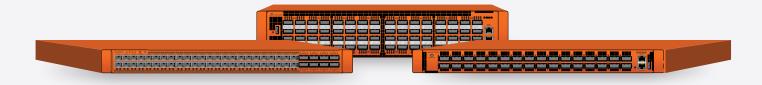
# **GigaVUE TA Series**

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



GigaVUE-TA25, GigaVUE-TA200, and GigaVUE-TA400 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

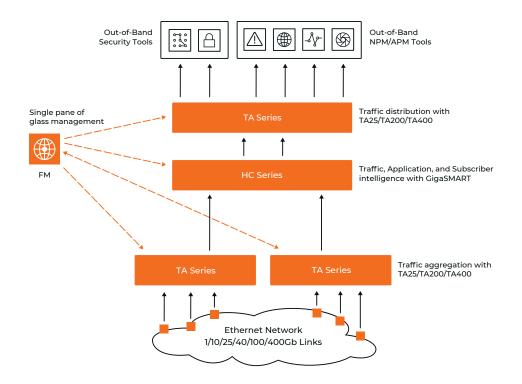
Optimize the delivery of your network traffic to your monitoring and security tools, enabling:

- 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 Gigamon Hawk, the hybrid cloud deep observability pipeline. 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. 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 more than 25Tbps of traffic processing across 32 clustered nodes, of TA Series with HC Series, you get 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 network visibility 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-TA25

1RU form factor meets the core traffic aggregation and forwarding needs of small to large 1Gb, 10Gb, 25Gb, 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-TA400

1RU form factor meets the core traffic aggregation and forwarding needs of large to massive size 10Gb, 25Gb, 40Gb, 100Gb, and 400Gb networks

## **Key Features and Benefits**

Network and Traffic Access	<ul> <li>Five fixed port configuration chassis models covering a range of Ethernet port speeds and media with pluggable transceivers:</li> <li>1000Mb and 10Gb copper</li> <li>1Gb, 10Gb, 25Gb, 40Gb, 100Gb multimode and single-mode fiber</li> <li>Compatible with SFP, SFP+, QSFP+ and QSFP28 MSA compliant transceivers, as offered by Gigamon</li> </ul>	<ul> <li>Scale from low- to high-density systems with a wide range of cost- effective options – deploy exactly what is needed</li> <li>Plug into a variety of network environment with multiple fiber optic transceiver options</li> </ul>
	<ul> <li>Port configurability:</li> <li>Full flexibility in selecting ports as ingress, intermediate, interconnect, or egress functions</li> <li>Unidirectional and bi-directional ports</li> <li>Tunnel termination (e.g. L2GRE, VXLAN)</li> </ul>	<ul> <li>Enable agile response to changes in monitoring infrastructure and monitoring needs</li> <li>Facilitate passive out-of-band and active inline monitoring<sup>\$</sup> via the same TA node and across multiple nodes</li> <li>Allow virtualized traffic to be accessed over an IP network</li> </ul>
Core Intelligence	<ul> <li>Flow Mapping, including:</li> <li>Aggregation and replication <ul> <li>Selective any-to-any port mapping</li> </ul> </li> <li>Filtering <ul> <li>Layer 2 to 7 rules</li> <li>Up to 24k map rules*</li> <li>Aggregate and egress</li> </ul> </li> <li>Load-balancing <ul> <li>Layers 2 to 4 hashing criteria</li> <li>Session stickiness</li> </ul> </li> </ul>	<ul> <li>Access traffic from any link to any tool, even for different link rates</li> <li>Remove issues with asymmetric routing and LAG</li> <li>Optimize tools by only forwarding traffic of interest or dropping traffic not of interest</li> <li>Spread load across multiple tool instances of same type</li> </ul>
	<ul> <li>Inline Bypass:<sup>\$</sup></li> <li>Logical bypass for 10G/25G/40G/100G link rates</li> <li>Aggregate multiple network segments</li> <li>Filter and load-balance towards inline applications/tools</li> <li>Easily configure simple and complex tool chains</li> <li>Customizable heartbeat packets for positive (through-path) and negative (block) tests</li> </ul>	<ul> <li>Provide full visibility for each inline security tool type (e.g., IPS, WAF)</li> <li>Easily deploy security in layers solutions, for both active and passive scenarios</li> <li>Seamlessly migrate tools from passive out-of-band to active inline mode</li> <li>Reduce likelihood of network impact due to malfunctioning active inline tools</li> </ul>
	- VLAN port tagging	• Pinpoint source of traffic
	MAC address modification	<ul> <li>Obscure original MAC information to meet privacy needs with retained ability to distinguish traffic sources</li> <li>Allow certain tool types to ingest traffic that meets specific MAC address requirements</li> </ul>

Core Intelligence continued	Device and Link discovery with ARP and LLDP	<ul> <li>Reduce time to install and configure GigaVUE nodes</li> </ul>
	Clustering* and Fabric Maps*	<ul> <li>Enable resilient traffic forwarding</li> <li>Manage up to 32 nodes in a cluster as a single virtual node</li> <li>Enact end-to-end Flow Mapping, across clusters, scaling to hundreds of nodes</li> </ul>
Traffic Intelligence*	Tunnel initiation (L2GRE, VXLAN)	Backhaul across IP networks to central sites or cloud based tools
	Tunnel De-encapsulation (L2GRE, VXLAN)	Facilitate traffic forwarding from cloud or virtual infrastructures
	Header Stripping (MPLS, VLAN, VXLAN)	<ul> <li>Improve effectiveness of tools that don't understand all network protocols</li> </ul>
	Time Stamping with PTP time synchronization**	<ul> <li>Facilitate accurate latency and performance analysis of network protocols and application transactions</li> </ul>
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	<ul> <li>Easy to manage via a Web GUI or via CLI for users already familiar with Cisco</li> <li>Easy integration with applications using CLI or RESTful API</li> <li>Support SDN paradigm</li> <li>Manage and orchestrate from single "pane of glass"</li> <li>Alerts can be received by any Syslog server or SNMP manager</li> </ul>
	<ul> <li>User access:</li> <li>Role-based Access Control (RBAC) <ul> <li>Multi-tenant user access</li> <li>Flexible user/role defined privileges, screen views and access</li> </ul> </li> <li>AAA security with local and remote authentication (RADIUS, TACACS+)</li> </ul>	<ul> <li>Adhere to corporate IT security policies</li> <li>Meet corporate IT authentication policy</li> </ul>
System	Field replaceable hardware: • AC and DC power supplies • Fan trays	Achieve five nines highly     available uptime
	<ul> <li>Metrics and statistics:</li> <li>Management CPU resources</li> <li>Switching ASIC resources</li> <li>Port utilization</li> <li>Flow map throughput</li> </ul>	<ul> <li>Facilitate troubleshooting</li> <li>Guide capacity planning and traffic forward rules</li> </ul>

\* Requires Advanced Features license \*\* Only available on TA200 <sup>§</sup> Only available on TA25 and TA200

## **Maximum Capabilities: Speeds and Feeds**

ATTRIBUTE	GIGAVUE-TA25	GIGAVUE-TA200	GIGAVUE-TA400
Size	"Small" (IRU)	"Medium" (2RU)	"Small" (1RU)
Throughput	2.0Tbps	6.4Tbps	12.8Tbps
# Port Cage Types:			
SFP+	-	-	-
SFP28 <sup>1</sup>	48	-	-
QSFP+	-	-	-
QSFP28 <sup>2</sup>	8	64	-
QSFP-DD <sup>3</sup>	-	-	32
# of Ports & Speeds:			
1Gb	48	-	-
	56*	128*	128*
25Gb	56*	128*	128*
40Gb	8	64	32
100Gb	8	64	128*
400Gb	-	-	32

\* Using breakout cables/panels <sup>1</sup> Supports SFP+ transceivers

<sup>2</sup> Supports QSFP+ transceivers

<sup>3</sup> Supports QSFP+ and QSFP28 transceivers

# **Maximum Capabilities: Filter Entries**

FILTERING TYPE	<b>GIGAVUE-TA25</b>	GIGAVUE-TA200	GIGAVUE-TA400
Flow Mapping filtering:			
default	256	256	256
with Advanced Features license	18k	24k	88k
Egress filtering:			
default	20	20	20
with Advanced Features license	100	400	400

## **Product Specifications: Physical Dimensions and Weights**

PRODUCT	HEIGHT	WIDTH	DEPTH	WEIGHT
GigaVUE-TA25	1RU, 1.75 in (4.5 cm)	17.32 in (44 cm)	19.25 in (48.9 cm)	19.0 lb (8.62 kg)
GigaVUE-TA200	2RU, 3.48 in (8.84 cm)	17.32 in (44 cm)	21.25 in (54.0 cm)	33.60 lb (15.24 kg)
GigaVUE-TA400	1RU, 1.75 in (4.42 cm)	17.32 in (44 cm)	21.25 in (54.0 cm)	23.0 lb (10.5 kg)

## **Product Specifications: Power Consumption/Heat Output**

PRODUCT	MAX SPECIFICATION
GigaVUE-TA25	323W, 1102 BTU/hr
GigaVUE-TA200	1069W, 3645 BTU/hr
GigaVUE-TA400	1147W, 3601 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-TA25/TA200/TA400
Operating temperature	32°F to 104°F (0°C to 40°C)
Operating relative humidity	10% to 90%, 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 16,405 ft (5.0 km)

# **Product Specifications: Compliance**

ASPECT	GIGAVUE	STANDARD
Safety	TA200/TA400	UL 60950-1; CSA C22.2 60950-1-07; IEC 60950-1; EN 62368-1
	TA25	UL 62368-1; CSA C22.2 62368-1-14; IEC 62368-1 & 60950-1; EN 62368-1
Emissions	TA25	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
	TA200/TA400	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	TA25/TA200/TA400	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	TA25/TA200/TA400	EU RoHS 6, RoHS 3 (EU 2015/863); NEBS Level 3
Security	TA200	Common Criteria

# **Ordering Information**

	PART NUMBER	DESCRIPTION
Base Unit	GVS-TAX21	GigaVUE-TA25 node, 8 40G/100G QSFP28 cages + 48 1G/10G/25G SFP28 cages, 2 power supplies, 4 fan trays, AC power, all ports enabled
	GVS-TAX22	GigaVUE-TA25 node, 8 40G/100G QSFP28 cages + 48 1G/10G/25G SFP28 cages, 2 power supplies, 4 fan trays, DC power, all ports enabled
	GVS-TAX21A	GigaVUE-TA25 node, 8 40G/100G QSFP28 cages + 48 1G/10G/25G SFP28 cages, 2 power supplies, 4 fan trays, AC power, 24 1G/10G/25G ports enablec
	GVS-TAX22A	GigaVUE-TA25 node, 8 40G/100G QSFP28 cages + 48 1G/10G/25G SFP28 cages, 2 power supplies, 4 fan trays, DC power, 24 1G/10G/25G 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
	GVS-TAC41	GigaVUE-TA400 node, 32 400G QSFP-DD cages, 2 power supplies, 7 fan trays, AC power
	GVS-TAC42	GigaVUE-TA400 node, 32 400G QSFP-DD cages, 2 power supplies, 7 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-TAX20	Upgrade option for GVS-TAX25 to enable all GigaVUE-TA25 ports (48 1G/10G/25G + 8 40G/100G)
	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-TAX20	Advanced Features License, GigaVUE-TA25, per node
	CLS-TAQ00	Advanced Features License, GigaVUE-TA40, per node
	CLS-TAC00	Advanced Features License, GigaVUE-TA100, per node
	CLS-TAC20	Advanced Features License, GigaVUE-TA25, per node
	IBP-TAC20	Inline Bypass License, GigaVUE-TA200, per node

LEGACY MODEL		
	PART NUMBER	DESCRIPTION
Power Supplies	PWR-TAXQ1	Power Supply Module, GigaVUE-TA10 or TA40, AC
and Fans	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-TACOO	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)
	FAN-TA25	GigaVUE-TA25 Fan Assembly, each (4 required)
	PWR-TAX21	Power Supply Module, GigaVUE-TA25, AC, each
	PWR-TAX22	Power Supply Module, GigaVUE-TA25, DC, each

PRODUCT	PART NUMBER	DESCRIPTION
GigaVUE-TA10	UPG-TAX00-SW-TM	Monthly subscription license to enable all GigaVUE-TA10 ports (48 10G + 4 40G) on GVS-TAX01A/TAX02A. Includes embedded Elite Support. Initial term must be 12 months or longer.
	CLS-TA100-SW-TM	Monthly subscription license to enable Advanced Features on GigaVUE-TA1/10 and 10G Whitebox, per node. Includes embedded Elite Support. Initial term must be 12 months or longer.
GigaVUE-TA25	GVS-TAX21-HW	GigaVUE-TA25 node, 8 40G/100G QSFP28 cages + 48 1G/10G/25G SFP28 cages, 2 power supplies, 4 fan trays, AC power, all ports enabled. Hardware only. Must pair with appropriate GigaVUE-OS Software License.
	GVS-TAX21-SW-TM	GigaVUE-OS Term Software License for GVS-TAX21-HW. Includes Elite Software Support Program.
	GVS-TAX21A-HW	GigaVUE-TA25 node, 8 40G/100G QSFP28 cages + 48 1G/10G/25G SFP28 cages, 2 power supplies, 4 fan trays, AC power, 24 10G/25G ports enabled. Hardware only. Must pair with appropriate GigaVUE-OS Software License.
	GVS-TAX21A-SW-TM	GigaVUE-OS Term Software License for GVS-TAX21A-HW. Includes Elite Software Support Program.
	GVS-TAX22-HW	GigaVUE-TA25 node, 8 40G/100G QSFP28 cages + 48 1G/10G/25G SFP28 cages, 2 power supplies, 4 fan trays, DC power, all ports enabled. Hardware only. Must pair with appropriate GigaVUE-OS Software License.
	GVS-TAX22-SW-TM	GigaVUE-OS Term Software License for GVS-TAX22-HW. Includes Elite Software Support Program.
	GVS-TAX22A-HW	GigaVUE-TA25 node, 8 40G/100G QSFP28 cages + 48 1G/10G/25G SFP28 cages, 2 power supplies, 4 fan trays, DC power, 24 10G/25G ports enabled. Hardware only. Must pair with appropriate GigaVUE-OS Software License.
	GVS-TAX22A-SW-TM	GigaVUE-OS Term Software License for GVS-TAX22A-HW. Includes Elite Software Support Program.
	UPG-TAX20-SW-TM	Monthly subscription license to enable all GigaVUE-TAX25 ports (48 10G + 4 40G on GVS-TAX25. Includes embedded Elite Support. Initial term must be 12 months or longer.
	CLS-TAX20-SW-TM	Monthly subscription license for Advanced Features License, GigaVUE-TA25, per node. Includes embedded Elite Support. Initial term must be 12 months or longer.
GigaVUE-TA40	CLS-TAQ00-SW-TM	Monthly subscription license to enable Advanced Features on GigaVUE-TA40, per node. Includes embedded Elite Support. Initial term must be 12 months or longer.
GigaVUE-TA100	GVS-TAC01-SW-TM	GigaVUE-OS Term Software License for GVS-TAC01-HW. Includes Elite Software Support Program.
	GVS-TAC02-SW-TM	GigaVUE-OS Term Software License for GVS-TAC02-HW. Includes Elite Software Support Program.
	UPG-TAC24-SW-TM	Monthly subscription license to enable 24 GigaVUE-TA100 ports (24 100G). Includes embedded Elite Support. Initial term must be 12 months or longer.
	UPG-TAC32-SW-TM	Monthly subscription license to enable 32 GigaVUE-TA100 ports (32 100G). Includes embedded Elite Support. Initial term must be 12 months or longer.
	CLS-TAC00-SW-TM	Monthly subscription license to enable Advanced Features on GigaVUE-TA100 per node. Includes embedded Elite Support. Initial term must be 12 months or longer.

PRODUCT	PART NUMBER	DESCRIPTION
GigaVUE-TA200	GVS-TAC21-HW	GigaVUE-TA200 node, 64 100G QSFP28 cages, 2 power supplies, 4 fan trays, AC power; 32 ports enabled. Hardware only. Must pair with appropriate GigaVUE-OS Software License.
	GVS-TAC21-SW-TM	GigaVUE-OS Term Software License for GVS-TAC21-HW. Includes Elite Software Support Program.
	GVS-TAC22-HW	GigaVUE-TA200 node, 64 100G QSFP28 cages, 2 power supplies, 4 fan trays, DC power; 32 ports enabled. Hardware only. Must pair with appropriate GigaVUE-OS Software License.
	GVS-TAC22-SW-TM	GigaVUE-OS Term Software License for GVS-TAC22-HW. Includes Elite Software Support Program.
	UPG-TAC20-SW-TM	Monthly subscription license to enable 64 GigaVUE-TA200 ports (64 100G). Includes embedded Elite Support. Initial term must be 12 months or longer
	CLS-TAC20-SW-TM	Monthly subscription license for Advanced Features License, GigaVUE-TA200, per node. Includes embedded Elite Support. Initial term must be 12 months or longer.
	IBP-TAC20-SW-TM	Monthly subscription license to enable Inline Bypass License on GigaVUE-TA200, per node. Includes embedded Elite Support. Initial term must be 12 months or longer.
GigaVUE-TA400	GVS-TAC41-HW	GigaVUE-TA400 node, 32 400G QSFP28 cages, 2 power supplies, 7 fan trays, AC power; 32 ports enabled. Hardware only. Must pair with appropriate GigaVUE-OS Software License
	GVS-TAC42-HW	GigaVUE-TA400 node, 32 400G QSFP28 cages, 2 power supplies, 7 fan trays, DC power; 32 ports enabled. Hardware only. Must pair with appropriate GigaVUE-OS Software License
	GVS-TAC40-SW-TM	GigaVUE-OS Term Software License for GVS-TAC41-HW. Includes Elite Software Support Program
	CLS-TAC40-TM	Monthly subscription license to enable Advanced Features on GigaVUE-TA400, per node. Includes embedded Elite Support. Initial term must be 12 months or longer

## **Support and Services**

Gigamon offers a range of support and maintenance services. For details regarding Gigamon Limited Warranty and its Product Support and Software Maintenance Programs, visit gigamon.com/ support-and-services/overview-and-benefits.

## **About Gigamon**

Gigamon offers a deep observability pipeline that harnesses actionable network-level intelligence to amplify the power of observability tools. This powerful combination enables IT organizations to assure security and compliance governance, speed root-cause analysis of performance bottlenecks, and lower operational overhead associated with managing hybrid and multi-cloud IT infrastructures. The result: modern enterprises realize the full transformational promise of the cloud. Gigamon serves more than 4,000 customers worldwide, including over 80 percent of Fortune 100 enterprises, nine of the 10 largest mobile network providers, and hundreds of governments and educational organizations worldwide. To learn more, please visit gigamon.com.

## For More Information

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

#### **Gigamon**<sup>®</sup>

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