

## Product Description

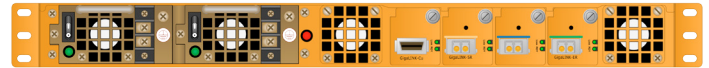
Gigamon delivers intelligent traffic visibility from across your network to enhance network monitoring of data centers, service providers, and enterprises. The GigaVUE-420 Visibility Fabric™ node aggregates, filters, and replicates traffic flows across multiple monitoring tools.

The GigaVUE-420 fabric node supports 1Gb and 10Gb connections and its modular design allows network professionals to deploy the number of ports, TAPs, or stacking ports needed to fit their requirements. As networks migrate from 1Gb to 10Gb, the GigaVUE-420 fabric node with its patented Flow Mapping® filtering technology and load-sharing capabilities allows existing 1Gb tools to be leveraged to analyze and monitor traffic.

With the GigaVUE-420 fabric node, tools may be added without affecting the production network and changes to traffic flows can be made dynamically at any hour without a configuration management review. GigaVUE® fabric nodes are designed to work together to create a Visibility Fabric architecture with the capability to intelligently aggregate, replicate, and filter traffic from across broad networks to centralized management, monitoring, and security systems.



FRONT



BACK

Table 1 : Features & Benefits

Features	Benefits
Powerful Flow Mapping to Manage Traffic	<p>Leveraging purpose-built hardware, Flow Mapping technology enables complex traffic-forwarding decision making to be executed at wire speed.</p> <ul style="list-style-type: none"> <li>• Apply different maps on tool ports to allow each tool to only see the traffic of interest</li> <li>• Selectively map traffic from 1Gb/10Gb network ports to lower speed 1Gb tools to better leverage existing tools</li> <li>• Distribute traffic from single higher speed ports to multiple tool ports with GigaStream™ technology</li> <li>• Multicast a single traffic source to multiple tool ports allowing a range of tools to access the same traffic</li> <li>• Detailed filtering down to the bit pattern using user-defined attributes (UDA)</li> <li>• Aggregate multiple 1Gb network ports to 10Gb tool ports to help prevent oversubscription</li> </ul>
Supports 1Gb and 10Gb Network and Tool Connections	<ul style="list-style-type: none"> <li>• High-density 1Gb and 10Gb connections</li> <li>• A flexible range of SFP and SFP+ transceivers including direct attach copper and active fiber cables, SR, LR, ER, and LRM</li> </ul>
Inline Bypass	<p>Utilizing logical and physical (hardware) bypass options the GigaTAP-BPS provides fault tolerant capabilities to security-based and other inline tools.</p> <ul style="list-style-type: none"> <li>• Simultaneously deploy inline and out-of-band inspection tools</li> </ul>
Solution for Monitoring Asymmetrically Routed Traffic	<p>Enables you to combine traffic from multiple network paths so that full bidirectional conversations are sent to your monitoring tools for analysis.</p>
Modularized Design	<ul style="list-style-type: none"> <li>• Modular design allows flexibility to accommodate TAPs, bypass TAPs, port expansion, or stacking link modules depending on needs</li> <li>• Redundant hot-swappable load-sharing AC and DC power supplies, dual cooling fans for investment protection</li> </ul>
Stacking	<p>Stack multiple GigaVUE G series fabric nodes to create a powerful Visibility Fabric architecture so that data arriving at a network port on one GigaVUE node in a cross-box stack can be forwarded to a tool port on another GigaVUE node.</p>
Flexible Management	<p>Versatile management options and capabilities are available including an integrated command-line interface (CLI), graphical user interface (GUI) for 'drag and drop' configuration, fully compliant support for SNMPv3 and email (SMTP) alerting capability.</p>

Table 2 : Product Information

Type	Description
Mounting	Mounts in an EIA-standard 19 inch or 24 inch telco rack or equipment cabinet. Front and rear mounting brackets included
Standard Ports and Expansions	<p>GigaVUE-420 CU modular base unit: 4 Ethernet 10/100/1000 Ethernet copper ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, IEEE802.3ab 1000BASE-T Gb Ethernet)</p> <p>GigaVUE-420 FO base unit: Four 1Gb SFP ports supporting SX, LX, and ZX optical transceivers</p> <p>Base unit includes:</p> <ul style="list-style-type: none"> <li>• 10/100/1000 BASE-T RJ45 Ethernet management port</li> <li>• RS-232 console port with RJ45 connector, Cisco compatible</li> <li>• All Ethernet ports and management port support Auto-MDIX, auto-negotiation</li> <li>• Front expansion slots: 4 slots, each accommodates a single GigaPORT, GigaTAP-Tx, GigaTAP-BPC, or GigaTAP-SX/LX/ZX module</li> <li>• Rear expansion slots: four 10Gb GigaLINK-XR expansion slots accommodate up to four GigaLINK-CU, GigaLINK-SFP+, or GigaLINK-XR (IEEE 802.3ae) modules, or up to two 10GigaTAP-XR modules</li> </ul>
Optional Modules	<ul style="list-style-type: none"> <li>• Four-port Gb modules: GigaPORT, GigaTAP-TX, GigaTAP-SX/LX/ZX, GigaTAP-BPC</li> <li>• Single port 10Gb modules: GigaLINK-CU, GigaLINK-XR, 10GigaTAP-XR</li> <li>• GigaLINK-SFP+</li> <li>• See table 9 for more information</li> </ul>
Performance	<p>Port-to-port throughput: Wire speed per port, no degradation when filters/maps are applied</p> <p>Packet Latency: (typical) 10Gb to 10Gb : 3.1 microseconds 1Gb to 1Gb : 10.5 microseconds</p>

Table 3 : Weight & Dimensions

Feature	Height	Width	Depth	Weight
Chassis	1.75in (4.45cm)	17.31in (43.97cm)	23.50in (59.69cm) [add 2in (5.1cm) to depth when a 10-GigaTAP module is installed]	System: 30.8lbs (13.97kg) Shipping: 45lbs (20.41kg)

Table 4: Electrical Characteristics

Power Supply Type	Specification
Power Supply Types	Dual 1+1 redundant hot-swappable power supplies, AC or DC
Heat/Power Dissipation	Fully populated 20+4 port system with all ports at 100% traffic load: nominally 160Watts/546 BTU/hr
Cooling	Dual redundant, hot-swappable, field replaceable, cooling fans
Voltage	<p>AC power modules: 100 to 240V AC. Fuse rating: internally protected, not user accessible</p> <p>DC power modules: -36 to -72V DC. Inputs reverse polarity protected</p> <p>For DC source: optional external fuse rating: 6 Amps Slow-Blo</p>
Current (nominal)	1.45A @ 110V AC / 3.33A @ -48V DC
Current (surge)	5A @ 110V AC
Frequency	50/60Hz for AC

**Table 5: Environmental Specifications**

Type	Description
Operating Temperature	32°F to 104°F (0°C to 40°C)
Operating Relative Humidity	20% to 80%, non-condensing
Non-operating/Storage Temperature	-4°F to 158°F (-20°C to 70°C)
Non-operating/Storage Relative Humidity	15% to 85%, non-condensing
Altitude	Up to 15,000ft (4.6km)
Air Flow	Sides to rear

**Table 6: Standards & Protocols**

Type	Description
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 7: Regulatory Compliance and Safety**



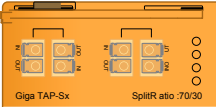
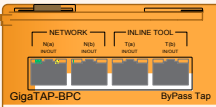
Specification	Description
Compliance and Safety	UL 60950-1; CSAC22.2 EN 60950-1; IEC-60950-1; China Compulsory Certification (CCC) Mark
RoHS Compliance	RoHS 6, EU directive 2002/95/EC
Emissions	FCC Part 15, Class A; VCCI Class A; EN55022/CISPR-22 Class A; Australia/New Zealand AS/NZS CISPR-22 Class A; 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 8: Warranty & Support**

Warranty	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>

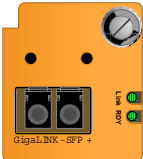

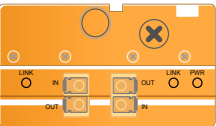
Table 9: Front Plug-in Module Specifications

Product	Ports	Link to TAP Mechanism	Power Fail Mechanism	Total Links Tapped per Module	Dimensions & Weight
<b>GigaPORT Expansion Module</b> 	Four, each can be set as RJ-45 Ethernet (10/100/1000BASE-T), or 1Gb SX/LX with multimode or singlemode SFP module(s)	N/A	No power fail link restore		1.50(h) x 3.25(w) x 10.62(d) inches (3.9 x 8.3 x 26.7cm) 1lb 2oz (0.55kg)
<b>GigaTAP-TX Dual TAP Module</b> 	Four RJ-45 ports organized as two pairs; each pair taps a single 10/100/1000BASE-T FDX Ethernet UTP link	Relays open link for tapping	Relays close link for power fail link restore	Maximum two FDX UTP links tapped per module	1.50(h) x 3.25(w) x 10.62(d) inches (3.9 x 8.3 x 26.7cm) 1lb 1oz (0.5kg)
<b>GigaTAP-SX/LX/ZX Dual TAP Module (MM or SM)</b> 	Four optical splitter ports. Module taps two 1Gb multimode or singlemode FDX fibers. Split ratio 70/30	Passive optical splitters taps	Power fail does not impact link status	Maximum two FDX fiber links tapped per module	1.50(h) x 3.25(w) x 10.62(d) inches (3.9 x 8.3 x 26.7cm) 1lb 9oz (0.7kg)
<b>GigaTAP-BPC Bypass TAP Module</b> 	Four RJ-45 ports organized network pair and inline bypass pair; network pair taps a single 10/100/1000BASE-T FDX Ethernet UTP link. Inline bypass link connects to inline tool	Relays open link for tapping	Relays close link for power fail link restore	Maximum one FDX UTP links tapped per module and one pair inline tool links	1.50(h) x 3.25(w) x 10.62(d) inches (3.9 x 8.3 x 26.7cm) 1lb 1oz (0.5kg)

Note: Performance throughput, environment, safety, emissions, immunity, & standards/protocols for modules are the same as the specifications on pages 2-3.

\*Optional accessories: SFP (optical transceiver): SX 850nm (550m), LX 1310nm (10km), ZX 1550nm (40km)

Table 10: Rear 10Gb Ethernet Plug-In Module Specifications

Products	Connectivity/Distance	Ports	Dimensions
<b>GigaLINK-SFP+</b> (10Gb Optical Module)  	-SFP+ (10Gb optical transceiver) -SR 850nm (300m) -LR 1310nm (2km standard, 10km special order) -ER 1550 nm (40km standard, 80km special order)  Optional stacking cables: -SFP+ to SFP+ direct attached copper cable, 5 meters -SFP+ active fiber cable, 10 meters -CX4 copper cable: -5m (standard) -1 or 10 or 15m (special order)	SFP+ fiber optic port	1.5(h) x 1.3(w) x 5.0(d) inches (3.8 x 3.3 x 12.7cm)
<b>GigaLINK-CU</b> (10Gb Copper Module)  	1 x 10Gb SFP+ fiber optic port	1 x 10Gb copper CX4 port	1.5(h) x 1.3(w) x 4.9(d) inches (3.8 x 3.3 x 12.4cm)
<b>GigaTAP-XR</b> (10Gb Optical TAP Module)  	Taps a single full duplex 10Gb fiber link; requires two 10Gb port slots		1.5(h) x 2.75(w) x 7.3(d) inches (3.8 x 7.0 x 18.2cm)

Note: Performance throughput, environment, safety, emissions, immunity, & standards/protocols for modules are the same as the specifications on pages 2-3

## Ordering Information

Table 11: Ordering Information

Part Number	Description
GVS-421	GigaVUE-420 4 copper port, AC power
GVS-422	GigaVUE-420 4 SFP Cages, AC power
GVS-423	GigaVUE-420 4 copper port, DC power
GVS-424	GigaVUE-420 4 SFP Cages, DC power
PRT-400	GigaPORT 4 port expansion module
SFP-502	1 Gig SFP, Multimode 850
SFP-503	1 Gig SFP, Singlemode 1310
SFP-504	1 Gig SFP, Singlemode 1550 (Special Order)
SFP-532	10 Gig SFP+, Multimode 850nm SR
SFP-533	10 Gig SFP+, Singlemode 1310nm LR
SFP-534	10 Gig SFP+, Singlemode 1550nm ER (Special Order)
SFP-535	10 Gig SFP+, Multimode 1310nm LRM (Special Order)
TAP-201	GigaTAP-TX copper tap module, 2 taps per module, 420 chassis
TAP-202	GigaTAP-SX 850nm Multimode tap module, 2 taps per module, 420 Chassis
TAP-203	GigaTAP-LX 1310nm Singlemode tap module, 2 taps per module, 420 Chassis (Special Order)
TAP-204	GigaTAP-ZX 1550nm Singlemode tap module, 2 taps per module, 420 Chassis (Special Order)
TAP-241	GigaTAP-BPC In-Line, Bypass Tap, Copper, 1Gig
TAP-GV4-X25B10	10GigaTap-SR optical Multimode 850nm 10Gig TAP module, 420 Chassis
TAP-GV4-X35C10	10GigaTap-LR optical Singlemode 1310nm 10Gig TAP module, 420 Chassis (Special Order)
TAP-GV4-X45D10	10GigaTap-ER optical Singlemode 1550nm 10Gig TAP module, 420 Chassis (Special Order)
GLK-311	GigaLINK-Cu -CX4 for GigaVUE-420, 10 Gig copper stacking port
GLK-320	GigaLINK-SFP+ for GigaVUE-420, empty SFP+ cage, 10 Gig port module
GLK-322	GigaLINK-SR -SFP+ for GigaVUE-420, MM 850 10 Gig port module
GLK-323	GigaLINK-LR -SFP+ for GigaVUE-420, SM 1310 10 Gig port module
GLK-324	GigaLINK-ER -SFP+ for GigaVUE-420, SM 1550 10 Gig port module (Special Order)
GLK-325	GigaLINK-SFP+ LRM for GigaVUE-420, MM 1310 10 Gig port module (Special Order)
CBL-005	Stacking Cable, CX4 copper cable, 5 meters
CBL-015	Stacking Cable, CX4 copper cable, 15 meters
CBL-205	SFP+ to SFP+ Direct Attach Copper cable, 5 meters
CBL-310	SFP+ active fiber cable, 10 meters
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](http://www.gigamon.com)