

# Data Sheet

## G-TAP M Series

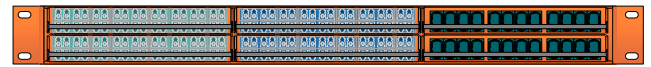
### Product Description

The G-TAP M Series is a family of high-density, passive fiber optical TAPs, which 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. Up to 36 full duplex links can be tapped in a 1RU space, allowing for more visibility with less space and lower costs.

The G-TAP M Series utilizes advanced thin-film technology to minimize insertion loss and maximize consistency across optical transceiver vendors when deploying within the narrow optical budgets of multimode fiber networks. High-capacity 10 gigabit 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 and 100Gb deployments.

The G-TAP M Series is a modular platform with a 1RU rack-mountable chassis that holds up to 6 TAP modules. Each TAP module supports up to 6 network links, depending on model. A combination of multimode (MM) and singlemode (SM) as well as 50/50 and 70/30 split ratios are available. The modularity not only provides flexibility in choosing link speed, fiber type, and split ratios, but also provides space for future growth of visibility for network security and performance monitoring.

The patch panel module converts a 40Gb SR4 MPO link into four 10Gb SR LC links (and vice versa) and is a convenient, organized alternative to using breakout cable: simply connect an MPO-12 patch cord from the 40Gb QSFP+ port to the patch panel.



*G-TAP M Series Chassis*



*TAP-M251  
Module*










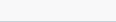
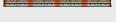
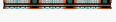


*TAP-M451  
Module*

**Table 1: Features and Benefits**

<b>G-TAP M Series</b>	
<b>Features/Applications</b>	<b>Benefits</b>
<b>Full Fidelity Traffic</b>	Because optical TAPs split the light, 100% 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.
<b>No Network Impact</b>	As fully passive devices, optical TAPs do not disrupt network traffic once installed, making for a highly reliable monitoring solution.
<b>Visibility Platform Integration</b>	TAPs provide the foundation of a traffic visibility platform. GigaTAPs are fully compatible with Gigamon's GigaVUE H Series and GigaVUE TA Series of Visibility Nodes, providing full access sophisticated traffic forwarding with Flow Mapping® and traffic intelligence with GigaSMART®.

Table 2: TAP Summary

Part Number	Link Speed	Fiber Type	Wavelength	Connector <sup>1</sup>	Links	Split Ratio	Network Loss <sup>2</sup>	Monitor Loss <sup>2</sup>
<b>TAP-M251</b> 	1/10Gb SX/SR	Multimode 50µm	850nm	LC	6	50/50	3.9dB	3.9dB
<b>TAP-M271</b> 	1/10Gb SX/SR	Multimode 50µm	850nm	LC	6	70/30	2.2dB	6.2dB
<b>TAP-M451</b> 	40/100Gb SR4	Multimode 50µm	850nm	MPO-12	3	50/50	4.3dB <sup>3</sup>	4.3dB <sup>3</sup>
<b>TAP-M471</b> 	40/100Gb SR4	Multimode 50µm	850nm	MPO-12	3	70/30	2.8dB <sup>3</sup>	6.4dB <sup>3</sup>
<b>TAP-M471-SR10</b> 	100Gb SR10	Multimode 50µm	850nm	MPO-24	3	70/30	2.8dB <sup>3</sup>	6.6dB <sup>3</sup>
<b>TAP-M253</b> 	1/10Gb LX/LR, EX/ER	Singlemode	1310/1550nm	LC	6	50/50	3.7dB	3.7dB
<b>TAP-M273</b> 	1/10Gb LX/LR, EX/ER	Singlemode	1310/1550nm	LC	6	70/30	2.0dB	6.1dB
<b>TAP-M453</b> 	40/100Gb LR4, 100Gb CWDM4	Singlemode	1270 - 1630nm	LC	6	50/50	3.7dB	3.7dB
<b>TAP-M473</b> 	40/100Gb LR4, 100Gb CWDM4	Singlemode	1270 - 1630nm	LC	6	70/30	2.0dB	6.1dB
<b>TAP-M506</b> 	40Gb BiDi	Multimode 50µm	840 - 910nm	LC	4	50/50	3.9dB	3.9dB
<b>PNL-M341</b> 	40Gb SR4 to 4x10Gb SR	Multimode 50µm	850nm & 1300nm	MPO- 12(UPC) to LC(UPC)	3	N/A	40Gb Insertion Loss ≤0.7dB	N/A
							10Gb Insertion Loss ≤0.3dB	
<b>PNL-M343</b> 	40Gb PLR4 to 4x10Gb LR	Singlemode	1270 - 1630nm	MPO- 12(APC) to LC(UPC)	3	N/A	40Gb Insertion Loss ≤0.75dB	N/A
							10Gb Insertion Loss ≤0.3dB	

<sup>1</sup>UPC unless otherwise specified<sup>2</sup>Includes connector loss<sup>3</sup>Measured using MPO/MTP cabling

Table 3: Physical Weight &amp; Dimensions

Part	Height	Width	Depth	Weight
<b>Chassis</b>	1.72in (4.38cm)	17.3in (44.0cm)	6.10in (15.5cm)	Empty: 3.8lbs (1.7kg) Full: 12.2lbs (5.5kg)
<b>TAP Module</b>	0.84in (2.14cm)	5.39in (13.7cm)	8.94in (22.7cm)	1.4lbs (0.64kg) typical

Table 4: Environmental Characteristics

Characteristic	Specification
Operating Temperature	32°F to 140°F (0°C to 60°C)
Operating Humidity	10% to 90%, relative, non-condensing
Storage Temperature	-4°F to 158°F (-20°C to 70°C)
Storage 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).

Gigamon offers a range of premium support and extended services. For details regarding Gigamon's Limited Warranty and product support offerings, visit [www.gigamon.com/support-and-services/overview-and-benefits](http://www.gigamon.com/support-and-services/overview-and-benefits)

## Ordering Information

Table 6: Ordering Information

Part Number	Description
<b>TAP-M200</b>	G-TAP M Series 1 RU chassis. Supports up to 6 M Series TAP modules
<b>TAP-M251</b>	G-TAP M Series 1/10Gb TAP module, 50/50 Multimode, 850 nm, 50/125 micron fiber, taps 6 1/10G links, requires TAP-M200
<b>TAP-M271</b>	G-TAP M Series 1/10Gb TAP module, 70/30 Multimode, 850 nm, 50/125 micron fiber, taps 6 1/10G links, requires TAP-M200
<b>TAP-M451</b>	G-TAP M Series 40/100Gb TAP module, 50/50 Multimode, 850 nm, MPO fiber, taps 3 40/100G SR4 links, requires TAP-M200
<b>TAP-M471</b>	G-TAP M Series 40/100Gb TAP module, 70/30 Multimode, 850 nm, MPO fiber, taps 3 40/100G SR4 links, requires TAP M200
<b>TAP-M471-SR10</b>	G-TAP M Series 100Gb TAP module, 70/30 Multimode, 850 nm, MPO fiber, taps 3 100G SR10 links, requires TAP-M200
<b>TAP-M253</b>	G-TAP M Series 1/10Gb TAP module, 50/50 Singlemode, 1310/1550 nm, taps 6 1/10G links, requires TAP-M200
<b>TAP-M273</b>	G-TAP M Series 1/10Gb TAP module, 70/30 Singlemode, 1310/1550 nm, taps 6 1/10G links, requires TAP-M200
<b>TAP-M453</b>	G-TAP M Series 40/100Gb TAP module, 50/50 Singlemode, taps 6 40/100G LR4 links, requires TAP-M200
<b>TAP-M473</b>	G-TAP M Series 40/100Gb TAP module, 70/30 Singlemode, taps 6 40/100G LR4 links, requires TAP-M200
<b>TAP-M506</b>	G-TAP M Series BiDi, 50/50 Multimode, taps 4 BiDi links, requires TAP-M200
<b>PNL-M341</b>	G-TAP M Series Breakout Panel, 3xMPO to 12xLC duplex Multimode, requires TAP-M200
<b>PNL-M343</b>	G-TAP M Series Breakout Panel, 3xMPO to 12xLC duplex Singlemode, requires TAP-M200

## For More Information

For more information about the Gigamon Visibility Platform or to contact your local representative, please visit: [www.gigamon.com](http://www.gigamon.com)