

GigaVUE-TA Series

Edge Traffic Aggregation and Distribution Visibility
for Small to Large Enterprises and Service Providers



GigaVUE-TA10, GigaVUE-TA40, GigaVUE-TA100, and GigaVUE-TA200 products

Key Benefits

Management, Integration, and Installation

Small footprint with low space, power and cooling needs

Rapid programmatic response to detectable events

Advanced integration with tools, controllers and other infrastructure systems

Traffic Forwarding for Network and Security Operations

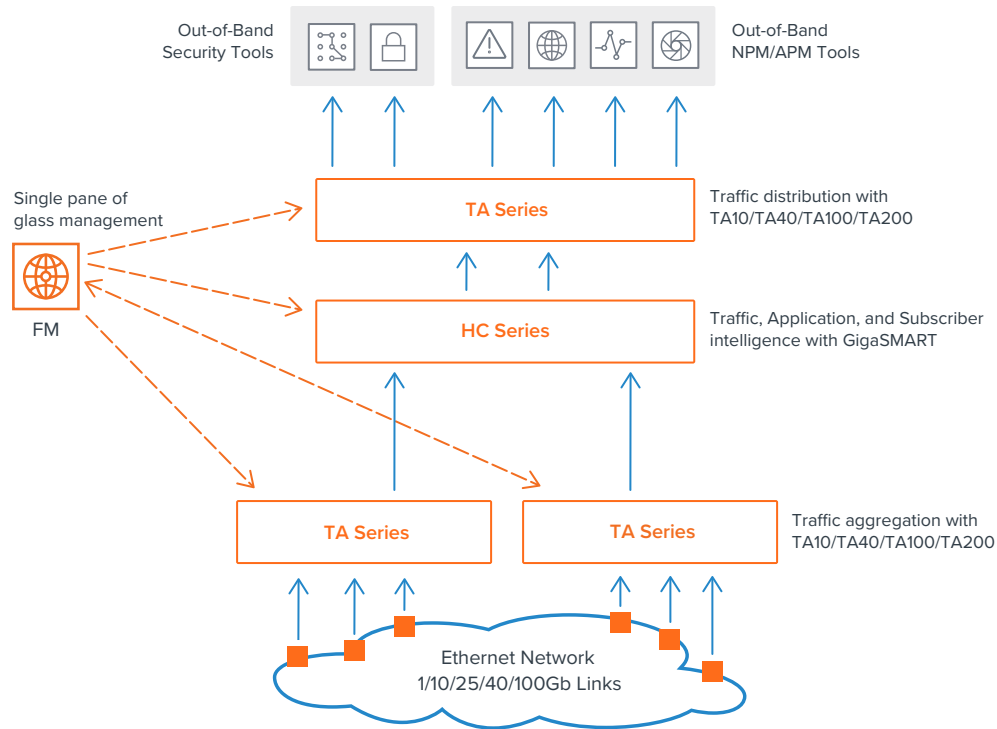
Optimize the delivery of your network traffic to your monitoring and security tools, enabling:

- Elimination of contention for network data access
- Targeting specific flows to specific tools with network awareness
- Sharing traffic load across multiple tools' instances

Selectively aggregate and replicate traffic at line rate

Reuse existing tools for current and new network links

Scale network coverage and tool deployment, with continuous visibility



GigaVUE-TA Series is used to aggregate traffic from your network, feed GigaVUE HC Series for more intelligent traffic optimization, and then distribute to tools for security, network and application monitoring

The GigaVUE® TA Series of edge network packet brokers is a key component of the Gigamon Visibility Fabric. They are designed to simply aggregate multiple network links and feed the combined traffic either to GigaVUE HC Series products, or directly to security and monitoring tools, or both.

In addition to physical networks, you gain centralized visibility into cloud and remote sites' network traffic, with tunnel termination and de-encapsulation on all TA Series platforms (with the exception of TA10). You can also perform selective traffic aggregation, replication, filtering and load-balancing on the GigaVUE TA Series.

Gigamon offers a wide set of capabilities for all of your packet brokering needs. GigaVUE TA Series optimizes traffic flow to ensure that only the traffic of interest is forwarded. The GigaVUE HC Series can then perform traffic, application and subscriber intelligence functions for more sophisticated traffic handling and forwarding. Lastly, GigaVUE-FM provides single pane, centralized management and control of both GigaVUE-TA and GigaVUE-HC series nodes, and also provides programmable APIs for software-defined visibility.

With up to 25Tbps of traffic processing across 32 clustered nodes, the TA Series provides you with network traffic visibility into all data in motion. With Gigamon you can eliminate traffic overload for tools and easily deploy or upgrade any out-of-band security and monitoring tools.

Use Cases include:

- Aggregation of multiple SPAN and TAP traffic feeds into higher speed uplinks
- Extending reach and density of Visibility Fabric across the data center
- Visibility into leaf and spine architectures for security and performance monitoring
- Top of rack deployment, consolidating traffic to GigaVUE HC Series node at end of row
- Data center upgrades moving to Cisco BiDi infrastructures

GigaVUE TA Series Family



GigaVUE-TA10

1RU form factor meets the core traffic aggregation and forwarding needs of small to medium 1Gb and 10Gb networks



GigaVUE-TA40

1RU form factor meets the core traffic aggregation and forwarding needs of medium to large 40Gb networks



GigaVUE-TA100

1RU form factor meets the core traffic aggregation and forwarding needs of small to medium size 10Gb, 40Gb, and 100Gb networks



GigaVUE-TA200

2RU form factor meets the core traffic aggregation and forwarding needs of medium to large size 10Gb, 25Gb, 40Gb, and 100Gb networks

GigaVUE-TA100 CXP

A 1RU form factor meets the core traffic aggregation and forwarding needs of small to medium size SR10 100Gb networks

Key Features and Benefits

Network and Traffic Access

Five fixed port configuration chassis models covering a range of Ethernet port speeds and media with pluggable transceivers:

- 1000Mb and 10Gb copper
- 1Gb, 10Gb, 25Gb, 40Gb, 100Gb multimode and single-mode fiber

Compatible with SFP, SFP+, QSFP+ and QSFP28 MSA compliant transceivers, as offered by Gigamon

- Scale from low- to high-density systems with a wide range of cost-effective options – deploy exactly what is needed
- Plug into a variety of network environment with multiple fiber optic transceiver options

Port configurability:

- Full flexibility in selecting ports as ingress, intermediate, interconnect, or egress functions
- Unidirectional and bi-directional ports
- Tunneling termination (e.g. L2GRE, VXLAN)

- Enable agile response to changes in monitoring infrastructure and monitoring needs
- Facilitate passive out-of-band and node interconnection
- Allow virtualized traffic to be accessed over an IP network

Core Intelligence

Flow Mapping, including:

- Aggregation and replication
 - Selective any-to-any port mapping
- Filtering
 - Layer 2 to 7 rules
 - Up to 24k map rules*
 - Aggregate and egress
- Load-balancing
 - Layers 2 to 4 hashing criteria
 - Session stickiness

- Access traffic from any link to any tool, even for different link rates
- Remove issues with asymmetric routing and LAG
- Optimize tools by only forwarding traffic of interest or dropping traffic not of interest
- Spread load across multiple tool instances of same type

VLAN port tagging

- Pinpoint source of traffic

Clustering* and Fabric Maps*

- Enable resilient traffic forwarding
- Manage up to 32 nodes in a cluster as a single virtual node
- Enact end-to-end Flow Mapping, across clusters, scaling to hundreds of nodes

Traffic Intelligence*

Tunnel De-encapsulation:**

- L2GRE*
- VXLAN*

- Improve effectiveness of tools that don't understand all network protocols
- Facilitate improved traffic forwarding

Time Stamping with PTP time synchronization***

- Facilitate accurate latency and performance analysis of network protocols and application transactions

Management

Local and remote using:

- CLI (Telnet/SSH)
- Web GUI (HTTP/HTTPS)
- XML API (HTTP/HTTPS)
- Fabric Manager (HTTP/HTTPS)
- SNMP (v1, v2, v3)
- Syslog

- Easy to manage via a Web GUI or via CLI for users already familiar with Cisco
 - Easy integration with applications using CLI or RESTful API
 - Support SDN paradigm
 - Manage and orchestrate from single “pane of glass”
 - Alerts can be received by any Syslog server or SNMP manager
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User access:

- Role-based Access Control (RBAC)
 - Multi-tenant user access
 - Flexible user/role defined privileges, screen views and access
- AAA security with local and remote authentication (RADIUS, TACACS+)

- Adhere to corporate IT security policies
 - Meet corporate IT authentication policy
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System

Field replaceable hardware:

- AC and DC power supplies
- Fan trays

- Achieve five nines highly available uptime
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Metrics and statistics:

- Management CPU resources
- Switching ASIC resources
- Port utilization
- Flow map throughput

- Facilitate troubleshooting
 - Guide capacity planning and traffic forward rules
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* Requires Advanced Features license

** Not available on TA10

*** Only available on TA200

Maximum Capabilities: Speeds and Feeds

ATTRIBUTE	GIGAVUE-TA10	GIGAVUE-TA40	GIGAVUE-TA100	GIGAVUE-TA100 CXP	GIGAVUE-TA200
Size	"Small" (1RU)	"Small" (1RU)	"Small" (1RU)	"Small" (1RU)	"Medium" (2RU)
Throughput	640Gbps	1.28Tbps	3.2Tbps	2.8Tbps	6.4Tbps
# Port Cage Types:					
SFP+	48	-	-	-	-
QSFP+	4	32	-	-	-
QSFP28	-	-	32	8	64
CXP	-	-	-	20	-
# of Ports & Speeds:					
1Gb	48	-	-	-	-
10Gb	64*	16*	128*	128*	128*
25Gb	-	-	-	-	128*
40Gb	4	32	32	8	64
100Gb	-	-	32	28	64

* Using breakout cables

Maximum Capabilities: Filter Entries

FILTERING TYPE	GIGAVUE-TA10	GIGAVUE-TA40	GIGAVUE-TA100, GIGAVUE-100 CXP	GIGAVUE-TA200
Flow Mapping filtering:				
default	256	256	256	256
with Advanced Features license	2k	4k	24k	24k
Egress filtering:				
default	20	20	20	20
with Advanced Features license	100	100	400	400

Product Specifications: Physical Dimensions and Weights

PRODUCT	HEIGHT	WIDTH	DEPTH	WEIGHT
GigaVUE-TA10	1RU, 1.75 in (4.5cm)	17.32 in (44 cm)	19.25 in (48.9cm)	19.05 lb (8.66 kg)
GigaVUE-TA40	1RU, 1.75 in (4.5cm)	17.32 in (44 cm)	19.25 in (48.9cm)	20.15 lb (9.16 kg)
GigaVUE-TA100	1RU, 1.75 in (4.5cm)	17.32 in (44 cm)	19.25 in (48.9cm)	22.99 lb (10.43 kg)
GigaVUE-TA100 CXP	1RU, 1.75 in (4.5cm)	17.32 in (44 cm)	19.25 in (48.9cm)	24.89 lb (11.29 kg)
GigaVUE-TA200	2RU, 3.5 in (8.9cm)	17.32 in (44 cm)	21.25 in (54.0 cm)	33.60 lb (15.24 kg)

Product Specifications: Power Consumption/Heat Output

PRODUCT	MAX SPECIFICATION
GigaVUE-TA10	220W, 751 BTU/hr
GigaVUE-TA40	280W, 954.8 BTU/hr
GigaVUE-TA100	550W, 1892.7 BTU/hr
GigaVUE-TA100 CXP	550W, 1892.7 BTU/hr
GigaVUE-TA200	1069W, 3645.29 BTU/hr

Power Options:

- AC Power Supply: 100-240V AC, 50-60Hz
- DC Power Supply: -48V DC

Each GigaVUE TA Series node comes standard with dual load-sharing power supplies.

For detailed current specifications, please refer to the GigaVUE TA Series Hardware Installation Guide.

Product Specifications: Environmental Specifications

ASPECT	GIGAVUE-TA10/TA40	GIGAVUE-TA100/TA100 CXP	GIGAVUE-TA200
Operating temperature	32°F to 104°F (0°C to 40°C)	32°F to 104°F (0°C to 40°C)	32°F to 104°F (0°C to 40°C)
Operating relative humidity	20% to 80%, non-condensing	10% to 90%, non-condensing	10% to 90%, non-condensing
Recommended storage temperature	-4°F to 158°F (-20°C to 70°C)	-4°F to 158°F (-20°C to 70°C)	-4°F to 158°F (-20°C to 70°C)
Recommended storage relative humidity	15% to 85%, non-condensing	15% to 85%, non-condensing	15% to 85%, non-condensing
Altitude	Up to 10,000 ft (3.05 km)	Up to 10,000 ft (3.05 km)	Up to 16,405 ft (5.0 km)

Product Specifications: Standards and Protocols

TYPE	STANDARDS
Protocols	IEEE 802.1q VLAN, IEEE 802.1ab Q-in-Q, IEEE 802.3 10BASE-T, IEEE 802.3u 100BASE-TX, IEEE 802.3ab 1000BASE-T, IEEE 802.3z 1000BASE-X, IEEE 802.3ae 10GBASE-X, IEEE 802.3ba 40G/100GBASE-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 & v3, RFC 2131 DHCP client, RFC 1492 TACACS+, and support for IPv4 and IPv6
Management	10/100/1000M RJ-45 Ethernet, RS-232 RJ-45 serial console, IPv4, IPv6, DHCP, ICMP, SNMP v1/v2 & v3, Syslog, Telnet, SSH2, TLS, RADIUS, TACACS+, LDAP

Product Specifications: Compliance

ASPECT	GIGAVUE	STANDARD
Safety	TA10/TA40/ TA100 CXP	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) + Am1:2009 + Am 2:2013
	TA100/TA200	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) + Am1:2009 + Am 2:2013; BSMI; CCC; EAC
Emissions	TA10/TA40	FCC Part 15, Class A; VCCI Class A; EN 55032/CISPR 32 Class A; Australia/New Zealand AS/NZS CISPR-32 Class A; KCC Class A
	TA100 CXP	FCC Part 15, Class A; VCCI Class A; EN 55032/CISPR 32 Class A
	TA100/TA200	FCC Part 15, Class A; VCCI Class A; EN 55032/CISPR 32 Class A; Australia/New Zealand AS/NZS CISPR-32 Class A; KCC Class A; BSMI; CCC; EAC
Immunity	TA10/TA40/TA100/ TA100 CXP	ETSI EN300 386 V1.6.1:2012; EN61000-4-2, 4-3, 4-4, 4-5, 4-6, 4-8, 4-11, 3-2, 3-3
Environment	TA10/TA40/TA100/ TA200	EU RoHS 6, EU Directive 2011/65/EU; NEBS Level 3
Security	TA10/TA40	FIPS 140-2; UC APL; Common Criteria
	TA100/TA100 CXP	FIPS 140-2

Ordering Information

	PART NUMBER	DESCRIPTION
Base Hardware	GVS-TAX01	GigaVUE-TA10 edge node, 4 40G cages + 48 10G cages, 2 power supply, 2 fan trays, AC power
	GVS-TAX02	GigaVUE-TA10 edge node, 4 40G cages + 48 10G cages, 2 power supply, 2 fan trays, DC power
	GVS-TAX01A	GigaVUE-TA10 edge node, 24 10G ports enabled, 2 power supplies, 2 Fan trays, AC power
	GVS-TAX02A	GigaVUE-TA10 edge node, 24 10G ports enabled, 2 power supplies, 2 Fan trays, DC power
	GVS-TAQ01	GigaVUE-TA40 edge node, 32 40G cages, 2 power supply, 3 fan trays, AC power
	GVS-TAQ02	GigaVUE-TA40 edge node, 32 40G cages, 2 power supply, 3 fan trays, DC power
	GVS-TAC01	GigaVUE-TA100 edge node, 32 100G cages, 2 power supplies, 3 fan trays, AC power; 16 ports enabled
	GVS-TAC02	GigaVUE-TA100 edge node, 32 100G cages, 2 power supplies, 3 fan trays, DC power; 16 ports enabled
	GVS-TACX1	GigaVUE-TA100 edge node, 20 100G CXP cages, 8 QSFP28 cages, 2 power supplies, 3 fan trays, AC power, all ports enabled
	GVS-TACX2	GigaVUE-TA100 edge node, 20 100G CXP cages, 8 QSFP28 cages, 2 power supplies, 3 fan trays, DC power, all ports enabled
	GVS-TAC21	GigaVUE-TA200 edge node, 32 100G ports enabled, 2 power supplies, 4 fan trays, AC power
	GVS-TAC22	GigaVUE-TA200 edge node, 32 100G ports enabled, 2 power supplies, 4 fan trays, DC power
Licenses	UPG-TAX00	Upgrade option for GVS-TAX01A/TAX02A to enable all GigaVUE-TA10 ports (48 10G and 4 40G)
	UPG-TAC24	Upgrade option to enable 24 GigaVUE-TA100 ports (24 100G)
	UPG-TAC32	Upgrade option to enable 32 GigaVUE-TA100 ports (32 100G); requires UPG-TAC24
	UPG-TAC20	Upgrade option for GigaVUE-TA200 to enable all 64 100G ports
	CLS-TA100	Advanced Features License, GigaVUE-TA1/10 and 10G Whitebox, per node
	CLS-TAQ00	Advanced Features License, GigaVUE-A40, per node
	CLS-TAC00	Advanced Features License, GigaVUE-A100, per node
	CLS-TAC20	Advanced Features License, GigaVUE-A200, per node

	PART NUMBER	DESCRIPTION
Power Supplies and Fans	PWR-TAXQ1	Power Supply Module, GigaVUE-TA10 or TA40, AC
	PWR-TAXQ2	Power Supply Module, GigaVUE-TA10, TA40, TA100 or HC1, DC, each
	PWR-TAC01	Power Supply Module, GigaVUE-TA100, AC, each
	PWR-TAC21	Power Supply Module, GigaVUE-TA200, AC
	PWR-TAC22	Power Supply Module, GigaVUE-TA200, DC
	FAN-TAC00	GigaVUE-TA100 Fan Assembly each (3 required)
	FAN-TAC20	GigaVUE-TA200 Fan Assembly, each (4 required)
	FAN-TAXQ0	GigaVUE-TA10 or TA40 Fan Assembly, each (2 required on TA10, 3 on TA40)

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.

For More Information

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