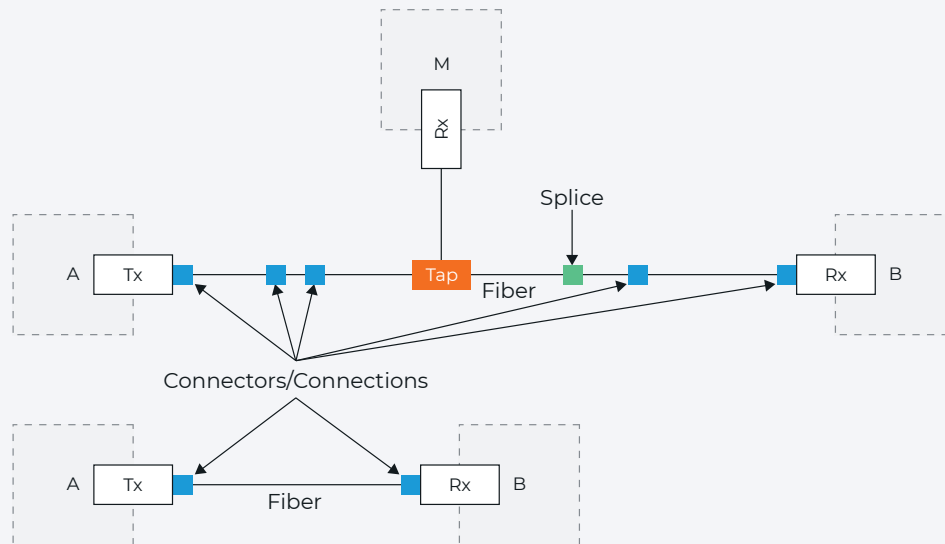


Gigamon Pluggable Transceivers and Cables



Description

For physical networks and physical monitoring and security tools, the Gigamon portfolio consists of a range of active taps (G-Tap A Series, G-Tap A Series 2), visibility nodes (GigaVUE® TA Series, GigaVUE HC Series), and compute servers (GigaVUE-FM). To enable these devices to function and interconnect appropriately in a variety of customer Ethernet networks, a range of pluggable transceivers and cables are regularly tested, validated, and offered with full support by Gigamon.

This product brief lists the currently available and offered pluggables along with their relevant characteristics for use in Gigamon physical products. Characteristics include packaging type, connector type, transmit power, receive sensitivity, media type, data rates, regulatory/standardization compliance, and compatible Gigamon products.

The range of transceivers includes SFP, SFP+, SFP28, QSFP+, QSFP28, and QSFP-DD covering 1 to 400 Gigabits per second (Gbps) rates for use with copper and fiber networks.

Applying Optical Power Values

The minimum transmit power and receive sensitivity values are helpful in providing guidance for whether an optical link can be viably tapped and what split ratios will work over the longer term, since they describe the worst-case scenarios within operational ranges over the rated life of the transceiver. The available optical budget can be determined by the following formula:

$$P_{\text{budget}} = P_{\text{Tx}} - L_{\text{conn}} - L_{\text{splices}} - L_{\text{cable}} - S_{\text{Rx}}$$

where:

P_{budget} is available power budget or margin

P_{Tx} is minimum transmitter power in dBm; obtained from either the Characteristics tables below or the customer equipment transceivers' datasheets

L_{conn} is total attenuation or loss due to connectors in dB; typically 0.25dB per connector

L_{splices} is total attenuation or loss due to fiber splices in dB; typically 0.3dB per splice

L_{cable} is total attenuation or loss due to fiber cable in dB; based on fiber type and length

S_{Rx} is worst-case receiver sensitivity in dBm; obtained from Characteristics tables below

The available power budget (P_{budget}) can then be used to determine whether passive tapping can be used and what passive tap split ratios will work.

If a patch panel is used, the insertion loss for that will need to be subtracted from the available optical power budget as well.

The maximum transmit power and receive power values are helpful in determining what minimum attenuation (cable length, for example) is required for direct transceiver-to-transceiver connection to work.

Characteristics

Note: Any SKU with the “T” suffix means the product is TAA compliant

Table 1. SFP Transceivers

The **1Gbps SFP** transceiver is a small form-factor pluggable module with support for a range of media types and up to three data rates (10Mb, 100Mb, 1Gb), although Gigamon products only support the Gigabit rate. Copper SFP uses the UTP connector type and fiber SFP uses the LC connector type.

SKU	Media		Wavelength	Connector	Power		Power & Sensitivity		Distance
	Type	Fiber	Nominal, nm	Type	Tx Max., dBm	Tx Min., dBm	Rx Max., dBm	Rx Min., dBm	Max., m
SFP-501, SFP-501T	Copper	N/A	N/A	UTP	N/A	N/A	N/A	N/A	100
SFP-502, SFP-502T	SX	Multimode	850	LC	-2.5, -3.0	-9.0, -9.5	0, -3.0	-18.0	300 (OM1) 550 (OM4)
SFP-503, SFP-503T	LX	Singlemode	1310	LC	-3.0	-9.5, -9.0	0, -3.0	-19.0, -21.0	10k
SFP-505T	FX	Multimode	1310	LC	-14.0	-20.0	-3.0	-30.0	2k

Table 2. SFP+ Transceivers

The **10Gbps SFP+** transceiver is a small form-factor pluggable module with support for a range of media types and up to two data rates (1Gb, 10Gb), although Gigamon products only support the 10Gb rate. Copper SFP+ uses the UTP connector type and fiber SFP+ uses the LC connector type.

SKU	Media		Wavelength	Connector	Power		Power & Sensitivity		Distance
	Type	Fiber	Nominal, nm	Type	Tx Max., dBm	Tx Min., dBm	Rx Max., dBm	Rx Min., dBm	Max., m
SFP-531, SFP-531T	Copper	N/A	N/A	UTP	N/A	N/A	N/A	N/A	30 (10G), 100 (< 10G)
SFP-532, SFP-532T	SR	Multimode	850	LC	-1.0	-5.0, -7.0	+0.5, -1.0	-11.1, -11.2	33 (OM1) 400 (OM4)
SFP-533, SFP-533T	LR	Singlemode	1310	LC	+0.5	-5.2	+0.5	-12.6, -14.4	10k
SFP-534, SFP-534T	ER	Singlemode	1550	LC	+4.0, +3.0	-1.7, -1.0	1.0, +0.5	14.1, -15.8	40k
SFP-535	LRM	Multimode	1310	LC	+0.5	-4.5	+1.5	-6.5	220

Table 3. SFP28 Transceivers

The **25Gbps SFP28** transceiver is a small form-factor pluggable module with support for a range of media types and up to two data rates (10Gb, 25Gb), although Gigamon products only support the 25Gb rate. Fiber SFP28 uses the LC connector type.

SKU	Media		Wavelength	Connector	Power		Power & Sensitivity		Distance
	Type	Fiber	Nominal, nm	Type	Tx Max., dBm	Tx Min., dBm	Rx Max., dBm	Rx Min., dBm	Max., m
SFP-552	SR	Multimode	850	LC	+3.0	-6.4	+3.0	-5.2	100
SFP-552T	SR	Multimode	850	LC	+2.4	-8.4	+2.4	-10.3	100
SFP-553T	LR	Singlemode	1310	LC	+2.0	-5.0	+2.0	-12.0	10k

Table 4. QSFP+ Transceivers

The **40Gbps QSFP+** transceiver is a small form-factor pluggable module with support for a range of media types and up to three data rates (1Gb, 10Gb, 40Gb), although Gigamon products only support the 10Gb and 40Gb rates. Unless stated explicitly, these transceivers also support four independent lanes of 10Gbps rates, which are determined by either wavelength for LC connector types or fiber for MPO connector types. Only the MPO connector types can operate in physical breakout mode.

SKU	Media		Wavelength	Connector	Power		Power & Sensitivity		Distance
	Type	Fiber	Nominal, nm	Type	Tx Max., dBm	Tx Min., dBm	Rx Max., dBm	Rx Min., dBm	Max., m
QSF-502, QSF-502T	SR4	Multimode	850	MPO12	-1.0, +2.4	-5.6	+4.0, +2.4	-5.4, -7.5	150 (OM4)
QSF-503T	LR4	Singlemode	1271, 1291, 1311, 1331	LC	+2.3	-4.0	+3.3	-11.5	10k
QSF-504	ER4	Singlemode	1271, 1291, 1311, 1331	LC	+4.5	+0.3	+3.8	-19.0	40k
QSF-506, QSF-506T	PSM4	Singlemode	1310	MPO12	+1.5, +0.5	4.5, -5.2	+3.0	-12.6	10k
QSF-507, QSF-507T	SR4-ER	Multimode	850	MPO12	+1.0, +2.4	-4.3, -6.0	+3.4, +2.4	-11.1	300 (OM3)
QSF-508	SWDM4	Multimode	850, 880, 910, 940	LC	+3.0	-7.5	+3.0	-9.0	300 (OM3)
QSB-504	BiDi	Multimode	850, 900	LC	+4.0	-6.2	+4.0	-8.2	70 (OM3)/ 100 (OM4)

Table 5. QSFP28 Transceivers

The **100Gbps QSFP28** transceiver is a small form-factor pluggable module with support for a range of media types and up to three data rates (25Gb, 50Gb, 100Gb), although Gigamon products only support the 25Gb and 100Gb rates. Unless stated explicitly, these transceivers also support four independent lanes of 25Gbps rates, which are determined by either wavelength for LC connector types or fiber for MPO connector types. Only the MPO connector types can operate in physical breakout mode.

SKU	Media		Wavelength	Connector	Power		Power & Sensitivity		Distance
	Type	Fiber	Nominal, nm	Type	Tx Max., dBm	Tx Min., dBm	Rx Max., dBm	Rx Min., dBm	Max., m
Q28-502T	SR4	Multimode	850	MPO12	+2.4	-6.4	+3.4	-9.2	100
Q28-503, Q28-503T	LR4	Singlemode	1295, 1300, 1304, 1309	LC	+5.5	-1.3	+4.5	-8.6	10k
Q28-504, Q28-504T	ER4-Lite	Singlemode	1295, 1300, 1304, 1309	LC	+4.5, +4.0	+0.1, -4.0	-3.0, -3.3	-14.65	25k
Q28-506	PLR4	Singlemode	1310	MPO12	+2.0	-3.5	+3.0	-9.0	2k
Q28-508	SWDM4	Multimode	850, 889, 910, 940	LC	+3.0	-6.3	+3.8	-8.2	100 (OM4)
Q28-511T	DR1	Singlemode	1310	LC	+4.0	-0.8	+4.0	-5.9	500
Q28-513	CWDM4	Singlemode	1271, 1291, 1311, 1331	LC	+2.5	-4.0	+2.5	-10.0	2k
Q28-514	FR1	Singlemode	1310	LC	+4.0	-0.2	+5.5	-6.4	2k
QSB-512	BiDi	Multimode	850, 900	LC	+4.0	-1.0	+7.0	-7.1	100 (OM4)
QSB-523T	BiDi	Multimode	850, 910	LC	–	–	+4.0 (40/100GG)	-6 (40G), -7.9 (100G)	100 (OM4)
QSB-524T	BiDi	Multimode	850, 910	LC	+5 (40G), +4 (100G)	-4 (40G), -6 (100G)	+4.0 (40/100GG)	-6 (40G), -7.9 (100G)	100 (OM4)
QSB-531	BiDi	Multimode	850, 910	LC	–	–	+4.0	-8.2	100 (OM4)
QSB-532	BiDi	Multimode	850, 910	LC	+4.0	-6.2	+4.0	-8.2	100 (OM4)

Table 6. QSFP-DD Transceivers

The **400Gbps QSFP-DD** transceiver is a small form-factor pluggable module with support for a range of media types and 400Gb data rate. Unless stated explicitly, these transceivers also support four independent lanes of 100Gbps rates, which are determined by either wavelength for LC connector types or fiber for MPO connector types. Only the MPO connector types can operate in physical breakout mode.

SKU	Media		Wavelength	Connector	Power		Power & Sensitivity		Distance
	Type	Fiber	Nominal, nm	Type	Tx Max., dBm	Tx Min., dBm	Rx Max., dBm	Rx Min., dBm	Max., m
QDD-503	LR4	Singlemode	1271, 1291, 1311, 1331	LC	+5.1	-2.7	+5.1	-9.0	10k
QDD-511	DR4	Singlemode	1310	MPO	+4.0	-2.9	+4.0	-5.9	500
QDD-512	DR4+	Singlemode	1310	MPO	+4.0	-2.4	+4.5	-6.4	2k
QDD-514	FR4	Singlemode	1271, 1291, 1311, 1331	LC	+3.5	-3.3	+3.5	-7.3	2k

Table 7. AOC and DAC Cables

The Direct Attach Copper Cable (DAC) and Active Optical Cable (AOC) are alternate cabling options for device interconnection.

SKU	Type	Length (m)
CBL-205	10G DAC	5
CBL-405	40G AOC	5
CBL-410	40G AOC	10
CBL-450	40G AOC	50
CBL-5005	100G DAC	0.5
CBL-503	100G DAC	3
CBL-505A	40/100G AOC	5
CBL-510A	40/100G AOC	10
CBL-602	400G DAC	2.5

Product Compatibility

Table 8. Compatibility Matrix

This table should be used to determine which transceivers work with each of the Gigamon products.

	G-Tap A Series		GigaVUE TA Series			GigaVUE HC Series			GigaVUE-FM	
SKU	A-SF	A-SF2	TA25, TA25E	TA200, TA200E	TA400, TA400E	HC1	HC1-Plus	HC3	HCT	FM
Q28-502T	–	–	Y	Y	Y	–	Y	Y	Y	Y*
Q28-503, Q28-503T	–	–	Y	Y	Y	–	Y	Y	Y	Y*
Q28-504	–	–	Y	Y	Y	–	Y	Y	–	Y*
Q28-504T	–	–	Y	–	Y	–	Y	Y	–	Y*
Q28-506	–	–	Y	Y	Y	–	Y	Y	Y	Y*
Q28-508	–	–	Y	Y	Y	–	Y	Y	Y	Y*
Q28-511T	–	–	Y	Y	Y	–	Y	Y	–	Y*
Q28-513	–	–	Y	Y	Y	–	Y	Y	Y	Y*
Q28-514	–	–	Y	Y	Y	–	–	Y	Y	Y*
QDD-503	–	–	–	–	Y	–	–	–	Y	–
QDD-511	–	–	–	–	Y	–	–	–	Y	–
QDD-512	–	–	–	–	Y	–	–	–	Y	–
QDD-514	–	–	–	–	Y	–	Y	–	–	–
QSB-504	–	–	Y	Y	Y	Y	Y	Y	Y	–
QSB-512	–	–	Y	Y	Y	–	Y	Y	Y	–
QSB-523T	–	–	Y	Y	Y	Y	Y	Y	Y	Y
QSB-524T	–	–	Y	Y	Y	Y	Y	Y	Y	Y
QSF-502, QSF-502T	–	–	Y	Y	Y	Y	Y	Y	Y	–

* Supported only on GFM-HW2-FM001-HW

	G-Tap A Series		GigaVUE TA Series			GigaVUE HC Series			GigaVUE-FM	
SKU	A-SF	A-SF2	TA25, TA25E	TA200, TA200E	TA400, TA400E	HC1	HC1-Plus	HC3	HCT	FM
QSF-503T	–	–	Y	Y	Y	Y	Y	Y	Y	–
QSF-504	–	–	Y	Y	Y	Y	Y	Y	–	–
QSF-506, QSF-506T	–	–	Y	Y	Y	Y	Y	Y	–	–
QSF-507, QSF-507T	–	–	Y	Y	Y	Y	Y	Y	–	–
QSF-508	–	–	Y	Y	Y	Y	Y	Y	Y	–
SFP-552, SFP-552T	–	–	Y	–	–	–	Y	Y	Y	Y*
SFP-553T	–	–	Y	–	–	–	Y	Y	Y	Y*
SFP-531, SFP-531T	–	–	Y	–	–	Y	Y	Y	Y	Y
SFP-532, SFP-532T	Y	Y	Y	–	–	Y	Y	Y	Y	Y
SFP-533, SFP-533T	Y	Y	Y	–	–	Y	Y	Y	Y	Y
SFP-534, SFP-534T	Y	Y	Y	–	–	Y	Y	Y	Y	Y
SFP-535	Y	Y	Y	–	–	Y	Y	Y	–	Y
SFP-501	Y	Y	Y	–	–	Y	Y	Y	Y	Y
SFP-501T	Y	Y	Y	–	–	Y	Y	Y	Y	Y
SFP-502	Y	Y	Y	–	–	Y	Y	Y	Y	Y
SFP-502T	Y	Y	Y	–	–	Y	Y	Y	Y	Y
SFP-503	Y	Y	Y	–	–	Y	Y	Y	Y	Y
SFP-503T	Y	Y	Y	–	–	Y	Y	Y	Y	Y
SFP-505T	–	Y	–	–	–	Y	–	–	Y	–

* Supported only on GFM-HW2-FM001-HW

G-Tap A Series			GigaVUE TA Series			GigaVUE HC Series			GigaVUE-FM	
SKU	A-SF	A-SF2	TA25, TA25E	TA200, TA200E	TA400, TA400E	HC1	HC1-Plus	HC3	HCT	FM
CBL-205	–	Y	Y	–	–	Y	Y	Y	Y	Y
CBL-405	–	–	–	Y	–	–	Y	–	–	–
CBL-410	–	–	–	Y	–	–	Y	–	–	–
CBL-450	–	–	–	Y	–	–	Y	–	–	–
CBL-503	–	–	Y	Y	Y	–	Y	Y	Y	Y
CBL-505A	–	–	Y	Y	Y	Y	Y	Y	Y	Y
CBL-510A	–	–	Y	Y	Y	Y	Y	Y	Y	Y
CBL-602	–	–	–	–	Y	–	–	–	–	–

Ordering Information

Table 9. Orderable Part Numbers

SKU	Description
Q28-502T	100G QSFP28, Multimode SR4. TAA Compliant.
Q28-503	100G QSFP28, Singlemode LR4. Not TAA Compliant.
Q28-503T	100G QSFP28, Singlemode LR4. TAA Compliant.
Q28-504	100G QSFP28, Singlemode ER4-Lite. Not TAA Compliant.
Q28-504T	100G QSFP28, Singlemode ER4-Lite. TAA Compliant.
Q28-506	100G QSFP28, Singlemode PLR4 2km. Not TAA Compliant.
Q28-508	100G QSFP28, Multimode SWDM4. Not TAA Compliant.
Q28-511T	100G QSFP28, Singlemode DR1. TAA Compliant.
Q28-513	100G QSFP28, Singlemode CWDM4. Not TAA Compliant.
Q28-514	100G QSFP28, Singlemode FR1. Not TAA Compliant.
QDD-503	400G QSFP28, Singlemode LR4. Not TAA Compliant.
QDD-511	400G QSFP28, Singlemode DR4. Not TAA Compliant.

SKU	Description
QDD-512	400G QSFP28, Singlemode DR4+. Not TAA Compliant.
QDD-514	400G QSFP28, Singlemode FR4. Not TAA Compliant.
QSB-504	40G QSFP+ BiDi, Multimode SR, Full Duplex. Not TAA Compliant.
QSB-512	100G QSFP28 BiDi, Multimode SR, Full Duplex. Not TAA Compliant.
QSB-531	100G QSFP28 BiDi, Multimode SR1.2, KP4 FEC support, Rx-Only For Use With Taps. Not TAA Compliant.
QSB-532	100G QSFP28 BiDi, Multimode SR1.2, KP4 FEC support, Full Duplex. Not TAA Compliant.
QSB-523T	40/100G QSFP28 Dual-Rate BiDi, Multimode SR, Rx-Only For Use With Taps. TAA Compliant.
QSB-524T	40/100G QSFP28 Dual-Rate BiDi, Multimode SR, Full Duplex. TAA Compliant.
QSF-502	40G QSFP+, Multimode SR4. Not TAA Compliant.
QSF-502-10P	10-pack of 40G QSFP+, Multimode SR4. Not TAA Compliant.
QSF-502T	40G QSFP+, Multimode SR4. TAA Compliant.
QSF-502T-10P	10-pack of 40G QSFP+, Multimode SR4. TAA Compliant.
QSF-503T	40G QSFP+, Singlemode LR4. TAA Compliant.
QSF-503T-5P	5-pack of 40G QSFP+, Singlemode LR4. TAA Compliant.
QSF-504	40G QSFP+, Singlemode ER4. Not TAA Compliant.
QSF-506	40G QSFP+ Parallel Singlemode LR for 4x10G Breakout, 1310 nm. Not TAA Compliant.
QSF-506T	40G QSFP+ Parallel Singlemode LR for 4x10G Breakout, 1310 nm. TAA Compliant.
QSF-507	40G QSFP+, Multimode SR4 Extended Reach. Not TAA Compliant.
QSF-507T	40G QSFP+, Multimode SR4 Extended Reach. TAA Compliant.
QSF-508	40G QSFP+, Multimode SWDM4. Not TAA Compliant.
SFP-501	1G SFP, Copper, UTP with RJ45 interface. Not TAA Compliant.
SFP-501T	1G SFP, Copper, UTP with RJ45 interface. TAA Compliant.
SFP-502	1G SFP, Multimode SX. Not TAA Compliant.
SFP-502T	1G SFP, Multimode SX. TAA Compliant.
SFP-503	1G SFP, Singlemode LX. Not TAA Compliant.
SFP-503T	1G SFP, Singlemode LX. TAA Compliant.
SFP-505T	100M SFP, Multimode FX. TAA Compliant.

SKU	Description
SFP-531	10G SFP+, Copper 10GBASE-T, RJ45 interface. Not TAA Compliant.
SFP-531T	10G SFP+, Copper 10GBASE-T, RJ45 interface. TAA Compliant.
SFP-532	10G SFP+, Multimode SR. Not TAA Compliant.
SFP-532-20P	20-pack of 10Gb SFP+, Multimode SR. Not TAA Compliant.
SFP-532T	10G SFP+, Multimode SR. TAA Compliant.
SFP-532T-20P	20-pack of 10Gb SFP+, Multimode SR. TAA Compliant.
SFP-533	10G SFP+, Singlemode LR. Not TAA Compliant.
SFP-533-20P	20-pack of 10Gb SFP+, Singlemode LR. Not TAA Compliant.
SFP-533T	10G SFP+, Singlemode LR. TAA Compliant.
SFP-533T-20P	20-pack of 10Gb SFP+, Singlemode LR. TAA Compliant.
SFP-534	10G SFP+, Singlemode ER. Not TAA Compliant. (Special Order)
SFP-534T	10G SFP+, Singlemode ER. TAA Compliant.
SFP-535	10G SFP+, Multimode 1310nm LRM. Not TAA Compliant. (Special Order)
SFP-552	25G SFP28, Multimode SR. Not TAA Compliant.
SFP-552T	25G SFP28, Multimode SR. TAA Compliant.
SFP-553T	25G SFP28, Singlemode LR. TAA Compliant.
CBL-205	SFP+ to SFP+ 10Gb Direct Attach Copper cable, 5 meters. Not TAA Compliant.
CBL-405	QSFP+ to QSFP+ 40Gb Active Fiber Cable, 5 meters. TAA Compliant.
CBL-410	QSFP+ to QSFP+ 40Gb Active Fiber Cable, 10 meters. TAA Compliant.
CBL-450	QSFP+ to QSFP+ 40Gb Active Fiber Cable, 50 meters. TAA Compliant.
CBL-503	QSFP28 to QSFP28 100Gb Direct Attach Copper cable, 3 meters. TAA Compliant.
CBL-5005	QSFP28 to QSFP28 100Gb Direct Attach Copper cable, 0.5 meters. TAA Compliant.
CBL-505A	QSFP28 to QSFP28 40/100Gb Active Fiber Cable, 5 meters. TAA Compliant.
CBL-510A	QSFP28 to QSFP28 40/100Gb Active Fiber Cable, 10 meters. TAA Compliant.
CBL-550	QSFP28 to QSFP28 40/100Gb Active Fiber Cable, 50 meters. TAA Compliant.
CBL-602	QSFP-DD to QSFP-DD 400Gb Direct Attach Copper cable, 2.5 meters. Not TAA compliant.

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® delivers an AI-powered Deep Observability Pipeline that provides network-derived telemetry to cloud, security, and observability tools. With AI-driven insights across packets, flows, and application metadata, organizations gain complete visibility into all data in motion to detect threats concealed in encrypted and lateral traffic, resolve network and application performance issues, and validate compliance while reducing operational cost and complexity. Gigamon is trusted by 4,000+ organizations, including 83 of the Fortune 100 and hundreds of public sector agencies and educational institutions. Learn more at gigamon.com.

**Worldwide Headquarters**

3300 Olcott Street, Santa Clara, CA 95054 USA
+1 (408) 831-4000 | gigamon.com

© 2015-2026 Gigamon. All rights reserved. Gigamon and Gigamon logos are trademarks of Gigamon in the United States and/or other countries. Gigamon trademarks can be found at gigamon.com/legal-trademarks. All other trademarks are the trademarks of their respective owners. Gigamon reserves the right to change, modify, transfer, or otherwise revise this publication without notice.