

Product Description

GigaSMART® technology extends the intelligence and value of the Gigamon Visibility Fabric™ architecture by enhancing your monitoring infrastructure and helping to optimize tool performance. A range of applications are available to enable the modification, manipulation, transformation, and transport of traffic from your network to the tools you rely upon for management, monitoring and security.

Network monitoring tools can now perform more efficiently by eliminating unwanted content with the de-duplication and packet slicing features. Masking allows network security teams to hide confidential information like passwords, financial accounts, or medical data allowing companies to meet SOX, HIPAA and PCI compliance regulations. Organizations can improve accuracy by adding source or timing information at the point of collection with the source port labeling and time stamping capabilities. Enhanced distribution features are available with tunneling and Layer 7 load balancing. And, header stripping allows tools to operate more effectively by removing unwanted protocols.



The GigaSMART capabilities are available on the GigaVUE-2404, GigaVUE HD series, and GigaVUE-HB1 Visibility Fabric nodes. GigaSMART applications are not restricted to specific network or tool ports, allowing maximum flexibility in configuration and provisioning.

Table 1: Software Features and Benefits

GigaSMART Applications	Benefits
Packet Slicing	<ul style="list-style-type: none"> • Slice selected packets between a 64-9000 byte offset • Process fewer bits while maintaining the vital, relevant portions of each packet • Significantly increase the capacity of forensic recording tools • Boost efficiency of protocol analysis, sniffer, and network optimization tools
Masking	<ul style="list-style-type: none"> • Conceal private data including financial and medical information • Empower network monitoring tools to perform their task and maintain SOX, PCI, and HIPAA compliance
Source Port Labeling	<ul style="list-style-type: none"> • Add labels to packets indicating the ingress port • Identify where a packet is coming from easily
Tunneling	<ul style="list-style-type: none"> • Encapsulate and forward packets to monitoring tools between networks on separate routed paths • Enable routing of data from lights-out data centers to central monitoring facilities
Advanced Tunneling with ERSPAN Termination	<ul style="list-style-type: none"> • Provides tunnel termination of ERSPAN sessions enabling consolidation, filtering and forwarding of relevant ERSPAN traffic • Enable analysis tools to receive filtered traffic from remote networks
De-duplication	<ul style="list-style-type: none"> • Relieve tool processing resources in asymmetrical networks by only forwarding a packet once • Remove packet duplication caused by inter-VLAN communication or incorrect switch configuration • Enhance the efficiency of your network monitoring tools by eliminating the potential of duplicate data streams
Header Stripping	<ul style="list-style-type: none"> • Eliminate the need for monitoring tools to decipher protocols • Allow easy filtering, aggregation, and load balancing of packets with headers removed • Support for ISL header/trailer removal and VXLAN, VNTAG, VLAN, MPLS and GTP-U tunnel stripping
Time Stamping	<ul style="list-style-type: none"> • Packet time stamps at line rate for subsequent analysis • Support Network Time Protocol (NTP), GPS or local time setting • Synchronize data more accurately to enhance quality of service (QoS) timing • Allow network analysis to be performed at one location, instead of at various network endpoints
Layer 7 Load Balancing	<ul style="list-style-type: none"> • Traffic distribution among multiple ports based on fixed or variable matching fields • Filtering and traffic distribution capabilities applied to any field in the packet beyond Layer 2 – Layer 4 and into the application layer

Product Specifications

Table 2: Software Features

Optional GigaSMART Features	GigaVUE- 2404 (line card)	GigaVUE HD Series (line card)	GigaVUE- HB1 (integrated)
Packet Slicing	•	• ¹	•
Masking	•	• ¹	•
Source Port Labeling	•	• ¹	•
Tunneling	•	• ^{1,2}	•
Advanced Tunneling with ERSPAN Termination	• ³	•	• ⁴
De-duplication	•	•	•
Header Stripping	• ⁵	•	•
Time Stamping	•	– ⁶	–
Layer 7 Load Balancing	• ⁷	–	–

•YES – NO

¹ Included with GigaVUE-HD series GigaSMART line card.

² Encapsulation is available on software version 3.0 or higher.

³ Included with the Tunneling feature license and available on software version 8.4 or higher.

⁴ Included with Tunneling feature license

⁵ VXLAN header stripping available on software version 8.4 or higher.

⁶ Time stamping provided by the GigaPORT-X12-TS line card.

⁷ Layer 7 match filtering available on software version 8.4 or higher.

Table 3: GigaSMART Performance



Product	Description
GigaSMART for GigaVUE-2404 	Processing: up to 16Gb per line card Number of blades: up to 2 per chassis Multiple GigaSMART line cards can be combined into a single system to provide scalable performance up to 32Gb Includes 6 SFP+ ports that support the following transceiver types: <ul style="list-style-type: none"> • 10Gb (10GBASE-SR/LR/ER/LRM) • 1Gb optical SFP (1000BASE-SX/LX/ZX) • 1Gb SFP copper (RJ45, 1000BASE-T)
GigaSMART for GigaVUE-HD4/HD8 	Processing up to 60Gb per line card No additional ports Multiple GigaSMART line cards can be combined into a single system to provide scalable performance up to 120Gb on the GigaVUE-HD4 and 240Gb on the GigaVUE-HD8
GigaSMART for GigaVUE-HB1 (integrated)	Processing up to 10Gb

Table 4: Physical Dimensions & Weight

GigaSMART Line Card	Height	Width	Depth	Weight
For GigaVUE-2404 Fabric Node	1" (2.54cm)	14.87" (37.76cm)	9.125" (23.17cm)	3.53lbs (1.6 kg)
For GigaVUE-HD4 and GigaVUE-HD8 Fabric Nodes	1.61" (4.08cm)	15.75" (40.01cm)	11.55" (29.33cm)	9.06lbs (4.11 kg)

Table 5: Power Requirements

Specification	GigaSMART Line Card
Current (nominal)	1.8 A @ 110V AC / 3.8 A @ -48V DC
GPS Antenna Signal Requirements	+3.3 VDC+/-0.3 VCD at 110mA: Frequency is 12.504 Mhz+/-3Khz

Table 6: Warranty & Support

Part Number	Description
Hardware	Gigamon 5-Year Hardware Limited Warranty included with purchase
Software	1-Year Software Limited Warranty included with purchase
Support	1-Year Standard Support included with purchase

Gigamon offers a range of premium support and extended services. For details regarding warranty and support, visit:

<http://www.gigamon.com/gigamon-technical-support>

Ordering Information

Table 7: GigaSMART for the GigaVUE-2404 Fabric Node

Part Number	Description
SMT-436	GigaSMART 6 port GigaVUE-2404 blade (no licenses included)
SMT-BSE	GigaSMART-Base Configuration (Packet Slicing, Masking, Source Port Labeling) features module license per GigaSMART blade
SMT-TSP	GigaSMART-Time Stamp feature module license per GigaSMART blade
SMT-DDP	GigaSMART-De-Duplication feature module license per GigaSMART blade
SMT-TUN	GigaSMART-Tunneling feature module license per GigaSMART blade
SMT-HST	GigaSMART-Header Stripping feature module license per GigaSMART blade
SMT-LBG	GigaSMART-Load Balancing Group feature module license per GigaSMART blade

Table 8: GigaSMART for the GigaVUE-HD4 and GigaVUE-HD8 Fabric Nodes

Part Number	Description
SMT-HD0	GigaSMART, HD Series blade (includes Packet Slicing, Masking, Source Port Labeling, & Tunneling De-Encapsulation)
SMT-HD0-DD1	GigaSMART, HD Series, De-Duplication feature license per GigaSMART blade
SMT-HD0-HS1	GigaSMART, HD Series, Header Stripping feature license per GigaSMART blade
SMT-HD0-AT1	GigaSMART, HD Series, Advanced Tunneling feature license per GigaSMART blade

Table 9: GigaSMART for the GigaVUE-HB1 Fabric Node

Part Number	Description
SMT-HB1-BSE	GigaSMART, HB license combo, includes Slice, Masking, & Source Port Labeling features
SMT-HB1-DD1	GigaSMART, HB license, De-Duplication feature
SMT-HB1-HS1	GigaSMART, HB license, Header Stripping feature
SMT-HB1-TUN	GigaSMART, HB license, Tunneling feature

For More Information

For more information about the Gigamon Visibility Fabric architecture or to contact your local representative, please visit:

www.gigamon.com