

Data Sheet

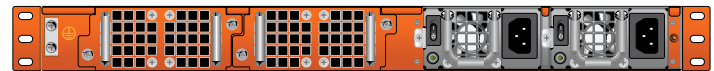
GigaVUE-HB1

Product Description

Built upon the success and functionality of the GigaVUE® H Series, the GigaVUE-HB1 Visibility Fabric™ node represents the only fixed-configuration node within the series. At just 1RU, this small form-factor fabric node can extend traffic visibility to more remote portions of the network running critical applications that require monitoring.



GigaVUE-HB1 (front)



GigaVUE-HB1 (rear)

The GigaVUE-HB1 fabric node easily handles traffic with up to four (4) 10Gb ports and sixteen (16) 1Gb ports available for any combination of monitoring and tool ports. Although designed as an entry-level solution, the GigaVUE-HB1 fabric node includes GigaSMART® intelligence. Optional GigaSMART functions including de-duplication, Adaptive Packet Filtering, NetFlow Generation, packet slicing, masking, source port labeling, header stripping, and tunneling, create a robust distributed monitoring solution anywhere space is at a premium. Combining the power of the Gigamon Visibility Fabric architecture and the flexibility of the GigaSMART packet processing engine, vital traffic and packet flows can be replicated onsite at remote locations, filtered, sliced, and tunneled back to a centralized monitoring location.

The GigaVUE-HB1 fabric node is ideal for deployments at distributed processing centers and regional cell sites, electrical power grids, and oil and gas refineries. The GigaVUE-HB1 fabric node is suitable for situations where critical server processing is taking place in isolated wiring closets. Since the GigaVUE-HB1 fabric node operates on the same code base, it can be clustered together with other GigaVUE H Series nodes for a powerful Unified Visibility Fabric.

Table 1: Features and Benefits



GigaVUE-HB1	
Features/Applications	Benefits
 Powerful Flow Mapping® to manage traffic	Flow Mapping technology enables complex traffic-forwarding decision making: <ul style="list-style-type: none"> • Purpose-built hardware for high-speed performance • Optimize tool performance by only sending each tool the traffic of interest • Share network ports among multiple user groups, each with their own maps • Distribute traffic from single higher speed ports to multiple tool ports with GigaStream™ technology • Aggregate multiple 1Gb or 10Gb network ports to 10Gb and 40Gb tool ports to maximize tool utilization • Multicast traffic to multiple tool ports, enabling a range of tools to access the same traffic • L2 – L7 and bit-pattern filtering using user-defined attributes (UDA) or GigaSMART Adaptive Packet Filtering
 GigaSMART traffic intelligence (optional)	Enhance traffic visibility and optimize tool performance by enabling the built-in GigaSMART engine. SSL Decryption, header stripping, and packet de-duplication remove impediments to monitoring. Tunneling expands visibility to remote sites and VM environments. NetFlow generation enables flow-based monitoring tools. See the GigaSMART data sheet for full details on all the services and applications available.

Table 1: Features and Benefits continued

GigaVUE-HB1	
Features/Applications	Benefits
Compact form factor	<ul style="list-style-type: none"> Reduced footprint to save space, power, and cooling GigaVUE-HB1 node is offered in 1RU
Supports 1Gb and 10Gb connections in a small footprint	<p>GigaVUE-HB1 fabric node supports:</p> <ul style="list-style-type: none"> Up to 4 high-density 10Gb SFP+ connections Up to 16 x 1Gb connections using a combination of 8 RJ45 connections and 8 SFPs Tight locations where space is at a premium Accepts all standard Gigamon SFP and SFP+ transceivers including direct attach copper and active fiber cables, SR, LR, ER, and LRM
Create multi-chassis clusters	Combine up to four GigaVUE H Series fabric nodes into a cluster delivering “manage-as-one” capability and full “primary-secondary” management redundancy.
Powerful manageability; GigaVUE-FM fabric manager	<p>Provides a versatile range of management options and capabilities including:</p> <ul style="list-style-type: none"> Integrated command-line interface (CLI) Integrated graphical user interface (GUI) <p>Adding the optional GigaVUE-FM fabric manager provides:</p> <ul style="list-style-type: none"> Customizable dashboards and wizards to view, configure, and manage the Visibility Fabric from a single pane-of-glass view
REST API Support	<ul style="list-style-type: none"> Programmatic access to capabilities in the Visibility Fabric via REST APIs exposed from the Fabric Manager, 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	Hot-swappable power supplies and fan trays allow for flexibility and investment protection. Optional, secondary power supply with load-balancing capabilities is available for both AC and DC.

Product Specifications

Table 2: Product Information

Type	Specification
Mounting	Mounts in an EIA-standard 19 inch or 24 inch telco rack or equipment cabinet. Front mounting ears are included. Rear mounting brackets are available as an option.
Standard ports	<ul style="list-style-type: none"> Provides up to 4 x 10Gb SFP+ connections and up to 16 x 1Gb connections using a combination of 8 RJ45 connections and 8 SFPs
Clustering	<ul style="list-style-type: none"> Up to 4 GigaVUE H Series fabric nodes Can operate in master, slave, or normal mode
GigaSMART licenses (optional)	<ul style="list-style-type: none"> Packet slicing, masking, and source port labeling SSL Decryption De-duplication Adaptive Packet Filtering NetFlow Generation <p>See the GigaSMART data sheet for full details.</p>

Table 3: Physical Dimensions & Weight

Product	Height	Width	Depth	Weight
GigaVUE-HB1	1.74in (4.42cm) (1RU)	17.32in (44cm) Without mounting brackets	18.11in (46cm)	20lbs (Installed) (9.07kg)

Table 4: Power Supplies & Electrical Characteristics

Type	Specification
Standard	One AC (100 to 240V) or DC (-48V DC) power supply module included
Optional	Secondary AC or DC module may be field installed to provide 1+1 redundant, load sharing, hot-swappable power (AC and DC may not be combined within a node)
Voltage	<i>AC power modules:</i> 100 to 240V AC. Fuse rating: 6A <i>DC power modules:</i> -36 to -72V DC. Inputs reverse polarity protected For DC source: optional external fuse rating: 10 Amps Slow-Blow
Current (nominal)	1.45A @ 110V AC / 3.33A @ -48V DC
Current (surge)	5A @ 110V AC
Frequency	50/60Hz for AC
Heat/power dissipation	Fully populated 20 port system with all ports at 100% traffic load: nominally 162W, 553 BTU/hr

Table 5: Optional Equipment

Equipment Type	Description
Secondary power supply AC	Provides redundant, load sharing, hot-swappable AC Power
Secondary power supply DC	Provides redundant, load sharing, hot-swappable DC Power
Transceivers and cables	A flexible range of SFP+ and SFP transceivers including direct attach copper cables, SR, LR, ER, and LRM. Only Gigamon transceivers are supported. See ordering information.

Table 6: Environmental Specifications

Type	Specification
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 7: Standards & Protocols

Type	Specification
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, RFC 783 TFTP, RFC 791 IP, RFC 793 TCP, RFC 826 ARP, RFC 854 Telnet, RFC 768 UDP, RFC 792 ICMP, SNMP v1/v2c, RFC 2131 DHCP client, RFC 1492 TACACS+, and support for IPv4 and IPv6.

Table 8: Compliance

Type	GigaVUE-HB1
Safety	UL 60950-1; CSA C22.2 EN 60950-1; IEC-60950-1
Emissions	FCC Part 15, Class A; VCCI Class A; EN55022/CISPR-22 Class A; Australia/New Zealand AS/NZS CISPR-22 Class A; CE Mark EN 55022 Class A
Immunity	ETSI EN300 386 V1,32, 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
Security	FIPS 140-2, UC APL

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 9: Ordering Information

Part Number	Description
GVS-HB101-0416	GigaVUE-HB1-0416 node, HB Series, 4 x 10Gb cages, 8 x 1Gb cages, 8 x 1Gb copper, Fans, Single AC Power
GVS-HB102-0416	GigaVUE-HB1-0416 node, HB Series, 4 x 10Gb cages, 8 x 1Gb cages, 8 x 1Gb copper, Fans, Single DC Power
PWR-2AC	110/240 V AC power supply module, HB1, 420, 212 or G-SECURE chassis
PWR-2DC	-48 V DC power supply module, HB1, 420, 212 or G-SECURE chassis
RMB-045	Optional Rear Mounting Bracket 45cm for GigaVUE-TA1 or GigaVUE-HB1
GFM-FM000	GigaVUE Fabric Manager (FM) Centralized Management SW Base License
SMT-HB0-APF	GigaSMART, HB license, Adaptive Packet Filtering feature
SMT-HB0-ASF	GigaSMART, HB Series, Application Session Filtering feature; requires SMT-HB0-APF
SMT-HB1-BSE	GigaSMART, HB license combo, includes Slice, Masking, & Source Port features
SMT-HB1-DD1	GigaSMART, HB license, De-Duplication feature
SMT-HB0-FVU	GigaSMART, HB license, FlowVUE feature
SMT-HB0-GTP250	GigaSMART, HB license, GTP Filtering & Correlation feature, 250K subscribers
SMT-HB1-HS1	GigaSMART, HB license, Header Stripping feature
SMT-HB0-NF1	GigaSMART, HB license, NetFlow Generation feature
SMT-HB0-SSL	GigaSMART, HB license, SSL Decryption feature
SMT-HB1-TUN	GigaSMART, HB license, Tunneling feature
SFP-501	GigaSMART, HC Series, FlowVUE feature license per GigaSMART module
SFP-502	1Gb SFP, Multimode 850nm
SFP-503	1Gb SFP, Singlemode 1310nm
SFP-504	1Gb SFP, Singlemode 1550nm (Special Order)
SFP-532	10Gb SFP+, Multimode 850nm SR
SFP-533	10Gb SFP+, Singlemode 1310nm LR
SFP-534	10Gb SFP+, Singlemode 1550nm ER (Special Order)
SFP-535	10Gb SFP+, Multimode 1310nm LRM (Special Order)
CBL-205	SFP+ to SFP+ direct attached copper cable, 5m
CBL-310	SFP+ Active Fiber Cable, 10m

For More Information

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

www.gigamon.com