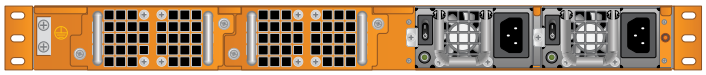
## *Product Description*


*GigaVUE-HB1 FRONT*



*GigaVUE-HB1 BACK*

Built upon the success and functionality of the GigaVUE® H Series, the GigaVUE-HB1 Visibility Fabric™ node represents the first 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.

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 from de-duplication to 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, or oil and gas refineries. The GigaVUE-HB1 fabric node is suitable for situations where critical server processing is taking place in isolated wiring closets or in Managed Service Provider deployments where Visibility as a Service is required. 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 Visibility Fabric architecture.

Table 1: Features & Benefits

| Features | Benefits |
|---|---|
| Powerful Flow Mapping® to Manage Traffic | Leveraging purpose-built hardware, the Flow Mapping technology enables complex traffic-forwarding decision making executed at wire speed.<br>• Apply different maps to allow each tool to only see the traffic of interest<br>• Selectively map traffic from 10Gb network ports to lower speed 1Gb tools to better leverage existing tools<br>• Distribute traffic from single higher speed ports to multiple tool ports with GigaStream™ technology<br>• Multicast a single traffic source to multiple tool ports enabling a range of tools to access the same traffic<br>• Detailed filtering down to the bit pattern using user-defined attributes (UDA)<br>• Apply different maps on tool ports to allow each tool to see the relevant traffic |
| GigaSMART Packet Modification (optional) | The GigaVUE-HB1 fabric node incorporates GigaSMART hardware built into the device. Optional GigaSMART packet modification features include: masking, packet slicing, source port labeling, tunneling, de-duplication, header stripping and VLAN tag insertion. This is ideal for remote monitoring locations where packets need to be masked, sliced, or de-duplicated prior to being tunneled back to a centralized monitoring facility. |
| Supports 1Gb and 10Gb connections in a small footprint | At just 1RU, GigaVUE-HB1 fabric node supports:<br>• Up to 4 high-density 10Gb SFP+ connections<br>• Up to 16 x 1Gb connections using a combination of 8 RJ45 connections and 8 SFPs<br>• Tight locations where space is at a premium, using only 1RU of height in a standard rack<br>• A flexible range of SFP and SFP+ transceivers including direct attach copper and active fiber cables, SR, LR, ER, and LRM |
| Powerful Manageability | GigaVUE-HB1 fabric node provides versatile management options and capabilities including an integrated command-line interface (CLI), an integrated graphical user interface (GUI) for 'drag and drop' configuration, fully compliant support for SNMPv3 and integrated email (SMTP) alerting capability. |
| Robust Design | Hot-swappable power supplies and fan trays allow for flexibility and investment protection. Optional, secondary power supply with load-balancing capabilities are 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 and rear mounting brackets are included. |
| Standard Ports | • 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 | • Up to 4 GigaVUE H series fabric nodes<br>• Can operate in master, slave or normal mode |
| GigaSMART Applications (Optional) | • Packet slicing, masking, and source port labeling<br>• De-duplication<br>• Header stripping, VLAN tag insertion<br>• Tunneling |

Table 3: Weight & Dimensions

| Product | Height | Width | Depth | Weight |
|---|---|---|---|---|
| GigaVUE-HB1 | 1.74in<br>(4.42cm)<br>(1RU) | 17.32in<br>(44cm)<br>Without mounting brackets | 18.11in<br>(46cm) | 20lbs (Installed)<br>(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 | AC power modules: 100 to 240V AC. Fuse rating: 6A<br>DC power modules: -36 to -72V DC. Inputs reverse polarity protected<br>For DC source: optional external fuse rating: 10 Amps Slow-Blo |
| 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 802.1Q 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: Regulatory Compliance & Safety

| Type | Specification |
|---|---|
| Safety | UL 60950-1; CSA C22.2 EN 60950-1; IEC-60950-1 |
| RoHS Compliance | RoHS 6, EU directive 2002/95/EC |
| 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 |

Table 9: Warranty and 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 10: 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 |
| SVC-2AC | 110/240V AC power supply module, HB1, 420, 212, or G-SECURE chassis |
| SVC-2DC | -48V DC power supply module, HB1, 420, 212, or G-SECURE chassis |
| SMT-HB1-BSE | GigaSMART, HB Series combo, includes Slice, Masking, & Source Port features license |
| SMT-HB1-DD1 | GigaSMART, HB Series, De-Duplication feature license |
| SMT-HB1-HS1 | GigaSMART, HB Series, Header Stripping feature license |
| SMT-HB1-TUN | GigaSMART, HB Series, Tunneling feature license |
| SFP-501 | 1Gb SFP, Copper, UTP with RJ45 interface |
| 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 |
| SVC-000 | 12 months Standard support and software maintenance |
| SVC-001 | 1st Year Premium 24x7 upgrade |
| SVC-002 | 12 months Premium 24x7 support and software maintenance |

## For More Information

For more information about the Gigamon Visibility Fabric architecture or to contact your local representative, please visit:
***www.gigamon.com***