# **G-TAP A Series**

Comprehensive, Flexible, High Density and Versatile Tapping for Any Copper and Mixed Media Networks





Figure 1a. G-TAP A-TX and G-TAP A-SF Front Views





Figure 1b. G-TAP A-TX2 and G-TAP A-SF2 Front Views

### **Key Benefits**

- Powerful traffic mirroring capabilities
- Multiple power options and redundancy
- · Remote and local management#

- Broad range of network speeds support
- · Network fail-safety
- · Integration with GigaVUE visibility nodes\*

<sup>#</sup> Except for GTP-ATX21-C model

<sup>\*</sup> G-TAP A Series 2 only

### **Product Description**

The GigaTAP™ A Series is a line of network TAPs designed with the Gigamon "Always On" architecture. This one-of-a-kind architecture eliminates network link downtime on network connections through the use of up to four power sources, including alternating current (AC), direct current (DC), Power over Ethernet (PoE\*), and on-board battery backup. While using any of the primary forms of power (AC, DC, PoE), the unique design of G-TAP A Series constantly charges the integrated backup battery, which allows it to assume power load in the event of a primary power failure. This eliminates link downtime associated to link renegotiation on the network devices connected to the TAP.

The G-TAP A Series also provides intelligent management capabilities that monitor link states of connected devices and the power state of all sources of power. In the event that primary power is lost, SNMP traps alert users that the TAP is utilizing the backup battery. The SNMP traps are re-triggered as battery levels drop to ensure rapid alert and renewal of the primary power source, eliminating further network downtime. The G-TAP A Series' intelligent monitoring also offers an added level of network security to your network by providing SNMP trap alerts when existing links are removed or when new links are added. The G-TAP A Series 2 has the additional capabilities of being managed by GigaVUE-FM (along with other GigaVUE visibility nodes), secure CLI login via SSH, and SNMP version 3 for issuing trap notifications.

The G-TAP A Series is shipped with its backup battery uninstalled. The backup battery provides a failsafe in case all primary power sources (AC, DC or PoE) are unavailable. Primary power sources constantly charge the backup battery so it's ready to assume the power load in the event of a power failure on the primary sources.



Figure 2. Front view of G-TAP A-TX and G-TAP A-SF units in rack mounting shelf



Figure 3a. Front view of power supply tray for G-TAP A-TX and G-TAP A-SF units



Figure 3b. Rear view of power supply tray for G-TAP A-TX and G-TAP A-SF units



Figure 4. Rear view of G-TAP A-TX2 and G-TAP A-SF2 units

<sup>\*</sup> PoE is not supported as an optional power source for G-TAP A Series 2  $\,$ 

#### **G-TAP A-TX and A-SF Deployment**

#### With or without the Rack Mount Tray

G-TAP A-TX and A-SF TAPs can be used either standalone or installed in the optional, three-across, 1RU rack mount tray (see Figure 2). The rack mount tray installs in a standard 1RU rack space using the provided hardware. You can install in two-post or four-post racks with a minimum width of 17.75 inches.

#### Providing power

Power to the G-TAP A-TX and A-SF units can be provided either using the available power bricks or using the optional G-TAP A Series Power Supply Tray (PST) which is designed to power larger deployments (see Figures 3a and 3b). The PST fits in a standard 19-inch rack and can power up to twenty-four (24) TAPs. The PST offers redundant power supplies for each half of the system and can be connected to two (2) different power grids for added failsafe capabilities. This allows for redundant power connections for each of up to twelve (12) TAPs per PST. Custom DC-to-DC twist-lock power cables are used to connect the rear of the PST to the rear of the A-TX and A-SF TAPs. Cable lengths are 52in (132cm).

#### **G-TAP A-TX2 and A-SF2 Deployment**

The G-TAP A-TX2 and A-SF2 TAPs can be used either standalone or mounted in pairs in a standard 19-inch rack using the provided mounting rails.

Each G-TAP A Series 2 can be powered using the available power bricks.

### **Key Features and Benefits**

Functionality	Full line-rate traffic mirroring	Copy 100% of network traffic including errors, non-standard network traffic, and network packets that do not conform to established protocol standards enabling detailed analysis, security, and monitoring
	Multiple network and tool interfaces:  Copper 10/100/1000 UTP & SFP  Fiber Multimode 1/10G LC & SFP/SFP+  Fiber Singlemode 1/10G LC &  SFP/SFP+  Direct-Attach 10G SFP+  Media conversion SFP/SFP+	<ul> <li>Depending upon G-TAP A Series model:</li> <li>Access and mirror traffic from any network type up to 10G</li> <li>Feed mirrored traffic to monitoring infrastructure with any port type, whether for performance, security or troubleshooting purposes</li> </ul>
	· Copper Ethernet Fail-to-Wire **	Additional network fail-safety in case primary power sources are lost and backup battery is also drained
Management#	Remote management using CLI via: • Telnet • SSH*	<ul> <li>Easily configure SNMP and monitor the states of the G-TAPs using industry familiar CLI syntax</li> <li>Access the CLI securely*</li> </ul>
	Remote management using GUI via GigaVUE-FM*	Single-pane management with Gigamor Visibility Fabric (VAF), in addition to physical traffic feed integration
	SNMP Traps via SNMP v1, v2, and v3*	Obtain alerts and notifications when changes occur in the G-TAP's link state, power sources and battery levels

Power	Multiple power source options: AC, DC, PoE ***	Flexibility to use in any site with differen power needs and requirements
	Redundant and failsafe power:  Optional dual external power feeds Built-in battery backup	Continuous operation without network interruption during power loss events, including:  Loss of a single power feed  Loss of all external power feeds
	Optional Power Supply Tray (PST) for powering up to eight (8) rack mount trays, i.e. twenty-four (24) G-TAP A-TX/A-SF units	Easy and compact external power provisioning for large installations

# **Product Specifications**

### **G-TAP A-SF AND A-SF2 TRANSCEIVER DETAILS**

Operating Wavelength (nm)	Max Link Distance	Cable Type	Connector Type	Average Launch Power (dBm)	Receiver Sensitivity (dBm)	Comments
850 (SX)	200 - 550 m	Multimode	LC	-9.5	-17.0	Depends on fiber type
1310 (LX)	10 km	Singlemode	LC	-9.5	-19.0	_
1550 (ZX)	40 km	Singlemode	LC	-4.0	-21.0	Special order
CAT-5 Copper (SFP Copper)	100 m	UTP CAT-5 or better	RJ45	N/A	N/A	-
850 (SR)	300 m	Multimode	LC	-7.3	-11.1	_
1310 (LR)	10 km	Singlemode	LC	-5.2 (OMA)	-12.6 (OMA)	_
1550 (ER)	40 km	Singlemode	LC	-1.7	-11.3	Special order
SFP+ Direct Attach (SFP+ Copper)	1m (30 AWG max) 5m (26 AWG max)	SFP+ Direct Attach Copper	SFP+	N/A	N/A	-
CAT-6a Copper (SFP+ Copper)	100 m	UTP CAT-6a or better	RJ45	N/A	N/A	-
	(nm)  850 (SX)  1310 (LX)  1550 (ZX)  CAT-5 Copper (SFP Copper)  850 (SR)  1310 (LR)  1550 (ER)  SFP+ Direct Attach (SFP+ Copper)  CAT-6a Copper	(nm)  850 (SX) 200 - 550 m  1310 (LX) 10 km  1550 (ZX) 40 km  CAT-5 100 m  Copper (SFP Copper)  850 (SR) 300 m  1310 (LR) 10 km  1550 (ER) 40 km  SFP+ Direct Attach (30 AWG max) (SFP+ Copper)  STP+ Copper (26 AWG max)  CAT-6a 100 m  Copper	(nm)         850 (SX)         200 - 550 m         Multimode           1310 (LX)         10 km         Singlemode           1550 (ZX)         40 km         Singlemode           CAT-5         100 m         UTP CAT-5 or better           (SFP Copper)         300 m         Multimode           1310 (LR)         10 km         Singlemode           1550 (ER)         40 km         Singlemode           SFP+ Direct Attach (30 AWG max)         Attach Copper         Attach Copper           (26 AWG max)         Copper         Copper	(nm)         Singlemode         LC           1310 (LX)         10 km         Singlemode         LC           1550 (ZX)         40 km         Singlemode         LC           CAT-5 (Copper (SFP Copper))         100 m         UTP CAT-5 or better         RJ45 or better           850 (SR)         300 m         Multimode         LC           1310 (LR)         10 km         Singlemode         LC           1550 (ER)         40 km         Singlemode         LC           SFP+ Direct Attach (30 AWG max) (SFP+ Copper)         Attach Copper         SFP+ Direct Copper         SFP+ Direct Copper           CAT-6a Copper         100 m         UTP CAT-6a or better         RJ45 or better	Name	Name

<sup>#</sup> Except for GTP-ATX21-C model

\* Only available with G-TAP A Series 2

\*\* Only available for G-TAP A-TX and A-TX2

\*\*\* PoE is not available as a power source for G-TAP A Series 2

### PHYSICAL DIMENSIONS AND WEIGHT

Product	Height	Width	Depth	Weight
G-TAP A-TX	1.75in (4.44cm)	5.5in (13.97cm)	9.75in (24.76cm)	3.12lbs (1.41kg)
G-TAP A-SF	1.75in (4.44cm)	5.5in (13.97cm)	9.75in (24.76cm)	3.12lbs (1.41kg)
Power Supply Tray (PST)				
G-TAP A-TX2	1.75in (4.44cm)	8.75in (22.2cm)	10.25in (26.0cm)	8.64lbs (3.93kg)
G-TAP A-SF2	1.75in (4.44cm)	8.75in (22.2cm)	10.25in (26.0cm)	8.40lbs (3.82kg)

# A-TX/SF POWER REQUIREMENTS

Power Type	Specifications
Alternating Current (AC)	100 to 240 V, 47 to 63 Hz, nominal 18 mA @ 120 V
Direct Current (DC)	-36 to -72 V, nominal 350 mA @ -48 V, reverse-polarity protected inputs
Power over Ethernet (PoE)	Type 1 (802.3af) – CAT3 or higher Type 2 (802.3at) – CAT5 or higher

### **OPTIONAL PST POWER REQUIREMENTS**

Power Type	Specifications
Alternating Current (AC)	100 to 240 V, 47 to 63 Hz, max 4 A @ 100V, nominal 3.4 A @ 110 V and 337 W (1149 BTU/hr)
Direct Current (DC)	-40 to -72 V, max 10 A @ 40 V, nominal 6.4 A @ -48 V and 308 W (1050 BTU/hr)

# A-TX2/SF2 POWER REQUIREMENTS

Power Type	Specifications	
Alternating Current (AC)	100 to 240 V, 47 to 63 Hz, nominal 420 mA @ 120 V	
Direct Current (DC)	13 V, nominal 4 A, 4-pin circular connector	

### **ENVIRONMENTAL SPECIFICATIONS**

Attribute	Specifications
Operating Temperature	32°F to 104°F (0°C to 40°C)
Operating Relative Humidity	20% to 80%, 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 15,000ft (4.6km)

### **STANDARDS AND PROTOCOLS**

Attribute	Specifications
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+, supports IPv4 and IPv6

### **REGULATORY AND SAFETY COMPLIANCE**

Attribute	Specifications
Safety	UL 60950-1; CSCAC 2212; EN 60950-1; IEC-60950-1, UL 62368-1; EN 62368-1; IEC 62368-1
RoHS	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 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

# **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 <a href="https://www.gigamon.com/support/support-and-services.html">https://www.gigamon.com/support-and-services.html</a>.

### **WARRANTY**

Туре	Description
Hardware	Gigamon 1-Year Hardware Limited Warranty included with purchase
Software	1-Year Software Limited Warranty included with purchase
Support	1-Year Standard Support included with purchase

### G-TAP A SERIES 1 (A-TX AND A-SF) ORDERING INFORMATION

Part Number	Description
GTP-ATX00	G-TAP A Series, 1-segment "Always On" Copper TAP, No Power brick
GTP-ATX01	G-TAP A Series, 1-segment "Always On" Copper TAP, AC Power brick
GTP-ATX01-UN	G-TAP A Series, Always On Copper TAP, AC Power (EU, UK, NA/JP, AU plugs).
GTP-ATX02	G-TAP A Series, 1-segment "Always On" Copper TAP, DC Power brick
GTP-ASF00	G-TAP A Series, 1-segment "Always On" SFP/SFP+ TAP, No Power brick
GTP-ASF01	G-TAP A Series, 1-segment "Always On" SFP/SFP+ TAP, AC Power brick
GTP-ASF01-UN	G-TAP A Series, Always On SFP/SFP+ TAP, AC Power (EU, UK, NA/JP, AU plugs).
GTP-ASF02	G-TAP A Series, 1-segment "Always On" SFP/SFP+ TAP, DC Power brick
PBK-GTA00-UN	Power Brick for G-TAP A Series (AC to DC transformer), EU, UK, NA/JP, AU plugs. Not TAA Compliant.
PBK-GTA01	Power Brick for G-TAP A Series (AC to DC transformer). Not TAA Compliant.
PBK-GTA03	Power Brick for G-TAP A Series (AC to DC transformer), EU Plug. Not TAA Compliant.
PBK-GTA05	Power Brick for G-TAP A Series (AC to DC transformer), UK Plug. Not TAA Compliant.
PBK-GTA07	Power Brick for G-TAP A Series (AC to DC transformer), AU Plug. Not TAA Compliant.
BAT-GTA00	Battery Pack G-TAP A Series
PST-GTA01	Power Supply Tray, powers up to 8 RMT-GTA03 trays, AC Power

### G-TAP A SERIES 1 (A-TX AND A-SF) ORDERING INFORMATION CONTINUED

Part Number	Description
PST-GTA02	Power Supply Tray, powers up to 8 RMT-GTA03 trays, DC Power
PWR-GTA01	Spare Power Supply Module, Requires G-TAP A Series Power Supply Tray, AC
PWR-GTA02	Spare Power Supply Module, Requires G-TAP A Series Power Supply Tray, DC
RMT-GTA03	Rack Mount Tray, 3-bay G-TAP A Series

### G-TAP A SERIES 2 (A-TX2 AND A-SF2) ORDERING INFORMATION

Part Number	Description
GTP-ATX21	G-TAP A Series 2, Always On Copper TAP, taps four 10/100/1000BASE-T links, fan assembly, one power brick (NA), rack mount kit
GTP-ATX21-C	G-TAP A Series 2, Always On Copper Tap, 4 x 10/100/1000BASE-T, Disabled Management and Console ports. <b>Note:</b> This model is not yet released.
GTP-ASF21	G-TAP A Series 2, Always On SFP/SFP+ TAP, taps four 1Gb/10Gb Copper or Fiber links, fan assembly, one power brick (NA), rack mount kit
PBK-GTA21	120W Power Brick for G-TAP A2 Series, AC Power NA Plug (for GTP-ATX21 and ASF21)
PCD-00A21	Power cord, G-TAP A Series 2, 10A/125V, 1.8m, NA plug
PCD-00A23	Power cord, G-TAP A Series 2, 2.5A/250V, 1.8m, EU plug
PCD-00A25	Power cord, G-TAP A Series 2, 2.5A/250V, 1.8m, UK plug
PCD-00A27	Power cord, G-TAP A Series 2, 2.5A/250V, 1,8m, AU plug
PCD-00A29	Power cord, G-TAP A Series 2, 2.5A/125V, 1.8m, JP plug
BAT-GTA20	G-TAP A Series 2 Battery Pack

### For More Information

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

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