100 to 240VAC	40 to 60VDC
Nominal current	6.6A @ 100VAC, 1.5A @ 240VAC	12.5A @ 53VDC
Max. operating input current	7.7A @ 100VAC	19.25A @ 40VDC
Heat/power dissipation for module at 100% traffic load	660W / 2252 BTU/hour	

Compliance

- RoHS, IEC-60950-1:2005, UL60950-1, and CSA C22.2 No. 60950-1, EN 60950-1, CE, FCC, AS/NZS CISPR 22 & 24, 55022, 55024, IEC-003

Physical Specifications

- 1RU high 19" rack-mountable chassis
- Dimensions: 17.5W x 29.5L x 1.75H (inches) / 44.5W x 75.0L x 4.5H (cm)
- Weight: 36.4lb / 16.5kg

Operational Environment

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 ONE is purchased as a base solution and additional licenses enable advanced functionality.

Solution Ordering Information

Solutions include Vision ONE hardware with 48 physical SFP/SFP+ ports, 4 QSFP+ ports, and 24 1G licenses for system use. Transceivers are not included. Compatible transceivers are available and may be purchased from Ixia. All solutions are configured with dual power supplies. Additional licenses may be added to a system to enable additional ports, Advanced Packet Processing, or Application and Threat Intelligence (LIC-7300-ATI).

Solution Part Number	10G HW Ports Included	40G HW Ports Included	Ports Licensed for 1G Use
SYS-V-ONE-24x1G-AC	48	4	24
SYS-V-ONE-24x1G-DC	48	4	24

License Ordering Information

Software licenses can be added to any of the Vision ONE hardware components or solutions. A fully licensed chassis supports 48 ports of 1G/10G, 4 ports of 40G, 160 Gbps of AFM and ATIP.

Hardware Component Part Number	Description
LIC-SYS-V-ONE-X8D-UP	Upgrade 8 ports of 1G to 1/10G operation.
LIC-SYS-V-ONE-X24D	24-port perpetual license for 1G/10G operation.
LIC-SYS-V-ONE-Q4D	4-port perpetual license for 40G operation.
LIC-SYS-V-ONE-80G-AFM	80Gbps of AFM includes dedup, header stripping, slicing, and timestamping.
LIC-SYS-V-ONE-INLINE	Enables inline functionality
LIC-7300-ATI	ATI (Application and Threat Intelligence) Processor One-Year License. Enables application use and software updates. Does not enable ports. Application will not function without a valid license installed.