

Data Sheet

GigaVUE-HC1



GigaVUE-HC1 (front)



GigaVUE-HC1 (rear)

75% of organizations believe visibility across all of their corporate networks could be improved

64% of enterprises state that they use 5 to 7 security or monitoring tools per site

Key Benefits

Network Operations

- ✓ Manages and filters traffic at wire-speed performance
- ✓ Provides flexible deployment options for inline and out-of-band tools
- ✓ Enhances network and security tools with traffic intelligence applications such as de-duplication, slicing, masking, SSL decryption and application session filtering

Security Operations

- ✓ Maximizes the reach and efficiency of security tools
- ✓ Rapidly detects anomalous activity
- ✓ Provides session and security awareness with NetFlow/IPFIX/CEF metadata generation
- ✓ Increases the ROI of existing security and monitoring tools

Network Traffic Intelligence for Remote and Branch Offices

The distributed nature of today's infrastructure has made it more challenging to access data in motion in locations beyond the traditional data center. GigaVUE-HC1 expands the GigaSECURE® Security Delivery Platform architecture by delivering network traffic visibility across the enterprise and enabling effective security for the enterprise, big or small, local or remote. For service providers, the GigaVUE-HC1 helps to maximize service assurance and quality of experience for their subscribers.

The base chassis has twelve (12) SFP/SFP+ cages supporting 1Gb and 10Gb modules plus four (4) fixed RJ-45 ports for 10/100/1000Mb. Expandability is provided by two module bays. The copper tap/bypass module has eight (8) RJ-45 ports to monitor four (4) 10/100/1000Mb links. The fiber inline bypass module has four (4) LC port to monitor two (2) 1Gb SX or 10Gb SR links plus four (4) SFP/SFP+ cages. These modules have fail-to-wire protection and support both out-of-band tapping and inline bypass protection.

Optional GigaSMART® features provide traffic intelligence to remote sites. Generating metadata and NetFlow/IPFIX enhances security analytics without sending full packet streams across a WAN. When full packet data is required, traffic flows can be tunneled back to centralized tools for deeper inspection. Efficiency is further improved by dropping duplicate packets, removing unwanted headers and slicing packets down to a more manageable size.

The GigaVUE-HC1 runs the same GigaVUE-OS used by the GigaVUE® H Series and TA Series family of products, providing a consistent set of features and user experience. In addition, the GigaVUE-HC1 supports clustering with other visibility nodes to increase scale and reach. GigaVUE-FM provides a single pane-of-glass view through which users can manage and orchestrate the entire Visibility Platform, including the GigaVUE-HC1.

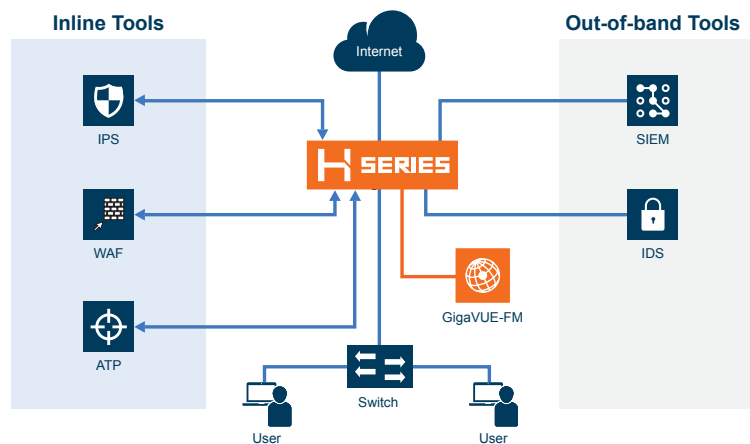


Table 1: GigaVUE-HC1 Modules


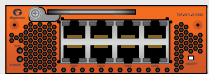
Product	Description
BPS-HC1-D25A24 	<ul style="list-style-type: none"> • 1Gb/10Gb Bypass combo module • 2 pairs of SX/SR 50/125µm BPS + 4 x 10Gb/1Gb (SFP+/SFP) ports
TAP-HC1-G10040 	<ul style="list-style-type: none"> • Embedded TAP and bypass module • 4 pairs of copper (RJ-45) TAPs or BPS • Each pair can be individually configured into TAP or BPS

Table 2: Features and Benefits

GigaVUE-HC1 Features/Applications	Benefits
Flexible, compact form-factor	<ul style="list-style-type: none"> • 1RU footprint saves space, power, and cooling • Twelve (12) 1Gb/10Gb SFP/SFP+ ports • Four (4) 10/100/1000M RJ-45 ports • 2 module bays for expandability • Built-in GigaSMART hardware enabled via software license
Flow Mapping®	<ul style="list-style-type: none"> • Provides high-speed, line-rate performance with purpose-build hardware • Optimizes tool performance by sending each tool only the traffic of interest • Distribute traffic across multiple tools with GigaStream® technology • Multicast traffic to multiple tool ports, enabling a range of tools to access the same traffic • Share network ports among multiple user groups, each with their own maps and tools
GigaSMART traffic intelligence (optional)	<ul style="list-style-type: none"> • Enable security analytics with metadata and NetFlow/IPFIX generation • Monitor remote sites by sending traffic to centralized tools across a public or private WAN • Enhance tool performance by dropping duplicates, removing troublesome headers, filtering traffic based on encapsulation headers such as VXLAN, GTP and MPLS, forwarding traffic corresponding to application sessions, and slicing packets
Inline bypass protection	<ul style="list-style-type: none"> • Helps protect the network against inline tool failure with fail-to-wire continuity • Monitors inline tool health with bi-directional heartbeats and bypasses tools that either fail or add too much latency • Solves the security blind spot in asymmetric routing by implementing resilient network architectures • Improves scalability of inline solutions by distributing traffic across multiple tools • Helps optimize tool performance by controlling which traffic goes to which inline tool
Inline and Out of Band SSL Decryption	<ul style="list-style-type: none"> • Improve efficiency of security tools by offloading processor-intensive SSL decryption • Architecture allows for decryption/re-encryption of traffic once for inspections by multiple tools • Supports Thales HSM for the storage and management of SSL keys for Out of Band SSL only
Embedded copper TAP	<ul style="list-style-type: none"> • Reduces cost, space, and complexity for tapping 10/100/1000BASE-T network links • Improves physical security by eliminating externally-accessible monitor points
Management and Orchestration through GigaVUE-FM	<ul style="list-style-type: none"> • Single pane of glass view of platform • Customizable dashboards reduce time to identify and resolve issues • Configuration wizards accelerate deployment and troubleshooting • Scheduled upgrades and backups decrease maintenance windows

Table 2: Features and Benefits continued

GigaVUE-HC1	
Features/Applications	Benefits
Fabric Maps feature in GigaVUE-FM	<ul style="list-style-type: none"> End-to-end Flow Mapping. across clusters to scale network visibility across hundreds of nodes
Tool Capacity Planning using GigaVUE-FM Tool View	<ul style="list-style-type: none"> Making sure the tool is optimally utilized Enable users to select the best tool to route network traffic based on resource availability Track the tool's storage capacity and data wrap-around time
Rest API Support	<ul style="list-style-type: none"> Programmatic access to capabilities in the Gigamon Platform via REST APIs exposed from GigaVUE-FM Allows implementation of Software-Defined Visibility paradigm by system administrators Advanced integration with tools, controllers and other IT systems used in the infrastructure to enable rapid programmatic response to events detected
Robust Design	<ul style="list-style-type: none"> Front-to-back cooling with hot-swappable fan trays Redundant, load-sharing power supplies (AC or DC)

Product Specifications

Table 3: Physical Dimensions & Weight



Product	Height	Width	Depth	Weight
GigaVUE-HC1 base unit 	1RU	17.26in (438.5mm) With ears mounted: 19.00in (483.5mm)	19.5in (495mm) With PSU handle and card ejector: 20.92in (531.8mm)	20.88lbs (9.47kg) With ears: 21.12lbs (9.58kg)
BPS-HC1-D25A24 Bypass Combo Module 	1.6in (4.10cm)	4.65in (11.80cm)	10.13in (24.98cm)	2.2lb (0.99kg)
TAP-HC1-G10040 Copper (RJ-45) 4TAP and Bypass Module 	1.6in (4.10cm)	4.65in (118mm)	10.13in (249.8mm)	1.50lbs (.68kg)

Table 4: Power Requirements

Type	GigaVUE-HC1
Power configuration	1+1: 2 power supplies
AC Typical power/heat output	212 Watts/722.9 BTU/hr
DC Typical power/heat output	224 Watts/763.8 BTU/hr
AC/DC Maximum power/heat output	460 Watts/1569.5BTU/hr
AC Power Supply (x2)	100-240V AC, 5.8-2.9A, 50-60Hz
DC Power Supply (x2)	-40.5 – -60V DC, 24A – 16A, Typ. -48V

Table 5: Environmental Specifications

Type	GigaVUE -HC1
Operating temperature	32°F to 104°F (0°C to 40°C)
Operating relative humidity	20% to 80%, non-condensing
Recommended storage temperature	-4°F to 158°F (-20°C to 70°C)
Recommended storage relative humidity	15% to 85%, non-condensing
Altitude	Up to 15,000ft (4.6km)

Table 6: Standards & Protocols

Type	GigaVUE-HC1
Standards and protocols	IEEE 802.3-2012, IEEE 802.1Q VLAN, IEEE 802.3 10BASE-T, IEEE 802.3u 100BASE-TX, IEEE 802.3ab 1000BASE-T, IEEE 802.3z 1000BASE-X, IEEE 802.3ae 10000BASE-X, IEEE 802.3ba, RFC 783 TFTP, RFC 791 IP, RFC 793 TCP, RFC 826 ARP, RFC 854 Telnet, RFC 768 UDP, RFC 792 ICMP, SNMP v1/v2c & v3, RFC 2131 DHCP client, RFC 1492 TACACS+, and support for IPv4 and IPv6

Table 7: Compliance

Type	GigaVUE-HC1
Safety	UL 60950-1; CSA C22.2 EN 60950-1; IEC-60950-1:2005(2nd Edition) + Am 1:2009 + Am 2:2013
Emissions	FCC Part 15, Class A; VCCI Class A; EN55022/CISPR-22 Class A; Australia/New Zealand AS/NZS CISPR-22 Class A; RCM; EU: CE Mark EN 55022 Class A, CCC China, BSMI Taiwan, Korea KCC, Russia EAC
Immunity	ETSI EN300 386 V1.3.2, EN61000-4-2, EN 61000-4-3, 61000-4-4, EN 61000-4-5, EN 61000-4-6, EN 61000-3-2
Environmental	RoHS 6: EU directive 2002/95/EC
NEBS	Level 3

Support and Services

Gigamon offers a range of support and maintenance services. For details regarding Gigamon's Limited Warranty and its Product Support and Software Maintenance Programs, visit www.gigamon.com/support-and-services/overview-and-benefits

Ordering Information

Table 8: Ordering Information

Part Number	Description
Base Hardware	
GVS-HC101	GigaVUE-HC1 node, 12 1G/10G cages, 4 10/100/1000M Copper, fan tray, 2 power supplies, AC power
GVS-HC102	GigaVUE-HC1 node, 12 1G/10G cages, 4 10/100/1000M Copper, fan tray, 2 power supplies, DC power
BPS-HC1-D25A24	Bypass Combo Module, GigaVUE-HC1, 2 SX/SR 50/125 BPS pairs, 4 10G cages
TAP-HC1-G10040	TAP and Bypass module, GigaVUE-HC1, 10/100/1000M Copper, 4 TAPs or BPC pairs
Parts	
SFP-501	1Gb SFP, Copper, UTP with RJ45 interface
SFP-502	1Gb SFP, Multimode 850
SFP-503	1Gb SFP, Singlemode 1310
SFP-532	10Gb SFP+, Multimode 850nm SR
SFP-533	10Gb SFP+, Singlemode 1310nm LR

Table 8: Ordering Information continued

Part Number	Description
Licenses	
SMT-HC1-BSE	GigaSMART, GigaVUE-HC1 license combo, includes Slicing, Masking, & Source Port features
SMT-HC1-DD1	GigaSMART, GigaVUE-HC1 license, De-Duplication feature
SMT-HC1-HS1	GigaSMART, GigaVUE-HC1 license, Header Stripping feature
SMT-HC1-TUN	GigaSMART, GigaVUE-HC1 license, Tunneling feature (includes ERSPAN De-Encapsulation)
SMT-HC1-NF1	GigaSMART, GigaVUE-HC1 license, NetFlow Generation feature
SMT-HC1-FVU	GigaSMART, GigaVUE-HC1 license, FlowVUE feature license
SMT-HC1-APF	GigaSMART, GigaVUE-HC1 license, Adaptive Packet Filtering feature
SMT-HC1-ASF	GigaSMART, GigaVUE-HC1 license, Application Session Filtering feature license; requires SMT-HC1-APF
SMT-HC1-SSL	GigaSMART, GigaVUE-HC1, SSL Decryption for Out of Band Tools Feature License
SMT-HC1-INSSL	GigaSMART, GigaVUE-HC1, SSL Decryption for Inline and Out of Band Tools Feature License
Fan and Power Supply	
FAN-TAXQ0	GigaVUE-TA10, TA40, HC1 fan assembly, each (2 required on TA10, 3 on TA40 and HC1)
PWR-TAXQ1	Power Supply Module, GigaVUE-TA10, TA40, or HC1, AC, each
PWR-TAXQ2	Power Supply Module, GigaVUE-TA10, TA40, or HC1 DC, each
Management	
GFM-HW0-FM010	GigaVUE-FM Hardware Appliance, manages up to 10 Physical Visibility Fabric Nodes
GFM-FM001	GigaVUE-FM, manage 1 Physical Visibility Fabric Node
GFM-FM005	GigaVUE-FM, manage up to 5 Physical Visibility Fabric Nodes
GFM-FM010	GigaVUE-FM, manage up to 10 Physical Visibility Fabric Nodes
GFM-FM000	GigaVUE-FM Prime Edition, manage up to 200 Physical Visibility Fabric Nodes, includes FabricVUE Traffic Analyzer (GFM-FM-FTA) and VMware NSX Manager Integration (GFM-VM-NSX) add-ons

For More Information

For more information about The Gigamon Platform or to contact your local representative, please visit: www.gigamon.com