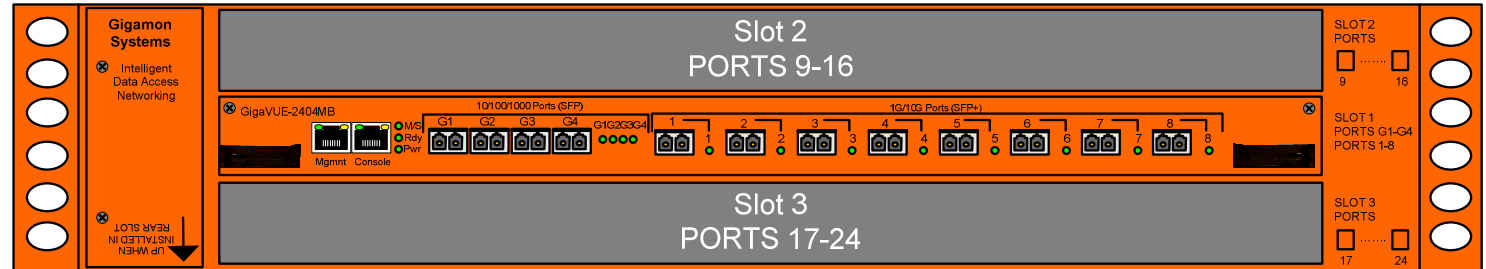
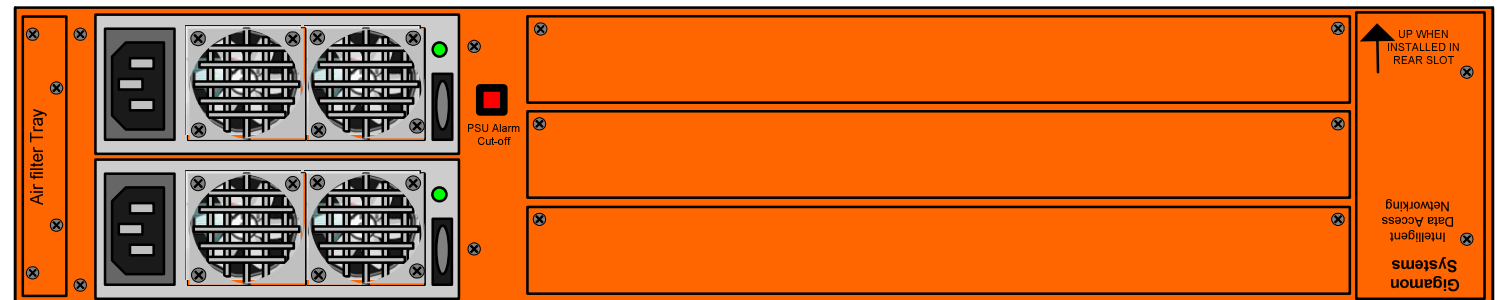


GigaVUE-2404 System and Module Specifications

GigaVUE-2404 Base System



Front View



Rear View

System Description

GigaVUE-2404: provides up to 24 x 10GigE/GigE ports, plus 4 x GigE ports for out-of-band data access for network monitoring tools and probes. The 10GigE ports can be set to GigE speeds. The 2404 comes in a 3-slot, 19 inch, 2U rack mount chassis. The base 2404 provides 4 x GigE and 8 x 10GigE/GieE ports standard via the 2404MB in slot 1. Number of 10GigE ports may be expanded in 8 port increments, up to 24 per 2404. The 2404MB main board in slot

1 also provides the Ethernet (10/100/1000Mbps) and serial management ports for the system. Slots 2 (top) and 3 (bottom) accepts optional 10GigE/GigE blades. All ports may be independently assigned as input or output ports. Any unpopulated slot requires a blank cover be installed to maintain proper system cooling and product warranty. Power: dual redundant load-sharing AC or DC power supplies. Cooling: dual redundant cooling fans. Air flow: side to side from right to left.

For ordering information please see order code section below.

Included Accessories	Rack mount kit with front and rear rack mounting brackets; 2 North American AC modular power cords for AC unit; serial console cable (Cisco compatible).
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Standard Ports and Expansion Slots	GigaVUE-2404 base system standard ports: 4 x GigE ports (Port ID: G1 to G4, SFP transceivers) plus 8 x 10GigE/GigE ports (Ports 1 to 8, accepts SFP+ 10GigE and SFP GigE transceivers). Optional 10GigE blades may be plugged into front slots 2 and 3 and expand total # of 10GigE ports to 24 (Ports 1 – 24).
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Optional Transceivers	Ports G1 to G4 (GigE port) will accept the following transceivers: <ol style="list-style-type: none">1. GigE SFP optical (SX/LX/ZX, LC connectors) speed 1000 Mbps; or2. GigE SFP copper (RJ45), speed 10/100/1000base-t.
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Ports 1 to 24 (settable as 10Gig or Gig port via transceiver type) will accept the following transceivers:

1. GigE SFP (optical SX/LX/ZX) speed 1000 Mbps; or
2. GigE SFP copper (RJ45) speed 1000base-t only; or
3. 10GigE SFP+ (SR/LR/ER/LRM) speed 10,000 Mbps.

Optional Expansion Blades	Front expansion slots: two (2), each accommodate a single 8 x 10GigE/GigE expansion blade. Rear expansion slots: three (3), reserved for future expansion.
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Available GigaVUE-2404 front expansion blades: 10GigaPORT-8X blade; 10GigaTAP-SR/LR/ER blade, 10GigaPORT-8CX4 blade. See order code.

Power Supplies	2 redundant, load sharing, hot-swappable universal modules (AC or DC). Input voltage: 100 to 240V AC, 50/60Hz.
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See Electrical Characteristics below.

Physical Size**Dimensions**

(without mounting
brackets)

Width x Depth x Height
17.35 x 19.25 x 3.50 inches (44.1 x 48.9 x 8.9 cm).

Weight (fully
populated)

System weight: approximately 37 lbs/16.8 kg. Shipping weight: approximately 50 lbs/22.7 kg.

Mounting

Mounts in an EIA-standard 19 inch or 24 inch telco rack or equipment cabinet, up to 39 inches deep.
Front and rear mounting brackets included. Optional 18 inch long rear brackets may be specified at order time.

Performance

Port to port
throughput:
Gigabit and 10 Gigabit

Wire speed from port to port, no degradation when maximum number of filters/maps are applied.
Packet latency (port to port): approximately 6.5 microseconds.

Environmental

RoHS compliance

All GigaVUE-2404 products are RoHS compliant.

Operating temperature

32°F to 104°F (0°C to 40°C)

Operating humidity

20% to 80%, relative, non-condensing

Recommended storage
temperature

-4°F to 158°F (-20°C to 70°C)

Recommended storage
humidity

15% to 85%, relative, non-condensing

Altitude

Up to 15,000ft. (4.6km)

Electrical**Characteristics**

Power supply types

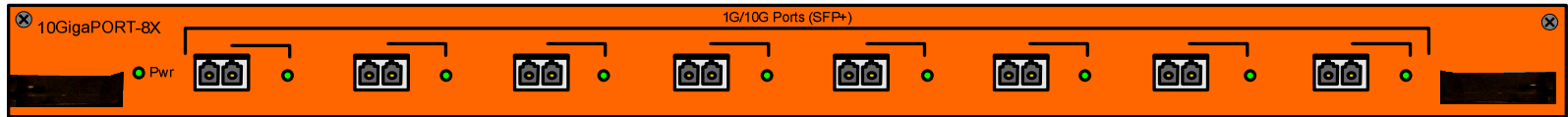
Dual 1+1 redundant load sharing hot swappable power supplies, AC or DC.

Heat/power dissipation

Fully populated 24 + 4 port system with all ports at 100% traffic load: nominally 200Watts/683 BTU/hr

Voltage, input	AC power modules: 100 to 240VAC. Fuse rating: internally protected, not user accessible. DC power modules: -36 to -72VDC. Inputs reverse polarity protected. DC source optional external fuse rating: 7Amps Slo-Blo.
Current (nominal)	1.8 Amp @ 110VAC. 3.8 Amp @ -48VDC.
Frequency	50/60 Hz for AC
Safety	UL 60950-1; CSA C22.2 EN 60950-1.
Emissions	FCC Part 15, class A; VCCI class A; EN55022/CISPR-22 class A; Australian/New Zealand AS/NZS CISPR-22 class A; CE Mark EN 55022 class A
Immunity	ETSI EN 300 386 V1.3.2, EN 61000-4-2, EN 61000-4-3, EN 61000-4-4, EN 61000-4-5, EN 61000-4-6, EN 61000-3-2.
Management	User interface: command line interface CLI; out of band management (serial RS-232C port); telnet, SSH2 through Ethernet management port. RADIUS, TACACS+ support.
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+,

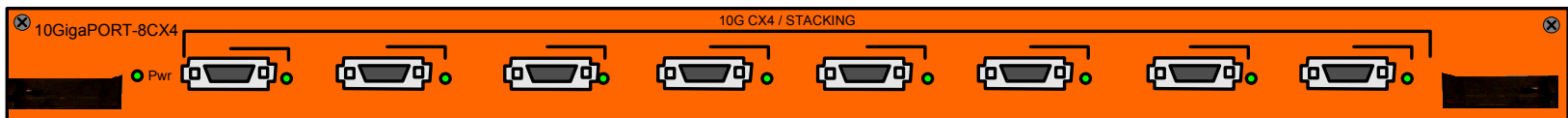
Order Codes	
GVS-432	GigaVUE-2404 with 4x1Gig & 8x10Gig ports, AC powered.
GVS-434	GigaVUE-2404 with 4x1Gig & 8x10Gig ports, DC powered.
PRT-438	10GigaPORT-8X, 8x10G SFP+ port expansion blade for GigaVUE-2404.
PRT-439	10GigaPORT-8CX4, 8x10G CX4 port expansion blade for GigaVUE-2404.
SFP-501	1 Gig, SFP, Copper UTP with RJ45 interface.
SFP-502	1 Gig, SFP, Multimode 850nm.
SFP-503	1 Gig, SFP, Single Mode 1310nm.
SFP-504	1 Gig, SFP, Single Mode 1550nm.
SFP-532	10Gig SFP+, Multimode 850nm.
SFP-533	10Gig SFP+, Single Mode 1310nm.
SFP-534	10Gig SFP+, Single Mode 1550nm.
SFP-535	10Gig SFP+, LRM for multimode fiber, 1310nm.
TAP-232	10GigaTAP-4SR for GigaVUE-2404, 850nm multi mode tap blade for 4 FDX links.
TAP-233	10GigaTAP-4LR for GigaVUE-2404, 1310nm single mode tap blade for 4 FDX links.
TAP-234	10GigaTAP-4ER for GigaVUE-2404, 1550nm single mode tap blade for 4 FDX links.
CBL-005	CX4 copper cable, 5 m.
CBL-015	CX4 copper cable, 15m
CBL-F05	CX4 fiber cable, 5m
CBL-F99	CX4 fiber cable, 100m
CBL-S05	Passive SFP+ copper cable, 5m
CBL-S12	Passive SFP+ copper cable, 12m



10GigaPORT-8X



10GigaTAP-4SR/4LR/4ER



10GigaPORT-8CX4

10Gigabit Blade Specifications	10GigaPORT-8X (Requires optional transceivers)	10GigaPORT-8CX4 (Available Q1, 09)	10GigaTAP-4SR/4LR/4ER (Integrated optical taps)
Optional transceivers/cables supported (See separate transceiver information sheet for distance and optical parameters)	SFP+ 10GigE speed only (850, 1310 or 1550nm) SFP Cu (GigE speed only) SFP GigE speed only (850, 1310 or 1550nm) Cable: SFP+ 10G copper cable, 12 m max	Integrated CX4, standard. Optional cables: CX4 copper cable (up to 15 m) Parallel CX4 fiber cable, up to 100 m max..	Internal optical 50/50 splitters taps up to 4 10Gigabit full duplex links. SR 850nm MM LR 1310nm SM ER 1550 nm SM
Ports	8 x 10GigE SFP+ fiber optic	8 x 10GigE copper CX4 ports	8 LC splitter ports tap 4 full duplex 10GigE fibers.
Physical Size			
Dimensions (Width x Depth x Height)	15.0 x 9.75 x 1.13 inches (38.1 x 24.8 x 2.9 cm)	15.0 x 9.75 x 1.13 inches (38.1 x 24.8 x 2.9 cm)	7.3(d) x 2.75(w) x 1.5(h) inches (18.2 x 7.0 x 3.8 cm)
Weight	3.5 lbs (1.59 kg) with transceivers	3.13 lbs (1.42 kg)	4.31 lbs (1.96 kg)
Performance			
Throughput	See GigaVUE-2404 base	See GigaVUE-2404 base	See GigaVUE-2404 base
Environment	See GigaVUE-2404 base	See GigaVUE-2404 base	See GigaVUE-2404 base
Safety	See GigaVUE-2404 base	See GigaVUE-2404 base	See GigaVUE-2404 base
Emissions	See GigaVUE-2404 base	See GigaVUE-2404 base	See GigaVUE-2404 base
Immunity	See GigaVUE-2404 base	See GigaVUE-2404 base	See GigaVUE-2404 base
Standards/Protocols	See GigaVUE-2404 base	See GigaVUE-2404 base	See GigaVUE-2404 base