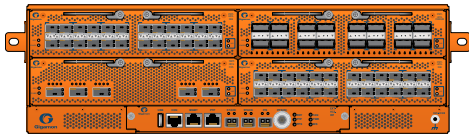# Data Sheet
GigaVUE-HC3

4.7ZB global data center traffic in 2015*

$7M average total cost of US security breach**

Key Benefits

Network Operations

✓ Deliver up to 25Tbps of processing power for optional GigaSMART® technologies

✓ Forward complex traffic decisions at wire-speed performance

✓ Scale your platform with 100Gb connectivity, modular design, and 32-node clusters

Security Operations

✓ Consolidate and simplify your security infrastructure

✓ Enhance your network security with GigaSECURE® traffic intelligence applications

✓ Provide session and security awareness with metadata generation on line rate 100Gb connectivity

Traffic Intelligence at Scale for the Most Demanding Networks

Enterprises, services providers, and the public sector are seeing more and more volumes of data traveling faster and faster through their networks. This generates more complexity, more cost, and more vulnerability to security threats than ever before. The right way to solve this challenge is to have pervasive visibility into the data moving throughout the network infrastructure.

The GigaVUE-HC3 visibility node enables comprehensive traffic and security intelligence at scale to see more, secure more, and expand your security and monitoring infrastructure to meet your needs.

Offering up to 25Tbps of traffic intelligence across 32 clustered nodes, the GigaVUE-HC3 enables you to gain deeper visibility into your data in motion, minimize traffic overload, extract metadata from network traffic, and provide more effective options to deploy both inline and out-of-band security tools.

The GigaVUE-HC3 visibility node provides you with security intelligence in 10, 40 and 100Gb networks. With mix-and-match capabilities, this modular appliance enables you to establish and expand your Visibility Platform as your needs grow.

Use Cases

Application And Service Monitoring

• Eliminate contention for network data

• Centralize Netflow/IPFIX Generation

• Filter streaming media and custom Layer 7 applications

On-Premise Monitoring of Cloud Services

• Get visibility into SDN infrastructure as well as private and public clouds.

Leverage Legacy Investments

• Take advantage of legacy tools with mismatched throughput connectivity

• Get network visibility during network upgrades

Security Posture Optimization

• Active security remediation with inline bypass

• Identify malware activity through Metadata Generation

Key Features

Modular Chassis

- Customize port capacity, speed mix, and GigaSMART processing power to the needs of your network.

- Reduce cost and reserve space for future expandability.

Field-replaceable control card

- Upgrade features and capabilities without replacing the chassis or even removing it from the rack.

Traffic Intelligence with GigaSMART

- Leverage 800Gbps of traffic intelligence processing per unit.

- Enhance visibility into encrypted sessions.

- Optimization of tools by removing duplicates and superfluous headers.

Clustering

- Extend Visibility Platform to 32 nodes, thousands of ports, and over 100Tb of traffic.

- End-to-end Flow Mapping® with single management and orchestration pane.

- Utilize optional GigaSMART applications and services from anywhere in the cluster.
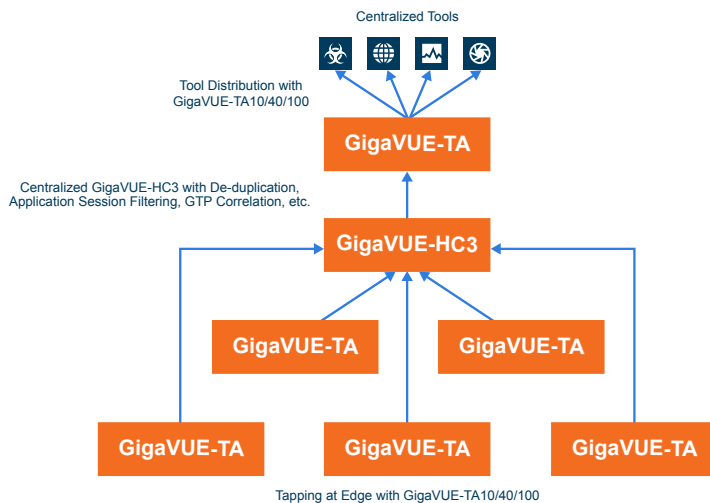
Inline Bypass Protection

- Safely deploy inline tools by monitoring their health and bypassing them in case of failure.

- Scale inline deployments by distributing traffic across multiple tools and/or bypassing specific traffic.

- Send specific traffic to tools optimized for that traffic.

- Migrate out-of-band tools to inline mode and replicate traffic to out-of-band tools.

REST API Support

- Programmatic access to the Visibility Fabric via REST APIs exposed from the Fabric Manager, GigaVUE-FM.

- Allow implementation of Software-defined Visibility paradigm by system administrators.

- Integrate with tools, controllers and other IT systems to enable rapid programmatic response to events.

Deployment Options

Centralized Deployment of the GigaVUE-HC3 for Pervasive Visibility

Centralized Tools

Tool Distribution with GigaVUE-TA10/40/100

GigaVUE-TA

Centralized GigaVUE-HC3 with De-duplication, Application Session Filtering, GTP Correlation, etc.

GigaVUE-HC3

GigaVUE-TA   **GigaVUE-TA**

GigaVUE-TA   **GigaVUE-TA**   **GigaVUE-TA**

Tapping at Edge with GigaVUE-TA10/40/100

Leaf-spine Deployment of the GigaVUE-HC3 for Multi-path Resiliency

Distributed Traffic Intelligence with GigaVUE-HC3

GigaVUE-HC3   **GigaVUE-HC3**   **GigaVUE-HC3**

Uplinks from Edge GigaVUE-TA10/40/100 Nodes

Tool Distribution with GigaVUE-TA10/40/100

GigaVUE-TA   **GigaVUE-TA**   **GigaVUE-TA**   **GigaVUE-TA**
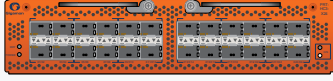
Centralized Tools
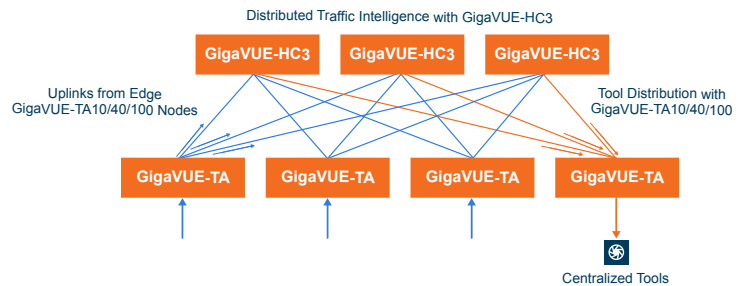
Table 1: GigaVUE-HC3 Modules

Product	Description
PRT-HC3-C08Q08	• 8 x 100Gb QSFP28 ports • Port Modes: 1 x 100Gb, 2 x 40Gb, or 4 x 10Gb*
SMT-HC3-C05	• 2 GigaSMART engines with 100Gbps processing power per engine • 5 x 100Gb QSFP ports • Port Modes: 1 x 100Gb, 1 x 40Gb, or 4 x 10Gb*
PRT-HC3-X24	• 24 x 10Gb SFP+ ports

Requires MPO-to-4xLC breakout cable or PNL-M341 module for G-TAP M Series

Product Specifications

Table 2: Physical Dimensions & Weight

Product	Height	Width	Depth	Weight
GigaVUE-HC3*	5.25in (3RU) (13.34cm)	19.0in (48.26cm)	29.1in (74.0cm) without cable management 33.5in (85.0cm) with cable management	88.0lbs (40.00kg)
PRT-HC3-C08Q08	1.9in (4.7cm)	8.5in (21.7cm)	16.1in (41.0cm)	2.40lbs (1.09kg)
SMT-HC3-C05	1.9in (4.7cm)	8.5in (21.7cm)	16.1in (41.0cm)	4.40lbs (2.00kg)
PRT-HC3-X24	1.9in (4.7cm)	8.5in (21.7cm)	16.1in (41.0cm)	2.12lbs (0.96kg)

Including power supplies and fans, but no port modules

Table 3: Power Specifications

Type	GigaVUE-HC3
Power configuration	• 1 + 1 Power: 2 Power Supplies • 2 + 2 Power: 4 Power Supplies
Total Power Consumption/ Heat Output	• 1850W / 6312.4BTU/hr • Fully populated system with all ports at 100% traffic load
AC power supplies	• Nominal: (x4) 100 - 240V AC, 120A, 47-63Hz • Min/Max: (x4) 90 - 264V AC, 133A, 47-63Hz
DC power supplies	• (x4) -48 to -60V DC, 40A Max • Typically -48V • Optional External Fuse Rating: 30A slow-blow

Table 4: Environmental Specifications

Type	GigaVUE -HC3
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 10,000ft (3.05km)

Table 5: Standards & Protocols

Type	GigaVUE-HC3
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 6: Compliance

Type	GigaVUE-HC3
Safety	UL 60950-1, 2nd Edition; CAN/CSA C22.2 No. 60950-1-07, 2nd Edition; EN 60950-1:2006/A11:2009/A1:2010/A12:2011/A2:2013; 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; EU:CE Mark EN 55022 Class A; CCC China; BSMI Taiwan; KCC Korea; EAC Russia
Immunity	ETSI EN300 386 V1.6.1:2012; EN61000-3-2; EN61000-3-3; EN61000-4-2; EN61000-4-3; EN61000-4-4; EN61000-4-5; EN61000-4-6; EN61000-4-8; EN61000-4-11
Environmental	2002/95/EC (RoHS); 2006/1907/EC (REACH); ISTA 2A
Security	FIPS 140-2

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**

Table 7: Ordering Information

Part Number	Description
Base Hardware	
GVS-HC301	GigaVUE-HC3 base unit w/ chassis, Control Card, 5 Fan Modules, CLI, 2 power supplies, AC power
GVS-HC302	GigaVUE-HC3 base unit w/ chassis, Control Card, 5 Fan Modules, CLI, 2 power supplies, DC power
PRT-HC3-C08Q08	Port Module, GigaVUE-HC3, 8x100G QSFP28 cages and 8x40G QSFP+ cages
SMT-HC3-C05	GigaSMART, GigaVUE-HC3, 5x100G QSFP28 cages (includes Slicing, Masking, Source Port & GigaVUE Tunneling De-Encapsulation SW)
PRT-HC3-X24	Port Module, GigaVUE-HC3, 24x10G
Licenses	
SMT-HC3-DD1	GigaSMART, GigaVUE-HC3, De-Duplication Feature License per GigaSMART module
SMT-HC3-HS1	GigaSMART, GigaVUE-HC3, Header Stripping Feature License per GigaSMART module
SMT-HC3-AT1	GigaSMART, GigaVUE-HC3, Advanced Tunneling Feature License per GigaSMART module
SMT-HC3-FVU	GigaSMART, GigaVUE-HC3, FlowVUE Feature License per GigaSMART module
SMT-HC3-APF	GigaSMART, GigaVUE-HC3, Adaptive Packet Filtering Feature License per GigaSMART module
SMT-HC3-ASF	GigaSMART, GigaVUE-HC3, Application Session Filtering Feature License per GigaSMART module; requires SMT-HC3-APF
SMT-HC3-NF1	GigaSMART, GigaVUE-HC3, NetFlow Generation Feature License per GigaSMART module
SMT-HC3-SSL	GigaSMART, GigaVUE-HC3, SSL Decryption for Out of Band Tools Feature License per GigaSMART module
SMT-HC3-GTPMAX	GigaSMART, GigaVUE-HC3, GTP Filtering & Correlation Feature License per GigaSMART module, Maximum subscribers
Power Supplies	
PWR-HC301	Power Supply Module, GigaVUE-HC3, AC (each)
PWR-HC302	Power Supply Module, GigaVUE-HC3, DC (each)
Parts	
QSF-503	40Gb QSFP+, Singlemode LR4
QSF-501	40Gb QSFP+ BiDi, Multimode SR, RX-only
QSB-502	40Gb QSFP+ BiDi, Multimode SR, Full Duplex
SFP-532	10Gb SFP+, Multimode 850nm SR
SFP-533	10Gb SFP+, Singlemode 1310nm LR
Cabling	
CBL-205	SFP+ to SFP+ Direct Attach Copper cable, 5 meters
CBL-310	SFP+ Active Fiber Cable, 10 meters
CBL-405	Active Fiber cable, 5 meters (QSFP approved)
CBL-410	Active Fiber cable, 10 meters (QSFP approved)
CBL-450	Active Fiber cable, 50 meters (QSFP approved)
Management	
GFM-FM00	GigaVUE Fabric Manager (FM) Centralized Management SW Base License

For More Information

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

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