G-TAP M Series
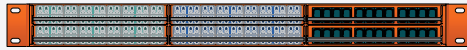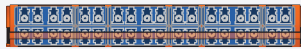
High/Low Density 1/2 RU Chassis

High/Low Density 1 RU Chassis
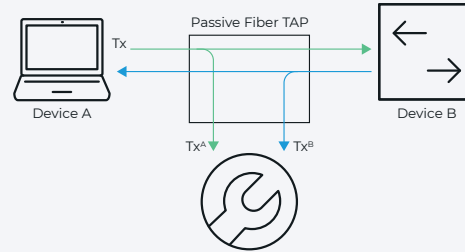
High-Density LC TAP Module

High-Density MPO TAP Module

Breakout Panel

Passive Fiber TAP

Tx

Device A

Device B

Tx^A

Tx^B

Product Description

The G-TAP M Series is a key traffic acquisition piece of the Gigamon Deep Observability Pipeline, and is a variety of passive fiber optical TAPs, for high density, lower density and unidirectional deployments, that require no power source to operate. By splitting the light optically, the G-TAP M Series enables network operators to passively monitor full duplex fiber optic links, without impacting network traffic.

With the high-density family, up to 18 full duplex links can be tapped in a ½ RU space and up to 36 full duplex links can be tapped in a 1 RU space, allowing for more visibility with less space and lower costs. There is a "LT" family for easier deployment in lower density situations. There is also a "ULT" family (see the G-TAP M Series Unidirectional TAP Family data sheet) specifically designed to provide additional no-return-path isolation to prevent signals that might be maliciously or accidentally transmitted into the monitor port of the TAP from entering or disrupting the network. Also available is a family of breakout panels for where these are needed.

The G-TAP M Series utilizes advanced thin-film technology to minimize insertion loss and maximize consistency across optics types and optical transceiver vendors when deploying within the narrow optical budgets of fiber (especially multimode) networks. High-capacity networks require a tapping solution with the highest possible density and quality to detect security threats and performance issues throughout the network. No special cabling or patch cords are required, even for 40Gb, 100Gb, and 400Gb deployments.

The G-TAP M Series is a modular platform with the choice of a ½ RU or 1 RU rack-mountable chassis that hold up to three (3) or six (6) TAP modules, respectively. Each TAP module supports up to six network links, depending on the model. A range of multimode (MM) and singlemode (SM) as well as 50/50, 60/40 and 70/30 split ratios are available. The modularity not only provides flexibility in choosing link speed, fiber type, split ratio, and density, but also facilitates continued network visibility for performance monitoring and security with future optical network technologies.

The patch panel modules convert a single 40Gb, 100Gb, or 400Gb MPO link into four 10Gb, 25Gb, or 100Gb LC links (and vice versa) and are a convenient, organized alternative to using breakout cables: simply connect a normal MPO-12 patch cord from the transceiver to the patch panel.

Table 1: Features and Benefits

Features/Applications	Benefits
Full Fidelity Traffic	Because optical TAPs split the light, 100 percent of the traffic is replicated for monitoring purposes. Unlike SPAN ports, which may throttle output based on load, TAPs forward everything at full line rate, including errored, malformed and non-standard packets.
No Network Impact	As fully passive devices, optical TAPs do not disrupt network traffic once installed, making for a highly reliable monitoring solution.
Deep Observability Pipeline Integration	TAPs provide the foundation of an on-prem deep observability pipeline. G-TAPs are fully compatible with GigaVUE HC Series and GigaVUE TA Series of visibility nodes, providing full access to sophisticated traffic forwarding with Flow Mapping® and traffic intelligence with GigaSMART®.

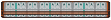# TAP Module Types

Table 2a: High Density TAP Summary

Part Number	Link Speed/Standard	Fiber Type	Wavelength	Connector[1]	Links	Split Ratio	Network Loss[2]	Monitor Loss[2]
TAP-M251T	1/10/25/40/100Gb SX/SR/SWDM4	Multimode 50/125μm OM5	830-940nm	LC	6	50/50	3.9dB	3.9dB
TAP-M253T	1/10/25/40/100/400Gb LX/LR/LR4/CWDM4/EX/ ER/ZX/ZR/FR4/LR4	Singlemode	1270-1550nm	LC	6	50/50	3.7dB	3.7dB
TAP-M271T	1/10/25/40/100Gb SX/SR/SWDM4	Multimode 50/125μm OM5	830-940nm	LC	6	70/30	2.2dB	6.2dB
TAP-M273T	1/10/25/40/100/400Gb LX/LR/LR4/CWDM4/EX/ ER/ZX/ZR/FR4/LR4	Singlemode	1270-1550nm	LC	6	70/30	2.0dB	6.1dB
TAP-M451T	40/100/400Gb SR4	Multimode 50/125μm OM5	830-870nm	MPO-12	3	50/50	4.3dB[3]	4.3dB[3]
TAP-M453T	40/100/400Gb PSM4/DR4/DR4+	Singlemode	1270-1550nm	MPO-12	3	50/50	4.3dB	4.3dB
TAP-M471T	40/100/400Gb SR4	Multimode 50/125μm OM5	830-870nm	MPO-12	3	70/30	2.8dB[3]	6.4dB[3]
TAP-M473T	40/100/400Gb PSM4/DR4/DR4+	Singlemode	1270-1550nm	MPO-12	3	70/30	2.8dB	6.7dB
TAP-M506T	40/100Gb BiDi	Multimode 50/125μm OM5	840-910nm	LC	4	50/50	3.9dB	3.9dB

Table 2b: Lower Density TAP Summary

Part Number	Link Speed/Standard	Fiber Type	Wavelength	Connector[1]	Links	Split Ratio	Network Loss[2]	Monitor Loss[2]
TAP-M251LT	1/10/25/40/100Gb SX/SR/SWDM4	Multimode 50/125µm OM5	830-940nm	LC	2	50/50	3.9dB	3.9dB
TAP-M252LT	1/10/25Gb SX/SR	Multimode 62.5/125µm OM1	830-870nm	LC	2	50/50	3.9dB	3.9dB
TAP-M253LT	1/10/25/40/100/400Gb LX/LR/LR4/CWDM4/EX/ ER/ZX/ZR/FR4/LR4	Singlemode	1270-1550nm	LC	2	50/50	3.7dB	3.7dB
TAP-M261LT	1/10/25/40/100Gb SX/SR/SWDM4	Multimode 50/125µm OM5	830-940nm	LC	2	60/40	3.2dB	5.2dB
TAP-M262LT	1/10/25Gb SX/SR	Multimode 62.5/125µm OM1	830-870nm	LC	2	60/40	3.2dB	5.2dB
TAP-M263LT	1/10/25/40/100/400Gb LX/LR/LR4/CWDM4/EX/ ER/ZX/ZR/FR4/LR4	Singlemode	1270-1550nm	LC	2	60/40	3.1dB	5.0dB
TAP-M271LT	1/10/25/40/100Gb SX/SR/SWDM4	Multimode 50/125µm OM5	830-940nm	LC	2	70/30	2.2dB	6.2dB
TAP-M272LT	1/10/25Gb SX/SR	Multimode 62.5/125µm OM1	830-870nm	LC	2	70/30	2.2dB	6.2dB
TAP-M273LT	1/10/25/40/100/400Gb LX/LR/LR4/CWDM4/EX/ ER/ZX/ZR/FR4/LR4	Singlemode	1270-1550nm	LC	2	70/30	2.0dB	6.1dB

For information about the Unidirectional TAPs, see the G-TAP M Series Unidirectional TAP Family data sheet.

Table 2c: Breakout Panel Summary

Part Number	Link Speed	Fiber Type	Wavelength	Connector[1]	Links	Split Ratio	Network Loss[2]	Monitor Loss[2]
PNL-M341T	40/100/400Gb SR4 to 4x10/25/100Gb SR	Multimode 50/125µm OM5	850nm & 1300nm	MPO-12(UPC) to LC(UPC)	3	N/A	40Gb Insertion Loss ≤0.7dB 10Gb Insertion Loss ≤0.3dB	N/A
PNL-M343T	40/100/400Gb PLR4 to 4x10/25/100Gb LR	Singlemode	1270-1630nm	MPO-12(UPC) to LC(UPC)	3	N/A	40Gb Insertion Loss ≤0.75dB 10Gb Insertion Loss ≤0.3dB	N/A

[1] UPC unless otherwise specified

[2] Includes connector loss

[3] Measured using MPO/MTP cabling

Specifications

Table 3: Physical Dimensions And Weight

Part	Height	Width	Depth	Weight
½ RU TAP M100T Chassis	0.81in (2.19cm)	17.3in (44.0cm)	6.10in (15.5cm)	Empty: 3.3lbs (1.5kg) Full: 8.58lbs (3.9kg)
1 RU TAP M200/M200T Chassis	1.72in (4.38cm)	17.3in (44.0cm)	6.10in (15.5cm)	Empty: 3.8lbs (1.7kg) Full: 14.3lbs (6.5kg)
High Density TAP Modules	0.84in (2.14cm)	5.39in (13.7cm)	8.94in (22.7cm)	1.72lbs (0.78kg) typical
Lower Density TAP Modules	0.84in (2.14cm)	5.39in (13.7cm)	8.94in (22.7cm)	1.63lbs (0.74kg) typical
Breakout Panel Modules	0.84in (2.14cm)	5.39in (13.7cm)	8.94in (22.7cm)	1.67lbs (0.76kg) typical

Table 4: Environmental Characteristics

Type	Specification
Storage Temperature	-4°F to 158°F (-20°C to 70°C)
Operating Temperature	32°F to 140°F (0°C to 60°C)
Storage Humidity	10% to 90%, relative, non-condensing
Operating Humidity	10% to 90%, relative, non-condensing
Altitude	Up to 15,000ft (4.6km)

Table 5: Regulatory Compliance

Regulatory Compliance
The G-TAP M Series complies with ROHS 2 and CE (EU directive 2011/65/EU).
All TAA compliant G-TAP M Series products also comply with ROHS (EU) 2015/863.

Ordering Information

Table 6a: Fiber TAP Chassis

Part Number	Description
TAP-M100T	G-TAP M Series ½ RU chassis. Supports up to 3 M Series Tap modules. TAA compliant.
TAP-M200/M200T	G-TAP M Series 1 RU chassis. Supports up to 6 M Series Tap modules. TAA compliant.

Table 6b: High Density Fiber TAP Modules

Part Number	Description
TAP-M251T	G-TAP M Series 1/10/25/40/100Gb 50/50 tap module, 830-940nm MM 50/125µm OM5, taps 6 links, LC, requires TAP-M100T or TAP-M200T chassis. TAA Compliant.
TAP-M253T	G-TAP M Series 1/10/25/40/100/400Gb 50/50 tap module, 1270-1550nm SM, taps 6 links, LC, requires TAP-M100T or TAP-M200T chassis. TAA Compliant.
TAP-M271T	G-TAP M Series 1/10/25/40/100Gb 70/30 tap module, 830-940nm MM 50/125µm OM5, taps 6 links, LC, requires TAP-M100T or TAP-M200T chassis. TAA Compliant.
TAP-M273T	G-TAP M Series 1/10/25/40/100/400Gb 70/30 tap module, 1270-1550nm SM, taps 6 links, LC, requires TAP-M100T or TAP-M200T chassis. TAA Compliant.
TAP-M451T	G-TAP M Series 40/100/400Gb, 50/50 tap module, 830-870nm MM 50/125µm OM5, taps 3 links, MPO, requires TAP-M100T or TAP-M200T chassis. TAA Compliant.
TAP-M453T	G-TAP M Series 40/100/400Gb 50/50 tap module, 1270-1550nm SM, taps 3 links, MPO, requires TAP-M100T or TAP-M200T chassis. TAA Compliant.
TAP-M471T	G-TAP M Series 40/100/400Gb, 70/30 tap module, 830-870nm MM 50/125µm OM5, taps 3 links, MPO, requires TAP-M100T or TAP-M200T chassis. TAA Compliant.
TAP-M473T	G-TAP M Series 40/100/400Gb 70/30 tap module, 1270-1550nm SM, taps 3 links, MPO, requires TAP-M100T or TAP-M200T chassis. TAA Compliant.
TAP-M506T	G-TAP M Series 40/100Gb 50/50 BiDi tap module, 840-910nm MM 50/125µm OM5, taps 4 links, LC, requires TAP-M100T or TAP-M200T chassis. TAA Compliant.

Table 6c: Lower Density Fiber TAP Modules

Part Number	Description
TAP-M251LT	G-TAP M Series 1/10/25/40/100Gb 50/50 tap module, 830-940nm MM 50/125μm OM5, taps 2 links, LC, requires TAP-M100T or TAP-M200T chassis. TAA Compliant.
TAP-M252LT	G-TAP M Series 1/10/25Gb 50/50 tap module, 830-870nm MM 62.5/125μm OM1, taps 2 links, LC, requires TAP-M100T or TAP-M200T chassis. TAA Compliant.
TAP-M253LT	G-TAP M Series 1/10/25/40/100/400Gb 50/50 tap module, 1270-1550nm SM, taps 2 links, LC, requires TAP-M100T or TAP-M200T chassis. TAA Compliant.
TAP-M261LT	G-TAP M Series 1/10/25/40/100Gb 60/40 tap module, 830-940nm MM 50/125μm OM5, taps 2 links, LC, requires TAP-M100T or TAP-M200T chassis. TAA Compliant.
TAP-M262LT	G-TAP M Series 1/10/25Gb 60/40 tap module, 830-870nm MM 62.5/125μm OM1, taps 2 links, LC, requires TAP-M100T or TAP-M200T chassis. TAA Compliant.
TAP-M263LT	G-TAP M Series 1/10/25/40/100/400Gb 60/40 tap module, 1270-1550nm SM, taps 2 links, LC, requires TAP-M100T or TAP-M200T chassis. TAA Compliant.
TAP-M271LT	G-TAP M Series 1/10/25/40/100Gb 70/30 tap module, 830-940nm MM 50/125μm OM5, taps 2 links, LC, requires TAP-M100T or TAP-M200T chassis. TAA Compliant.
TAP-M272LT	G-TAP M Series 1/10/25Gb 70/30 tap module, 830-870nm MM 62.5/125μm OM1, taps 2 links, LC, requires TAP-M100T or TAP-M200T chassis. TAA Compliant.
TAP-M273LT	G-TAP M Series 1/10/25/40/100/400Gb 70/30 tap module, 1270-1550nm SM, taps 2 links, LC, requires TAP-M100T or TAP-M200T chassis. TAA Compliant.

For information about the Unidirectional TAPs, see the G-TAP M Series Unidirectional TAP Family data sheet.

Table 6d: Breakout Fiber TAP Modules

Part Number	Description
PNL-M341T	G-TAP M Series Breakout panel, 3xMPO to 12xLC duplex Multimode, requires TAP-M100T or TAP-M200/M200T chassis. TAA compliant.
PNL-M343T	G-TAP M Series Breakout Panel, 3xMPO to 12xLC duplex Singlemode, requires TAP-M100T or TAP-M200/M200T chassis. TAA compliant.

Support

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-derived intelligence to amplify the power of observability tools. This powerful combination helps 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 ten largest mobile network providers, and hundreds of governments and educational organizations worldwide. To learn more, please visit gigamon.com.

Gigamon®

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

02.25_26