

FOUNDATION OF VISIBILITY

STARTS WITH SEEING EVERY BIT, BYTE, AND PACKET®

Garland Technology's best-in-class Network TAP (Test Access Point) and purpose-built Packet Broker solutions provide an innovative, industry leading 360° visibility view for modern visibility fabrics.

Garland's unique TAP to Tool[™] Architecture puts the focus on the performance and visibility of your security and monitoring tools. Offering modular and open vendor solutions, we provide the scalability and flexibility to deploy what you need, when you need it.

It all starts with the packet. On your journey for complete visibility truth, Garland Technology provides 100% visibility, along with increased performance, and network optimization to add value to your investment, while mitigating risk.

The Garland Leadership



Chris Bihary, CEO/Co-Founder

Chris' experience and technical knowledge of IT and OT network access and visibility challenges drive the success of Garland Technology, and is the foundation for its loyal and growing customer base.

Chris started his career owning an IT reseller who built out 9-1-1 call center network infrastructure, which helped shape his core belief to always ensure uptime for critical networks.



Jerry Dillard, CTO/Co-Founder

For over 25 years, Jerry has dedicated his career to designing and engineering solutions to ensure network uptime while maintaining a secure network environment. As the inventor of the Bypass TAP technology, Jerry continues to innovate with network TAPs, packet brokers, and inline bypass technology.

Our Commitment to Quality

Garland Technology's focus will remain centered around reliability while delivering the greatest economical solutions for today's network teams and the most complex and extensive data center environments worldwide.

The "Garland Quality Standard" ensures all network TAPs are stress tested with live network data and validated, with zero failures in the field. Made, tested, and supported in the USA.





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PACKET BROKERS AND INLINE BYPASS

Garland Technology is committed to helping increase the value of your network by offering the industry's most reliable, economical, easy to deploy network TAP and packet broker solutions.

Garland Technology provides the scalability and flexibility to deploy what you need, when you need it, so you can focus on what's important - network visibility.

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NETWORK TAPS OVERVIEW

Complete Packet Visibility for Performance and Security Monitoring Solutions

Network performance monitoring, troubleshooting, threat hunting, incident detection systems and other monitoring tools are deployed in an out-of-band monitoring architecture and rely on packet level data. Challenges come from providing these tools with complete packet visibility and optimizing this traffic for optimal tool performance.

Network TAPs (test access points) are a purpose-built hardware device that allows teams to access and monitor network traffic by copying packets without impacting or compromising network integrity, continuously, 24/7/365. The Network TAP ensures these tools are getting complete data, as SPAN (Mirror/switched port analyzer) ports are known to drop packets, create duplicate packets and were not developed for continuous monitoring. A visibility fabric of purpose-built network TAPs and Packet Brokers provide real-time visibility to monitor, protect, and analyze traffic in real-time, all the time.

Network TAP Benefits

- Provide complete packet visibility with full-duplex copies of network traffic.
- Ensure no dropped packets, while passing physical errors and support jumbo frames without introducing delay, or altering the data.
- Support speeds from 10/100M, 1G, 10G, 40G, 100G, and 400G and are available in single-mode and multi-mode fiber or copper ethernet.
- Available in Tap 'Breakout,' aggregation, regeneration, bypass and advanced filtering.
- Passive or failsafe Does not affect the network.
- No IP address, or MAC address, and cannot be hacked.



Garland Technology's extensive line of network TAPs are purpose-built scalable hardware devices that can either provide a single copy, multiple copies (regeneration), or consolidate traffic (aggregation). As well as, innovative data diodes and advanced filtering designs, to maximize the production of your monitoring tools for faster deployments and improved reliability. Garland network TAPs are available with Tap 'Breakout,' aggregation, regeneration, advanced filtering and inline bypass modes.



PASSIVE FIBER NETWORK TAPS BREAKOUT NETWORK TAPS



SelectTAP[™]: Fiber Modular Chassis

Ultimate flexibility and scalability for data center visibility

- Provide 100% full duplex traffic visibility
- Supports TAP 'Breakout' Mode
- Supports speeds of 1G/10G/25G/40G/100G/400G
- Accommodates 16 to 24 TAP modules
- Supports single-mode and multi-mode OS1, OS2, OM1, OM2, OM3, OM4, OM5
- Supports Cisco BiDirectional optical technology
- Supports MPO/MTP brand connectors
- Passive, no power source required

Model #	Network Speed	No. of TAPs	Split Ratio	Wavelengths	Media	Connector
FMC-1U	Fiber Modular Chassis					
OS2501M	1/10/25/40/100G	1	50/50	1290-1330nm 1530-1570nm	Fiber-OS1/OS2	LC Single-Mode
OS2701M	1/10/25/40/100G	1	70/30	1290-1330nm 1530-1570nm	Fiber-OS1/OS2	LC Single-Mode
OS2502-BiDiM	1/10G	2	50/50	1270-1350nm 1450-1530nm 1510-1590nm	Fiber-OS2	LC Single-Mode
OS2702-BiDiM	1/10G	2	70/30	1270-1350nm 1450-1530nm 1510-1590nm	Fiber-OS2	LC Single-Mode
OS2501WM	1/10/25/40/100/400G	1	50/50	1270-1350nm 1510-1590nm	Fiber - OS1/OS2	LC Single-Mode
OS2701WM	1/10/25/40/100/400G	1	70/30	1270-1350nm 1510-1590nm	Fiber - OS1/OS2	LC Single-Mode
OS2501-PSM4BM	100G	1	50/50	1310nm	Fiber-OS1/OS2	MTP12 B Style Male Connectors (MPO)
OS2701-PSM4BM	100G	1	70/30	1310nm	Fiber-OS1/OS2	MTP12 B Style Male Connectors (MPO)
OM1501M	1/10G	1	50/50	850-1300nm	Fiber-OM1/OM2	LC Multi-Mode
OM1701M	1/10G	1	70/30	850-1300nm	Fiber-OM1/OM2	LC Multi-Mode
OM4501M	1/10/25G	1	50/50	850nm	Fiber-OM3/OM4	LC Multi-Mode
OM4701M	1/10/25G	1	70/30	850nm	Fiber-OM3/OM4	LC Multi-Mode
OM5501M	1/10/25/40/100G*	1	50/50	850-950nm	Fiber OM5	LC Multi-Mode
OM5701M	1/10/25/40/100G*	1	70/30	850-950nm	Fiber OM5	LC Multi-Mode
OM4501-40GSRBiDiM	40G	1	50/50	800-950nm	Fiber-OM3/OM4	LC Multi-Mode
OM4701-40GSRBiDiM	40G	1	70/30	800-950nm	Fiber-OM3/OM4	LC Multi-Mode
OM5501-SRBiDiM	40/100G*	1	50/50	800-950nm	Fiber OM5	LC Multi-Mode

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SelectTAP ™ Continued

Model #	Network Speed	No. of TAPs	Split Ratio	Wavelengths	Media	Connector
FMC-1U	Fiber Modular Chassis					
OM5701-SRBiDiM	40/100G*	1	70/30	800-950nm	Fiber OM5	LC Multi-Mode
OM4501-SRBM	40/100G	1	50/50	850nm	Fiber-OM3/OM4	MTP-12 Multi- Mode
OM4701-SR4BM	40/100G	1	70/30	850nm	Fiber-OM3/OM4	MTP-12 Multi- Mode
OM5501-SR4BM	40/100/400G*	1	50/50	850-950nm	Fiber OM5	MTP12 Multi- Mode
OM5701-SR4BM	40/100/400G*	1	70/30	850-950nm	Fiber OM5	MTP12 Multi- Mode
OS23321X3M	1G/10G/25G/40G/100G	1	33.3 / 33.3 / 33.3	1310-1550nm	Fiber-OS2	LC Single-Mode
OM43321X3M	1G/10G	1	33.3 / 33.3 / 33.3	850nm	Fiber-OM3/OM4	LC Multi-Mode

Note: OS2 Fiber supports OS1 and 052; 0M1 Fiber supports OM1 and OM2; OM5 Fiber supports OM3 and OM4 *Used for 100G SWDM4. Options available in 100G_CWDM4





Single-Mode Passive Fiber Network TAP

Single-mode fiber for long-range connectivity

- Provide 100% full duplex traffic visibility
- Supports TAP 'Breakout' Mode
- Supports speeds of 1G/10G/25G/40G/100G
- Various split ratios available
- Portable module that can be used standalone, in a 1U space using rack mount plate, or DIN Rail mounted
- Exclusive High Density 1U chassis with 28 or 56 TAPs
- Plug & Play installation; no power source needed
- Industry standard LC Connectors

Model #	Network Speed	No. of TAPs	Split Ratio*	Wavelengths	Media	Connector
RMP-1U	1U Rack Mount Kit	- Hold up to 4 N	/lodules, each M	Nod can have 1, 2, 3 or 4 portable TAPs***	r	
OS1501	1/10/25/40/100G	1	50/50	1310/1550nm	Fiber-OS1/OS2	LC Single-Mode
OS1601	1/10/25/40/100G	1	60/40	1310/1550nm	Fiber-OS1	LC Single-Mode
OS1701	1/10/25/40/100G	1	70/30	1310/1550nm	Fiber-OS1	LC Single-Mode
OS2501°	1/10/25/40/100G	1	50/50	1310/1550nm	Fiber-OS2	LC Single-Mode
OS2701°	1/10/25/40/100G	1	70/30	1310/1550nm	Fiber-OS2	LC Single-Mode
OS1502	1/10/25/40/100G	2	50/50	1310/1550nm	Fiber-OS1	LC Single-Mode
OS1702	1/10/25/40/100G	2	70/30	1310/1550nm	Fiber-OS1	LC Single-Mode
OS2502°	1/10/25/40/100G	2	50/50	1310/1550nm	Fiber-OS2	LC Single-Mode
OS2702°	1/10/25/40/100G	2	70/30	1310/1550nm	Fiber-OS2	LC Single-Mode
OS2702-BiDi°	1/10G	2	70/30	1270-1350nm/1450-1530nm/1510-1590nm	Fiber-OS2	LC Single-Mode
OS1503	1/10/25/40/100G	3	50/50	1310/1550nm	Fiber-OS1	LC Single-Mode
OS1703	1/10/25/40/100G	3	70/30	1310/1550nm	Fiber-OS1	LC Single-Mode
OS2503°	1/10/25/40/100G	3	50/50	1310/1550nm	Fiber-OS2	LC Single-Mode
OS2703°	1/10/25/40/100G	3	70/30	1310/1550nm	Fiber-OS2	LC Single-Mode
OS1504	1/10/25/40/100G	4	50/50	1310/1550nm	Fiber-OS1	LC Single-Mode
OS1704	1/10/25/40/100G	4	70/30	1310/1550nm	Fiber-OS1	LC Single-Mode
OS2504°	1/10/25/40/100G	4	50/50	1310/1550nm	Fiber-OS2	LC Single-Mode
OS2704°	1/10/25/40/100G	4	70/30	1310/1550nm	Fiber-OS2	LC Single-Mode

Model #	Network Speed	Chassis Size	No. of TAPs	Split Ratio*	Wavelengths	Media	Connector/Mode
OS15028	1/10/25/40/100G	Chassis 1U	28	50/50	1310/1550nm	Fiber-OS1	LC Single-mode
OS17028	1/10/25/40/100G	Chassis 1U	28	70/30	1310/1550nm	Fiber-OS1	LC Single-mode
OS25028	1/10/25/40/100G	Chassis 1U	28	50/50	1310/1550nm	Fiber-OS2	LC Single-mode
OS27028	1/10/25/40/100G	Chassis 1U	28	70/30	1310/1550nm	Fiber-OS2	LC Single-mode
OS15056	1/10/25/40/100G	Chassis 1U	56**	50/50	1310/1550nm	Fiber-OS1	LC Single-mode
OS17056	1/10/25/40/100G	Chassis 1U	56**	70/30	1310/1550nm	Fiber-OS1	LC Single-mode
OS25056	1/10/25/40/100G	Chassis 1U	56**	50/50	1310/1550nm	Fiber-OS2	LC Single-mode
OS27056	1/10/25/40/100G	Chassis 1U	56**	70/30	1310/1550nm	Fiber-OS2	LC Single-mode

*Custom split ratios are available in 60/40, 80/20, or 90/10.

ble in 60/40, 80/20, or 90/10. **56 1U Fiber TAPs are populated front and back

***Additional rack mounting options include: RMS-1U, RMS-1U-V2, BRACKET-10, BRACKET-11

°Wideband version is available (i.e., O52501W, O52701W, etc.)



Multi-Mode Passive Fiber Network TAPs

Multi-mode fiber for short-range connectivity

- Provide 100% full duplex traffic visibility
- Supports TAP 'Breakout' Mode
- Supports speeds of 1G/10G/25G/40G/100G Various split ratios available
- Portable module that can be used standalone, in a 1U space using rack mount plate, or DIN Rail mounted
- Exclusive High Density 1U chassis with 28 or 56 TAPs
- Plug & Play installation; no power source needed
- New Prism based technology to reduce bit errors

Model #	Network Speed	No. of TAPs	Split Ratio*	Wavelengths	Media	Connector
RMP-1U	1U Rack Mount Kit	- Hold up to 4 M	lodules, each M	odule can have 1, 2, 3	3 or 4 portable TAPs**	ł
OM1501	1/10G	1	50/50	850/1300nm	Fiber-OM1	LC Multi-Mode
OM1701	1/10G	1	70/30	850/1300nm	Fiber-OM1	LC Multi-Mode
OM3501	1/10/25G	1	50/50	850/1300nm	Fiber-OM3	LC Multi-Mode
OM4501	1/10/25G	1	50/50	850nm	Fiber-OM3/OM4	LC Multi-Mode
OM4701	1/10/25G	1	70/30	850nm	Fiber-OM3/OM4	LC Multi-Mode
OM4701-40GSRBiDi	40G	1	70/30	800-950nm	Fiber-OM3/OM4	LC Multi-Mode
OM5501	1/10/25/40/100G	1	50/50	850-950nm	Fiber OM5	LC Multi-Mode
OM5701	1/10/25/40/100G	1	70/30	850-950nm	Fiber OM5	LC Multi-Mode
OM1502	1/10G	2	50/50	850/1300nm	Fiber-OM1	LC Multi-Mode
OM1702	1/10G	2	70/30	850/1300nm	Fiber-OM1	LC Multi-Mode
OM3502	1/10/25G	2	50/50	850/1300nm	Fiber-OM3	LC Multi-Mode
OM4502	1/10/25G	2	50/50	850nm	Fiber-OM3/OM4	LC Multi-Mode
OM4702	1/10/25G	2	70/30	850nm	Fiber-OM3/OM4	LC Multi-Mode
OM4702-40GSRBiDi	40G	2	70/30	800-950nm	Fiber-OM3/OM4	LC Multi-Mode
OM5502	1/10/25/40/100G	2	50/50	850-950nm	Fiber OM5	LC Multi-Mode
OM5702	1/10/25/40/100G	2	70/30	850-950nm	Fiber OM5	LC Multi-Mode
OM1503	1/10G	3	50/50	850/1300nm	Fiber-OM1	LC Multi-Mode
OM1703	1/10G	3	70/30	850/1300nm	Fiber-OM1	LC Multi-Mode
OM3503	1/10/25G	3	50/50	850/1300nm	Fiber-OM3	LC Multi-Mode
OM4503	1/10/25G	3	50/50	850nm	Fiber-OM3/OM4	LC Multi-Mode
OM4703	1/10/25G	3	70/30	850nm	Fiber-OM3/OM4	LC Multi-Mode
OM4703-40GSRBiDi	40G	3	70/30	800-950nm	Fiber-OM3/OM4	LC Multi-Mode
OM5503	1/10/25/40/100G	3	50/50	850-950nm	Fiber OM5	LC Multi-Mode
OM5703	1/10/25/40/100G	3	70/30	850-950nm	Fiber OM5	LC Multi-Mode
OM1504	1/10G	4	50/50	850/1300nm	Fiber-OM1	LC Multi-Mode
OM1704	1/10G	4	70/30	850/1300nm	Fiber-OM1	LC Multi-Mode



Model #	Network Speed	No. of TAPs	Split Ratio*	Wavelengths	Media	Connector
OM3504	1/10/25G	4	50/50	850/1300nm	Fiber-OM3	LC Multi-Mode
OM4504	1/10/25G	4	50/50	850nm	Fiber-OM3/OM4	LC Multi-Mode
OM3704	1/10/25G	4	70/30	850nm	Fiber-OM3	LC Multi-Mode
OM4704	1/10/25G	4	70/30	850nm	Fiber-OM3/OM4	LC Multi-Mode
OM5504	1/10/25/40/100G	4	50/50	850-950nm	Fiber OM5	LC Multi-Mode
OM5704	1/10/25/40/100G	4	70/30	850-950nm	Fiber OM5	LC Multi-Mode

Multi-Mode Passive Fiber Network TAPs

Model #	Network Speed	Chassis Size	No. of TAPs	Split Ratio*	Wavelengths	Media	Connector
OM15028	1/10G	Chassis 1U	28	50/50	850/1300nm	Fiber-OM1	LC Multi-Mode
OM17028	1/10G	Chassis 1U	28	70/30	850/1300nm	Fiber-OM1	LC Multi-Mode
OM35028	1/10/25G	Chassis 1U	28	50/50	850/1300nm	Fiber-OM3	LC Multi-Mode
OM45028	1/10/25G	Chassis 1U	28	50/50	850nm	Fiber-OM3/OM4	LC Multi-Mode
OM47028	1/10/25G	Chassis 1U	28	70/30	850nm	Fiber-OM3/OM4	LC Multi-Mode
OM55028	1/10/25/40/100G	Chassis 1U	28	50/50	850-950nm	Fiber OM5	LC Multi-Mode
OM57028	1/10/25/40/100G	Chassis 1U	28	70/30	850-950nm	Fiber OM5	LC Multi-Mode
OM15056	1/10G	Chassis 1U	56**	50/50	850/1300nm	Fiber-OM1	LC Multi-Mode
OM17056	1/10G	Chassis 1U	56**	70/30	850/1300nm	Fiber-OM1	LC Multi-Mode
OM35056	1/10/25G	Chassis 1U	56**	50/50	850/1300nm	Fiber-OM3	LC Multi-Mode
OM45056	1/10/25G	Chassis 1U	56**	50/50	850nm	Fiber-OM3/OM4	LC Multi-Mode
OM47056	1/10/25G	Chassis 1U	56**	70/30	850nm	Fiber-OM3/OM4	LC Multi-Mode
OM55056	1/10/25/40/100G	Chassis 1U	56**	50/50	850-950nm	Fiber OM5	LC Multi-Mode
OM57056	1/10/25/40/100G	Chassis 1U	56**	70/30	850-950nm	Fiber OM5	LC Multi-Mode

*Custom split ratios are available in 60/40, 80/20, or 90/10.

56 1U Fiber TAPs are populated front and back *Additional rack mounting options include: RMS-1U, RMS-1U-V2, BRACKET-10, BRACKET-11

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MPO/MTP[®] Multi-Mode Passive Fiber Network TAPs

Portable high speed 40G/100G-SR4 or 100G-SR10

- Provide 100% full duplex traffic visibility
- Supports TAP 'Breakout' Mode
- Multi-mode fiber in either MTP-12 (40G/100G) or MTP 24 (100G)
- MTP® brand connectors for lowest dB loss
- Portable module that can be used standalone, in a 1U space using rack mount plate, or DIN Rail mounted
- Plug & Play installation; no power source needed

Model #	Network Speed	No. of TAPs	Split Ratio*	Wavelengths	Media	Connector
RMP-1U	1U Rack Mount Kit	- Hold up to 4	Modules, each	Mod can have 1, 2 oi	⁻ 3 portable TAPs	
OM4501-SR4B	40/100G	1	50/50	850nm	Fiber-OM3/OM4	MTP-12 Multi-Mode
OM4701-SR4B	40/100G	1	70/30	850nm	Fiber-OM3/OM4	MTP-12 Multi-Mode
OM5501-SR4B	40/100/400G	1	50/50	850-950nm	Fiber OM5	MTP-12 Multi-Mode
OM5701-SR4B	40/100/400G	1	70/30	850-950nm	Fiber OM5	MTP-12 Multi-Mode
OM4502-SR4B	40/100G	2	50/50	850nm	Fiber-OM3/OM4	MTP-12 Multi-Mode
OM4702-SR4B	40/100G	2	70/30	850nm	Fiber-OM3/OM4	MTP-12 Multi-Mode
OM5502-SR4B	40/100/400G	2	50/50	850-950nm	Fiber OM5	MTP-12 Multi-Mode
OM5702-SR4B	40/100/400G	2	70/30	850-950nm	Fiber OM5	MTP-12 Multi-Mode
OM4503-SR4B	40/100G	3	50/50	850nm	Fiber-OM3/OM4	MTP-12 Multi-Mode
OM4703-SR4B	40/100G	3	70/30	850nm	Fiber-OM3	MTP-12 Multi-Mode
OM5503-SR4B	40/100/400G	3	50/50	850-950nm	Fiber OM5	MTP-12 Multi-Mode
OM5703-SR4B	40/100/400G	3	70/30	850-950nm	Fiber-OM3/OM4	MTP-12 Multi-Mode
OM4502-100GSR10A	100G	2	50/50	850nm	Fiber-OM3/OM4**	MTP-24 Multi-Mode
OM4702-100GSR10A	100G	2	70/30	850nm	Fiber-OM3/OM4**	MTP-24 Multi-Mode
OM4503-100GSR10A	100G	3	50/50	850nm	Fiber-OM3/OM4**	MTP-24 Multi-Mode
OM4703-100GSR10A	100G	3	70/30	850nm	Fiber-OM3/OM4**	MTP-24 Multi-Mode

*Custom split ratios are available in 60/40, 80/20, or 90/10. OM3/OM4** Available in OM5





BiDi Passive Fiber Network TAP Supports Cisco BiDirectional optical technology

- Provide 100% full duplex traffic visibility
- Supports TAP 'Breakout' Mode
- Unique design provides flexibility to TAP multi-mode OM3/OM4/OM5 fiber types
- Portable module that can be used standalone, in a 1U space using rack mount plate, or DIN Rail mounted
- Exclusive High Density 1U chassis with 21 TAPs
- Plug & Play installation; no power source needed

Model #	Network Speed	No. of TAPs	Split Ratio*	Wavelengths	Media	Connector/Mode
RMP-1U	1U Rack Mount Kit	- Hold up to 4	Modules, each I	Module can have 1, 2	or 3 portable TAPs	
OM4501-40GSRBiDi	Up to 40G	1	50/50	800/950nm	Fiber-OM3/OM4	LC Multi-Mode
OM5501-SRBiDi	40/100G	1	50/50	850-950nm	Fiber OM5	LC Multi-Mode
OM4502-40GSRBiDi	Up to 40G	2	50/50	800/950nm	Fiber-OM3/OM4	LC Multi-Mode
OM5502-SRBiDi	40/100G	2	50/50	850-950nm	Fiber OM5	LC Multi-Mode
OM4503-40GSRBiDi	Up to 40G	3	50/50	800/950nm	Fiber-OM3/OM4	LC Multi-Mode
OM5503-SRBiDi	40/100G	3	50/50	850-950nm	Fiber OM5	LC Multi-Mode
OM45021-40GSRBiDi	Up to 40G	21	50/50	800-950nm	Fiber-OM3/OM4	LC Multi-Mode
OM55021-SRBiDi	40/100G	21	50/50	850-950nm	Fiber OM5	LC Multi-Mode
OM4701-40GSRBiDi	Up to 40G	1	70/30	800/950nm	Fiber-OM3/OM4	LC Multi-Mode
OM5701-SRBiDi	40/100G	1	70/30	850-950nm	Fiber OM5	LC Multi-Mode
OM4702-40GSRBiDi	Up to 40G	2	70/30	800/950nm	Fiber-OM3/OM4	LC Multi-Mode
OM5702-SRBiDi	40/100G	2	70/30	850-950nm	Fiber OM5	LC Multi-Mode
OM4703-40GSRBiDi	Up to 40G	3	70/30	800/950nm	Fiber-OM3/OM4	LC Multi-Mode
OM5703-SRBiDi	40/100G	3	70/30	850-950nm	Fiber OM5	LC Multi-Mode
OM47021-40GSRBiDi	Up to 40G	21	70/30	800/950nm	Fiber-OM3/OM4	LC Multi-Mode
OM57021-SRBiDi	40/100G	21	70/30	850-950nm	Fiber OM5	LC Multi-Mode
OS2502-BiDi	1G/10G	2	50/50	1270~1350nm/ 1450~1530nm/ 1510~1590nm	Fiber-OS2	LC Single-Mode
OS2504-BiDi	1G/10G	4	50/50	1270~1350nm/ 1450~1530nm/ 1510~1590nm	Fiber-OS2	LC Single-Mode
OS2506-BiDi	1G/10G	6	50/50	1270~1350nm/ 1450~1530nm/ 1510~1590nm	Fiber-OS2	LC Single-Mode

*Custom split ratios are available in 60/40, 80/20, or 90/10.

COPPER NETWORK TAPS BREAKOUT NETWORK TAPS



Copper Network TAP

Portable TAP for 1G copper network monitoring and troubleshooting

- Provide 100% full duplex traffic visibility
- Supports TAP 'Breakout' Mode
- Supports speeds of 10M/100M or 10/100/1000M (1G)
- Failsafe or passive design available
- Link failure propagation
- Portable module that can be used standalone, in a 1U space using rack mount plate, or DIN Rail mounted
- Plug & Play installation

Model #	Network Speed	Network	Monitor	Breakout	Failsafe	Data Diode	Serial Port	Power		
RMP-1U	1U Rack Mount Kit - Hold up to 4 portable TAPs***									
PT100*	10/100M	Copper-RJ45	Copper-RJ45	Yes	Passive	Yes	No	DC		
P1GCCB	10/100/1000M (1G)	Copper-RJ45	Copper-RJ45	Yes	Yes	Yes	No	DC		



Copper Modular Network TAP

Data Center Solutions for 1G network monitoring

- Provide 100% full duplex traffic visibility
- Supports tap 'Breakout' Mode
- Exclusive high density 1U support 4 TAPs and 2U supports 12 TAPs
- Hot swappable
- Link failure propagation
- Supports jumbo frames

Copper Modular Network TAP | Chassis Options

Model #	Chassis/TAPs*	Power Supplies	Voltage	Current (nominal)	Consumption (maximum)	Dimensions (WxHxD)
M1G1ACE	1U; up to 4 TAPs	Dual Internal AC	100-240VAC	0.75A@115VAC	86.25 Watts	17.40" × 1.75" × 13.45"
M1G1DCE	100/1000M	Dual Internal DC	36-60VDC	1A@48VDC	48 Watts	(441.96mm x 44.45mm x 341.63mm) 2 SFP
M1G2ACE	100/1000M	Dual Internal AC	100-240VAC	1A@115VAC	115 Watts	17.40" × 3.47" × 13.45"
M1G2DCE	100/1000M	Dual Internal DC	36-60VDC	2.8A@48VDC	134.4 Watts	(441.96mm x 88.14mm x 341.63mm)

M1GC* Management card: Ethernet/GUI - and- Serial/CLI for M1GxxE

*M1GL or blanking plates are used if managment card is not required or if not all TAP modules are populated. Management card and additional GT TAP modules can be added to chassis.

Copper Breakout TAP Module Options

Model #	Network Speed	Network	Monitor	Break- out	Aggrega- tion	Regenera- tion	Fail- safe	Data Diode	Power
M100CCB*	10/100M	2 Copper-RJ45 Passive	2 Copper-RJ45	Yes	No	No	Passive	Yes	POE
M1GCCB	10/100/1000M	2 Copper-RJ45	2 Copper-RJ45	Yes	No	No	Yes	Yes	Dual AC/DC

*Supports Power over Ethernet ***Additional rack mounting options include: RMS-1U, RMS-1U-V2, BRACKET-10, BRACKET-11.





Military-Grade Industrial Network TAP

Rugged modular 1/2 rack for

extreme environments

- Provide 100% full duplex traffic visibility
- Supports TAP 'Breakout' Mode
 Captures full duplex traffic up to 2Gbps without dropping packets
- Supports link speed synchronization
- Supports jumbo frames
- Passes physical errors
- Applications: Military Vehicles, Utility Vehicles, Aircraft

Model #	Network Speed	Network	Monitor	Breakout	Aggrega- tion	Regenera- tion	Failsafe	Data Diode	Power
	Two slot Chassis	- Holds up to 2 Moc	dular TAPs						
M1GP1G-DC	Single external D	C power supply uni	t						
M100CCBm	10/100M	2 Mighty Mouse 10/100M	2 Mighty Mouse 10/100M	Yes	No	No	Yes	Yes	DC
M1GCCBm	10/100/1000M	2 Mighty Mouse 10/100/1000M	2 Mighty Mouse 10/100/1000M	Yes	No	No	Yes	Yes	DC

REGENERATION TAPS BREAKOUT NETWORK TAPS



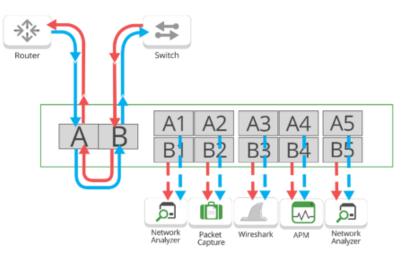
RegenTAP: 1x5

1x5 Replication provides 5 TAP 'breakout' copies of traffic from a single link

- Provide 100% full duplex traffic visibility
- Supports 1G/10G, 1/2 rack 1U Chassis
- Network failsafe or passive design
- OEO design [optical to electric to optical]
- Plug and play; no management

Model #	Network Speed	Network	Monitor	Split Ratio*	Failsafe	Power
INT10G12MSB5	1G/10G	SX/SR Multi-Mode Fiber	SFP+	-	Failsafe	Dual AC/DC
INT10G12SSB5	1G/10G	LX/LR Single-Mode Fiber	SFP+	-	Failsafe	Dual AC/DC
INT10G12MSB5-5	1G/10G	SX/SR Multi-Mode Fiber	SFP+	50/50	Passive	Dual AC/DC
INT10G12MSB5-6	1G/10G	SX/SR Multi-Mode Fiber	SFP+	60/40	Passive	Dual AC/DC
INT10G12MSB5-7	1G/10G	SX/SR Multi-Mode Fiber	SFP+	70/30	Passive	Dual AC/DC
INT10G12SSB5-5	1G/10G	LX/LR Single-Mode Fiber	SFP+	50/50	Passive	Dual AC/DC
INT10G12SSB5-6	1G/10G	LX/LR Single-Mode Fiber	SFP+	60/40	Passive	Dual AC/DC
INT10G12SSB5-7	1G/10G	LX/LR Single-Mode Fiber	SFP+	70/30	Passive	Dual AC/DC

*Custom split ratios are available in 80/20 or 90/10, please inquire.



1x5 Regeneration. Five complete copies of data from a single link.





RegenTAP: Dual Breakout

Dual Breakout provides multiple TAP 'breakout' copies of traffic from single link

- Provide 100% full duplex traffic visibility
- Supports 1G/10G | 2 TAPs-in-1, 1/2 rack 1U Chassis
- Ideal for direct connect, SFP, QSFPs, active cable infrastructures
- Network Failsafe or passive design
- OEO design [optical to electric to optical]
- Plug and play; no management

RegenTAP: Dual Breakout Option 1

Model #	Network Speed	Ports	Power
INT10G10V1	10G	(10) SFP+	Dual AC/DC

RegenTAP: Dual Breakout Option 2

Model #	Network Speed	Network	Monitor	Split Ratio*	Failsafe	Power
INT10G12SSV2	1G/10G	LX/LR Single-Mode Fiber	SFP+	-	Failsafe	Dual AC/DC
INT10G12MSV2	1G/10G	SX/SR Multi-Mode Fiber	SFP+	-	Failsafe	Dual AC/DC
INT10G12SSV2-5	1G/10G	LX/LR Single-Mode Fiber	SFP+	50/50	Passive	Dual AC/DC
INT10G12SSV2-6	1G/10G	LX/LR Single-Mode Fiber	SFP+	60/40	Passive	Dual AC/DC
INT10G12SSV2-7	1G/10G	LX/LR Single-Mode Fiber	SFP+	70/30	Passive	Dual AC/DC
INT10G12MSV2-5	1G/10G	SX/SR Multi-Mode Fiber	SFP+	50/50	Passive	Dual AC/DC
INT10G12MSV2-6	1G/10G	SX/SR Multi-Mode Fiber	SFP+	60/40	Passive	Dual AC/DC
INT10G12MSV2-7	1G/10G	SX/SR Multi-Mode Fiber	SFP+	70/30	Passive	Dual AC/DC

*Custom split ratios are available in 80/20 or 90/10, please inquire.

RegenTAP: Dual Breakout SPAN 1x4

Dual Breakout Option 1

Model #	Network Speed	Ports	Power
INT10G10SP1	1/10G	(10) SFP+	120W
TAP 1 TAP 2 B C D E TAP 2 B C D F AB BA BA AB BA BA AB BA BA AB BA BA	Router Sw	Router Switch AP 1 TAP 2 1A 1C 2 2 2A 1B 1D 2 2B	SPAN 1 SPAN 1 SPAN 2 A B C D E C D E C D E C D E C D E C D E C D E C D E C D E C C D E C C D C C D C C C C

Dual Breakout Option 2

Regeneration TAPsBreakout Network TAPs15

Dual Breakout SPAN 1x4 Option 3



RegenTAP: Passive

1x3 Replication provides 2 TAP 'breakout' or 3 SPAN copies of traffic from a single link

- Provide 100% full duplex traffic visibility
- Supports speeds of 1G/10G/25G/40G/100G
- Available in portable, modular, high density
- Easy configuration, no power required
- Supports jumbo frames
- Optional one or two segment
- configurations per module
- Passes physical errors

Model #	Network Speed	Network	Monitor	# of TAPs	Split Ratio	Wavelengths	Media	Connector			
RMP-1U	1U Rack Mount Kit - Hold	1U Rack Mount Kit - Hold up to 4 Modules, each Module can have 1, 2, 3 or 4 TAPs***									
OS23321X3	1G/10G/25G/40G/100G	1 LC	3 LC	1	33.3/33.3/33.3	1310/1550nm	Fiber-OS2	LC Sin- gle-Mode			
OS23341X3	1G/10G/25G/40G/100G	1 LC	3 LC	2	33.3/33.3/33.3	1310/1550nm	Fiber-OS2	LC Sin- gle-Mode			
OS23361X3	1G/10G/25G/40G/100G	1 LC	3 LC	3	33.3/33.3/33.3	1310/1550nm	Fiber-OS2	LC Sin- gle-Mode			
OS233421X3	1G/10G/25G/40G/100G	1 LC	3 LC	21	33.3/33.3/33.3	1310/1550nm	Fiber-OS2	LC Sin- gle-Mode			
FMC-1U	Fiber Modular Chassis										
OS23321X3M	1G/10G/25G/40G/100G	1 LC	3 LC	1	33.3/33.3/33.3	1310/1550nm	Fiber-OS2	LC Sin- gle-Mode			
OM43321X3M	1G/10G	1 LC	3 LC	1	33.3/33.3/33.3	850nm	Fiber-OM3/ OM4	LC Multi-Mode			

***Additional rack mounting options include: RMS-1U, RMS-1U-V2, BRACKET-10, BRACKET-11



AGGREGATOR NETWORK TAPS



FieldTAP™

Pocket-size and portable, ideal for field testing and troubleshooting

- Provide 100% full duplex traffic visibility
- Supports speeds of 10M/100M/1000M (1G)
- Monitoring on USB 3.0
- Supports Power over Ethernet (PoE)
- Plug & Play; easy configuration; switches on back

Model #	Network Speed	Network	Monitor	Size	Supported OS	Network	Monitor	Power
RMP-1U	1U Rack Mount Kit - Ho	olds up to 4 Porta	able TAPs - F	P1GCUA only				
P1GCUA	10/100/1000Mbps (1Gbps)	Copper RJ45	USB 3.0	Portable	Windows Linux Mac-OS	Copper RJ45	USB 3.0	USB: DC
P1GCUA_mini	10/100/1000Mbps (1Gbps)	Copper RJ45	USB 3.0	Pocket-size "mini"	Windows Linux Mac-OS	Copper RJ45	USB 3.0	USB: DC
P1GSFPU_mini	1G	SFP	USB 3.0	Pocket-size "mini"	Windows Linux Mac-OS	SFP	USB 3.0	USB: DC



AggregatorTAP: Passive

Portable passive copper TAP aggregation

- Provide 100% full duplex traffic visibility
- Supports speeds of 100M
- Two (2) 1G Aggregated Monitoring ports
- Supports Power over Ethernet (PoE)
- Plug & Play; easy configuration; switches on back
- Portable module that can be used standalone, in a 1U space using rack mount plate, or DIN Rail mounted

Model #	Network Speed	Network	Monitor	Breakout	Aggregation	Regeneration /SPAN	Failsafe	Data Diode	Power
RMP-1U	1U Rack Mo	ount Kit - Holds up	to 4 Portable TAPs						
P100CCA	100M	2 Copper-RJ45	2 Copper 1000M RJ45	No	Yes	Yes	Passive	Yes	DC
PT104	100M	2-PCB	2-PCB	No	Yes	Yes	Passive	No	POE



AggregatorTAP: Copper

Portable copper TAP aggregation

- Provide 100% full duplex traffic visibility
- Supports speeds of 10/100/1000M (1G)
- Supports aggregation, breakout and regeneration/SPAN modes
- Supports jumbo frames and passes physical errors
 - Plug & Play; easy configuration; switches on back
 - Stand alone unit, or rack mount 4 TAPs in a 1U

Model #	Network Speed	Network	Monitor	Breakout	Aggregation	Regeneration /SPAN	Failsafe	Data Diode	Power
RMP-1U	1U Rack Mount Kit	- Holds up to 4 Po	rtable TAPs						
P1GCCAS	10/100/1000M	2 Copper-RJ45	2 Copper-RJ45	Yes	Yes	Yes	Passive	Yes	AC
P1GCSAS	10/100/1000M	2 Copper-RJ45	2 SFP	Yes	Yes	Yes	Passive	Yes	AC



AggregatorTAP: Fiber

Portable TAP aggregation and media conversion

- Provide 100% full duplex traffic visibility
- Supports 1G/10G speeds
- Media conversion: SX or LX to copper or SFP / SFP+
- Supports aggregation, tap 'breakout' and regeneration/SPAN modes
- Supports jumbo frames and passes physical errors
- Plug & Play; easy configuration; switches on back of TAP
- Stand alone unit, or rack mount 4 TAPs in a 1U

Model #	Network Speed	Network	Monitor	Breakout	Aggregation	Regeneration /SPAN	Failsafe	Data Diode	Power
RMS-1U-V2	1U Rack Mo	ount Kit - Holds up to 4 Portab	le TAPs						
P10GMSA-5	1G/10G	MMF 1G-SX/10G-SR	(2) SFP+	Yes	Yes	Yes	Passive	Yes	DC
P10GMSA-6	1G/10G	MMF 1G-SX/10G-SR	(2) SFP+	Yes	Yes	Yes	Passive	Yes	DC
P10GMSA-7	1G/10G	MMF 1G-SX/10G-SR	(2) SFP+	Yes	Yes	Yes	Passive	Yes	DC
P10GSSA-5	1G/10G	SMF 1G-SX/10G-LR	(2) SFP+	Yes	Yes	Yes	Passive	Yes	DC
P10GSSA-6	1G/10G	SMF 1G-SX/10G-LR	(2) SFP+	Yes	Yes	Yes	Passive	Yes	DC
P10GSSA-7	1G/10G	SMF 1G-SX/10G-LR	(2) SFP+	Yes	Yes	Yes	Passive	Yes	DC
RMP-1U	1U Rack Mo	ount Kit - Holds up to 4 Portab	le TAPs						
P1GMCA	1G	(2) SX Multi-Mode Fiber-LC	(2) Copper - RJ45	Yes	Yes	Yes	Passive	Yes	DC
P1GMSA	1G	(2) SX Multi-Mode Fiber-LC	(2) SFP	Yes	Yes	Yes	Passive	Yes	DC
P1GSCA	1G	(2) LX Single-Mode Fiber-LC	(2) Copper - RJ45	Yes	Yes	Yes	Passive	Yes	DC
P1GSSA	1G	(2) LX Single-Mode Fiber-LC	(2) SFP	Yes	Yes	Yes	Passive	Yes	DC

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AggregatorTAP: 100Base-FX

Portable TAP aggregation and media conversion

- Provide 100% full duplex traffic visibility
- Media conversion: 100Base-FX or 100BASE-LX to Copper Gigabit
- Supports aggregation and breakout modes
- Plug & Play; easy configuration; switches on back of TAP
- Stand alone unit, or rack mount 4 TAPs in a 1U

Model #	Network	Monitor	Breakout	Aggregation	Regeneration /SPAN	Failsafe	Data Diode	Power
RMP-1U	1U Rack Mount F	Kit - Holds up to 4 Portable TAPs**	**					
P100FXCA	2 100Base-FX	2 Copper-RJ45 100/1000M (1G)	Yes	Yes	No	Passive	Yes	DC
P100LXCA	2 100Base-LX	2 Copper-RJ45 100/1000M (1G)	Yes	Yes	No	Passive	Yes	DC

***Other compatible rack mounts RMS-1U, RMS-1U-V2, BRACKET-10, BRACKET-11



AggregatorTAP: Copper High Density

High density TAP aggregation

- Provide 100% full duplex traffic visibility
- TAP 4 network segments and aggregate traffic to 1 or 2 monitoring ports
- Aggregate 8 SPAN Ports to 1 or 2 monitoring ports
- Link speed synchronization
- Link failure propagation (LFP)
- Supports jumbo frames and passes physical errors
- Data Diode design provides a unidirectional path

Model #	Network Speed	Network	Monitor	Breakout	Aggregation	Regeneration /SPAN	Failsafe	Data Diode	Power
1U Rack Mount Kit incluc	led - Holds (2) INT1	G10CSA							
INT1G10CSA	2 100Base-FX 10/100/1000M	4 Copper-RJ45 (pair)	2 SFP	Yes	Yes	Yes	Passive	Yes	AC
INT1G10CSA-DC	10/100/1000M	4 Copper-RJ45 (pair)	2 SFP	Yes	Yes	Yes	Passive	Yes	DC
INT1G10CSASP	10/100/1000M	8 Copper-RJ-45	2 SFP	No	Yes	Yes	N/A	Yes	AC
INT1G10CSASPDC	10/100/1000M	8 Copper-RJ-45	2 SFP	No	Yes	Yes	N/A	Yes	DC



XtraTAP[™]: 1G Modular Aggregator

Modular TAP aggregation with breakout, regeneration and bypass

- Provide 100% full duplex traffic visibility
- Port-to-Port Aggregation
- Exclusive high density 1U support 4 TAPs and 2U supports 12 TAPs
- Remote management option with CLI or GUI
- Hot swappable TAP modules
- Supports jumbo frames and passes physical errors
- Supports link failure propagation (LFP)

XtraTAP: 1G Modular Aggregator Chassis Options

Model #	Chassis/TAPs*	Power Supplies	Voltage	Current (nominal)	Consumption (maximum)	Dimensions (WxHxD)
M1G1ACE	1U; up to 4 TAPs	Dual Internal AC	100-240VAC	0.75A@115VAC	86.25 Watts	17.40" x 1.75" x 13.45" (441.96mm x 44.45mm x 341.63mm)
M1G1DCE	100/1000M	Dual Internal DC	36-60VDC	1A@48VDC	48 Watts	2 SFP
M1G2ACE	100/1000M	Dual Internal AC	100-240VAC	1A@115VAC	115 Watts	17.40" × 3.47" × 13.45"
M1G2DCE	100/1000M	Dual Internal DC	36-60VDC	2.8A@48VDC	134.4 Watts	(441.96mm x 88.14mm x 341.63mm)
LLL C C I						

M1GC* Management card: Ethernet/GUI - and- Serial/CLI for M1GxxE

*M1GL or blanking plates (Model #: Tray-BG) are used if managment card is not required or if not all TAP modules are populated. Management card and additional GT TAP modules can be added to chassis.

XtraTAP: 1G Modular Aggregator Aggregation TAP Options

Model #	Network Speed	Network	Monitor	Breakout	Aggregation	Regeneration /SPAN	Bypass	Failsafe	Data Diode	Power
M1GCCBP	10/100/1000M	2 Copper-RJ45	2 Cop- per-RJ45	Yes	Yes	Yes	Yes	Yes	No	Dual AC/DC
M1GCSBP	10/100/1000M	2 SX Multi-Mode, passive LC-Fiber	2 Cop- per-RJ45	Yes	Yes	Yes	Yes	Yes	No	Dual AC/DC
M1GMCA	1G	2 Copper-RJ45	2 Cop- per-RJ45	Yes	Yes	Yes	No	Passive	Yes	Dual AC/DC
M1GMSA	1G	2 SX Multi-Mode, passive LC-Fiber	2 SFP	Yes	Yes	Yes	No	Passive	Yes	Dual AC/DC
M1GSCA	1G	2 LX Single-Mode, passive LC-Fiber	2 Cop- per-RJ45	Yes	Yes	Yes	No	Passive	Yes	Dual AC/DC
M1GSSA	1G	2 LX Single-Mode, passive LC-Fiber	2 SFP	Yes	Yes	Yes	No	Passive	Yes	Dual AC/DC



INDUSTRIAL ENVIRONMENTS SPECIALIZED NETWORK TAPS



Data Diode Network TAP

Modular Network TAP and Packet Broker Data Center Solutions for 1G Network Monitoring

- Provide 100% full duplex traffic visibility
- Maintain network integrity for industrial network monitoring without exposing additional risk
- Protect the source of data streams between network segments that have different security requirements
- Physical hardware separation guarantees unidirectional traffic between network segments
- Supports 10/100/1000M (1G)
- Supports tap 'breakout,' aggregation, regeneration / SPAN mode

Model #	Network Speed	Network	Monitor	Breakout	Aggregation	Regeneration /SPAN	Failsafe
PT100	10/100M	2 Copper-RJ45	2 Copper-RJ45	Yes	No	No	Passive
P1GCCB	10/100/1000M	2 Copper-RJ45	2 Copper-RJ45	Yes	No	No	Failsafe
P1GCCB_OT	10/100/1000Mbps (1Gbps)	Copper - RJ45	Copper - RJ45	Yes	No	No	Failsafe
M100CCBm	10/100M	2 Mighty Mouse 10/100M	2 Mighty Mouse 10/100M	Yes	No	No	Failsafe
M1GCCBm	10/100/1000M	2 Mighty Mouse 10/100/1000M	2 Mighty Mouse 10/100/1000M	Yes	No	No	Failsafe



Data Diode SPAN TAP

Secure SPAN Links with Hardware-enforced Perimeter Protection

- Provide 100% full duplex traffic visibility
- Maintain network integrity for industrial network monitoring without exposing additional risk
- Protect the source of data streams like switch SPAN ports between network segments that have different security requirements
- Physical hardware separation guarantees unidirectional traffic between network segments
- Supports 10/100/1000M (1G)
- Supports regeneration / SPAN mode

Model #	Network Speed	Network	Monitor	Breakout	Aggregation	Regeneration /SPAN
P1GCCAS-Custom	10/100/1000M	2 Copper-RJ45	2 Copper-RJ45	No	No	Yes
CTAP-P1GCCREG	10/100/1000M	2 Copper-RJ45	2 Copper-RJ45	No	No	Yes



AggregatorTAP: Data Diode

Secure Network and SPAN Links with Hardware-enforced Perimeter Protection

- Provide 100% full duplex traffic visibility
- Maintain network integrity for industrial network monitoring without exposing additional risk
- Protect the source of data streams between network segments that have different security requirements
- INT1G10CSA Aggregate up to 4 TAP links to 1 or 2 monitoring ports
- INT1G10CSASP Aggregate up to 8 SPAN Ports to 1 or 2 monitoring ports
- Supports 10/100/1000M (1G)

Model #	Network Speed	Network	Monitor	Data Diode	Breakout	Aggregation	Regeneration /SPAN	Power
INT1G10CSA	10/100/1000M	8 Copper-RJ45	2 SFP	Yes	Yes	Yes	Yes	AC
INT1G10CSA-DC	10/100/1000M	8 Copper-RJ45	2 SFP	Yes	Yes	Yes	Yes	DC
INT1G10CSASP	10/100/1000M	8 Copper-RJ45	2 SFP	Yes	No	Yes	Yes	AC
INT1G10CSASPDC	10/100/1000M	8 Copper-RJ45	2 SFP	Yes	No	Yes	Yes	DC



Copper OT Network TAP

Visibility Solution for Network and Security Monitoring in Extreme Temperatures

- Provide 100% full duplex traffic visibility
- Supports tap 'breakout'
- Engineered for extreme temperature variations -40C to +85C / -40F to +185F
- Rugged metal construction
- Fixed DC powered
- Supports 10/100/1000M (1G)

Model #	Network Speed	Form Factor	# of TAPs	Failsafe	Network	Monitor	Serial Port	Power		
RMS-1U-v2		1U Rack Shelf Mount Kit - Hold up to 4 Portable 1/10G TAPs								
RMP-1U	1U Rack Mount Kit - Hold up to 4 portable TAPs									
DIN_MOUNT	Select the Ga	Select the Garland Technology portable network TAP model # and add "DIN_MOUNT." below model								
P1GCCB_OT	10/100/1000Mbps (1Gbps)	Portable	1	Yes	Copper - RJ45	Copper - RJ45	No	DC		



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PCIe Network TAP

Visibility Solution for Network and Security Monitoring PC Integrations

- Provide 100% full duplex traffic visibility
- Supports jumbo frames and passes physical errors
- Easily integrate into network appliances or PC
- Supports failsafe, LFP and link speed synch

Model #	Network Speed	Form Factor	# of TAPs	Failsafe	Network	Monitor	Serial Port
PCIE1GCUA	10/100/1000Mbps (1Gbps)	PCIe	1	Yes	Copper - RJ45	USB	PCIe
PCIE1GCA	10/100/1000Mbps (1Gbps)	PCIe	1	Yes	Copper - RJ45	PCIe	PCIe
PCIE10GLRA	1/10Gbps	PCIe	1	Passive	LR Single-Mode Fiber	PCIe	PCIe
PCIE10GSRA	1/10Gbps	PCIe	1	Passive	SR Multi-Mode Fiber	PCIe	PCle



Industrial Accessories DIN Rail | Field DC-DC Converter Power lock connectors

- All of Garland Technology's portable network TAP form factors are available with Industrial accessories
- Fits standard 35mm DIN rail
- Field DC-DC Converter can be integrated into all RMP-1U chassis configurations or as an external supply option
- Power Lock connectors provide extra assurance power supplies stay connected

DIN Rail Mounting Kit

Model #	Description
DIN_Mount	Select the Garland Technology portable Network TAP model number and add "DIN MOUNT" below model

Field DC-DC Converter

Model #	Input Voltage	Output Voltage	Output Current	Output Power	Ripple/noise
PWR-DCDC1	Typ(Vdc)/ Range (Vdc)	(VDC)	min(mA) / max(mA)	max(W)	max(mVp-p)
PVVR-DCDCT	24 / 9 ~ 36	5	150 / 3000	15	100

Power Lock Connectors

Model #	Description
PWR-DCDC1L	Power Supply Lock System for Portable TAPs (except P100CCA)
PLTYPE2	Power Supply Lock System for P100CCA Portable TAP

ADVANCED FILTERING TAPS TAP HYBRIDS



XtraTAP[™]: All-In-1

Flexible Visibility Solution with Advanced TAP Filtering and Media Conversion to Improve Tool Performance

- Provide 100% full duplex traffic visibility
 Advanced filtering for Layer 2, Layer 3 and Layer 4
- · Set utilization alerts to avoid oversubscription
- Media Conversion (SR, LR, SFP+ / RJ45, SX, LX, SFP)
- Supports tap filtering, 'breakout,' aggregation,
- and regeneration/SPAN modes

Model #	Network Speed	Network	Monitor	Split* Ratio	Filtering	Breakout	Aggregation	Regeneration / SPAN	Failsafe	Power		
RMS-1U-v2, BRACKET-11	1U Rack Mount	U Rack Mount Kit - Hold up to 4 Portable 1/10G TAPs										
P10GSSFE-5	1/10G	LR Single- Mode Fiber	SFP+	50/50	Yes	Yes	Yes	Yes	Yes	Dual AC/DC		
P10GSSFE-6	1/10G	LR Single- Mode Fiber	SFP+	60/40	Yes	Yes	Yes	Yes	Yes	Dual AC/DC		
P10GSSFE-7	1/10G	LR Single- Mode Fiber	SFP+	70/30	Yes	Yes	Yes	Yes	Yes	Dual AC/DC		
P10GMSFE-5	1/10G	SR Multi- Mode Fiber	SFP+	50/50	Yes	Yes	Yes	Yes	Yes	Dual AC/DC		
P10GMSFE-6	1/10G	SR Multi- Mode Fiber	SFP+	60/40	Yes	Yes	Yes	Yes	Yes	Dual AC/DC		
P10GMSFE-7	1/10G	SR Multi- Mode Fiber	SFP+	70/30	Yes	Yes	Yes	Yes	Yes	Dual AC/DC		
RMP-1U	1U Rack Mount	Kit - Hold up to	o 4 Portable	e 1G TAPs	S							
P1GCCFE	10/100/1000M	2 Cop- per-RJ45	2 Cop- per-RJ45	NA	Yes	Yes	Yes	Yes	Yes	AC/DC		
P1GCSFE	10/100/1000M	2 Cop- per-RJ45	2 SFP	NA	Yes	Yes	Yes	Yes	Yes	AC/DC		
P1GMCFE	1G	2 SX Multi- Mode	2 Cop- per-RJ45	*	Yes	Yes	Yes	Yes	Yes	AC/DC		
P1GMSFE	1G	2 SX Multi- Mode	2 SFP	*	Yes	Yes	Yes	Yes	Yes	AC/DC		
P1GSCFE	1G	2 LX Sin- gle-Mode	2 Cop- per-RJ45	*	Yes	Yes	Yes	Yes	Yes	AC/DC		
P1GSSFE	1G	2 LX Sin- gle-mode	2 SFP	*	Yes	Yes	Yes	Yes	Yes	AC/DC		

*Split ratios are available in 50/50, 60/40, 80/20, or 90/10, please inquire.





XtraTAP[™]: Portable Packet Broker

Flexible Visibility Solution with Advanced TAP Filtering and Media Conversion to Improve Tool Performance

- Provide 100% full duplex traffic visibility
- Four port SFP+ designUltimate flexibility: Configure TAP modes, ports, speeds and the media you need
 Advanced filtering for Layer 2, Layer 3 and Layer 4
- Set utilization alerts to avoid oversubscription
- Supports tap filtering, 'breakout,' aggregation, bypass and regeneration/SPAN modes

XtraTAP: Portable Packet Broker

Model #	Network Speed	Ports	Filtering	Breakout	Aggregation	Regeneration / SPAN	Bypass	Power
RMS-1U-v2	1U Rack Mount Kit -	Hold up to 4 F	Portable TAPs					
P10GSFPBPFE	1/10G	(4) SFP+	Yes	Yes	Yes	Yes	Yes	Dual AC/ DC

NETWORK PACKET BROKER TAP HYBRIDS



XtraTAP[™]: Modular Packet Broker **Modular Network TAP and Packet Broker Data**

Center Solutions for 1G Network Monitoring

- Provide 100% full duplex traffic visibility
- Advanced filtering for Layer 2, Layer 3 and Layer 4
- Exclusive high density 1U support 4 TAPs and 2U supports 12 TAPs
- Supports filtering, aggregation, bypass or breakout TAP modules
- Multi-Tier Filtering supports MAC, VLAN, IP, DSCP, TCP, UDP
- Media Conversion: Fiber (SX, LX, ZX) and copper (TX)

XtraTAP: Modular Packet Broker Chassis Options

Model #	Chassis/TAPs*	Power Supplies	Voltage	Current (nominal)	Consumption (maximum)	Dimensions (WxHxD)			
M1G1ACE	1U; up to 4 TAPs	Dual Internal AC	100-240VAC	0.75A@115VAC	86.25 Watts	17.40" x 1.75" x 13.45" – (441.96mm x 44.45mm			
M1G1DCE	DCE 1U; up to 4 TAPs Dual Inter		36-60VDC	1A@48VDC	48 Watts	x 341.63mm)			
M1G2ACE	2U; up to 12 TAPs	Dual Internal AC	100-240VAC	1A@115VAC	115 Watts	17.40" x 3.47" x 13.45"			
M1G2DCE	2U; up to 12 TAPs	Dual Internal AC	36-60VDC	2.8A@48VDC	134.4 Watts	- (441.96mm x 88.14mm x 341.63mm)			
M1GC*	GC* Management card: Ethernet/GUI - and- Serial/CLI for M1GxxE								

*M1GL or blanking plates (Model #: Tray-BG) are used if management card is not required or if not all TAP modules are populated. Management card and additional GT TAP modules can be added to chassis.

XtraTAP: Modular Packet Broker | Filtering TAP Module Options

Model #	Network Speed	Network	Monitor	Breakout	Aggregation	Regeneration /SPAN	Filtering	Bypass	Failsafe	Power		
M1GCCF	10/100/1000M	2 Cop- per-RJ45	2 Cop- per-RJ45	Yes	Yes	Yes	Yes	No	Passive	Dual AC/ DC		
M1GCSF	10/100/1000M	2 Cop- per-RJ45	2 SFP	Yes	Yes	Yes	Yes	No	Passive	Dual AC/ DC		
M1GMCF	1G	2 SX Multi- Mode, passive LC-Fiber	2 Cop- per-RJ45	Yes	Yes	Yes	Yes	No	Passive	Dual AC/ DC		
M1GMSF	1G	2 SX Multi- Mode, passive LC-Fiber	2 SFP	Yes	Yes	Yes	Yes	No	Passive	Dual AC/ DC		
M1GSCF	1G	2 LX Sin- gle-Mode, passive LC-Fiber	2 Cop- per-RJ45	Yes	Yes	Yes	Yes	No	Passive	Dual AC/ DC		
M1GSSF	1G	2 LX Sin- gle-Mode, passive LC-Fiber	2 SFP	Yes	Yes	Yes	Yes	No	Passive	Dual AC/ DC		
M1GC*			Manager	Management card: Ethernet/GUI - and- Serial/CLI for M1GxxE								





XtraTAP™: Packet Broker

All-In-1 Network TAP Packet Broker hybrid for easy to deploy visibility and network optimization

- Provide 100% full duplex traffic visibility
- Advanced filtering for Layer 2, Layer 3 and Layer 4
- Exclusive high density 1U support 4 TAPs and 2U supports 12 TAPs
- Supports filtering, aggregation, bypass or breakout TAP modules
 Multi-Tier Filtering supports MAC, VLAN, IP, DSCP, TCP, UDP
 Media Conversion: Fiber (SX, LX, ZX) and copper (TX)

Model #	Network Speed	Network	Split Ratio*	10G Ports	40G Ports	Failsafe	Power
INT10G12MSFE-5	1G/10G	MMF 1G-SX /10G-SR	50/50	(10) SFP+	-	Yes	Dual AC/DC
INT10G12MSFE-6	1G/10G	MMF 1G-SX /10G-SR	60/40	(10) SFP+	-	Yes	Dual AC/DC
INT10G12MSFE-7	1G/10G	MMF 1G-SX /10G-SR	70/30	(10) SFP+	-	Yes	Dual AC/DC
INT10G12SSFE-5	1G/10G	SMF 1G-LX /10G-LR	50/50	(10) SFP+	-	Yes	Dual AC/DC
INT10G12SSFE-6	1G/10G	SMF 1G-LX /10G-LR	60/40	(10) SFP+	-	Yes	Dual AC/DC
INT10G12SSFE-7	1G/10G	SMF 1G-LX /10G-LR	70/30	(10) SFP+	-	Yes	Dual AC/DC
INT10G8SR56-5	1G/10G/40G	(4) MMF 1G- SX /10G-SR	50/50	(32) 1G/10G SFP+	(4) QSFP+ (4x 10G)	Yes	Dual AC/DC
INT10G8SR56-6	1G/10G/40G	(4) MMF 1G- SX /10G-SR	60/40	(32) 1G/10G SFP+	(4) QSFP+ (4x 10G)	Yes	Dual AC/DC
INT10G8SR56-7	1G/10G/40G	(4) MMF 1G- SX /10G-SR	70/30	(32) 1G/10G SFP+	(4) QSFP+ (4x 10G)	Yes	Dual AC/DC
INT10G8LR56-5	1G/10G/40G	(4) SMF 1G- LX /10G-LR	50/50	(32) 1G/10G SFP+	(4) QSFP+ (4x 10G)	Yes	Dual AC/DC
INT10G8LR56-6	1G/10G/40G	(4) SMF 1G- LX /10G-LR	60/40	(32) 1G/10G SFP+	(4) QSFP+ (4x 10G)	Yes	Dual AC/DC
INT10G8LR56-7	1G/10G/40G	(4) SMF 1G- LX /10G-LR	70/30	(32) 1G/10G SFP+	(4) QSFP+ (4x 10G)	Yes	Dual AC/DC

*Split ratios are available in 50/50, 60/40, 80/20, or 90/10, please inquire.

NETWORK PACKET BROKER OVERVIEW

Flexible Network Traffic Optimization

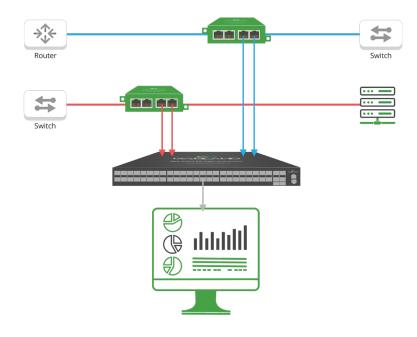
Network Packet Brokers Purpose-built and Specialized for your needs.

In today's environment with significant investment in security and monitoring tools, Garland Technology recognizes the need for a cost effective solution that allows the flexibility and speed that is required for the networks of the future.

Garland provides the advantages of full-featured Network Packet Brokers (NPB) at a significantly less cost. We take the approach of providing solutions that are flexible and scalable for future on-demand growth with excellent ROI. Allowing you to deploy what you need, when you need it.

For advanced traffic optimization, Network TAP and SPAN traffic from various network segments are passed through a network packet broker (NPB) to provide traffic aggregation, advanced filtering, load balancing, deduplication and tunneling, optimizing the traffic for improved monitoring tool performance.

Garland's PacketMAX[™] line of packet brokers are designed to reduce costs and streamline data between teams. Garland's deconstructed packet broker approach provides teams with the flexibility to 'deploy what you need when you need it,' with modular options and no additional per-port license fees.



Network Packet Broker Benefits

- Optimize network traffic for improved monitoring tool performance.
- Provide traffic aggregation, filtering, and load balancing.
- Provide advanced features such as deduplication, packet slicing and time stamping and GRE, L2GRE, ERSPAN, VxLAN Tunneling.
- Support speeds from 1G, 10G, 25G, 40G, 100G.
- Hybrid packet brokers with TAP integration options.
- Inline Edge Security Packet Brokers with Bypass TAPintegration options.
- No additional per-port or feature license fees.

TRAFFIC AGGREGATION NETWORK PACKET BROKERS



Optimize network traffic to improve security and monitoring tools

PacketMAX[™]: Advanced Aggregator

- Provide 100% full duplex traffic visibility
- Supports 1G/10G
- Aggregate network traffic to a single or multiple tools (1:1, 1:N, N:1, N:N)
- Session/flow aware/hash-based load balancing
- Layer 2–4 filtering GRE/VXLAN Tunneling
- No additional per-port license fees

Model #	Network Speed	1G Port	1/10G Port	Power Supplies
GAA10G10AC	1/10G	-	(10) SFP+	AC
GAA10G20AC	1/10G	-	(20) SFP+	AC

ADVANCED FEATURES NETWORK PACKET BROKERS



PacketMAX[™]: Advanced Features

- Supports 1G/10G
- Time stamping
- Packet slicing
 GRE, L2GRE, ERSPAN, VxLAN Tunneling
 Hash-based load balancing, round-robin
- distribution, filtering and aggregation
- No additional per-port license fees

Extend feature set of existing infrastructure and reduce the processing load to security and monitoring tools

Model #	Network Speed	1G Port	1/10G Port	Power Supplies
AF1G40AC	10/100/1000M (1G), 10G	(24) RJ-45	(16) SFP+	AC
AF1G52AC	10/100/1000M (1G), 10G	(48) RJ45	*(4) SFP+	AC
AF1G52DC	10/100/1000M (1G), 10G	(48) RJ45	*(4) SFP+	DC

*SFP+ supports 10G only



PacketMAX[™]: Advanced Features Dedup

Extend feature set of existing infrastructure and reduce the processing load to security and monitoring tools

- Supports 10G/40G
- FPGA Based design for increased flexibility
- Large window deduplication
- Time Stamping: 5 nS resolution
- Programmable Packet Slicing

Model #	Network Speed	Port	Power	Watts
AF10G4ACE	10/40G	(4) SFP+ (1) QSFP	1 AC Power Supply	135W
AF10G4DCE	10/40G	(4) SFP+ (1) QSFP	1 DC Power Supply	135W



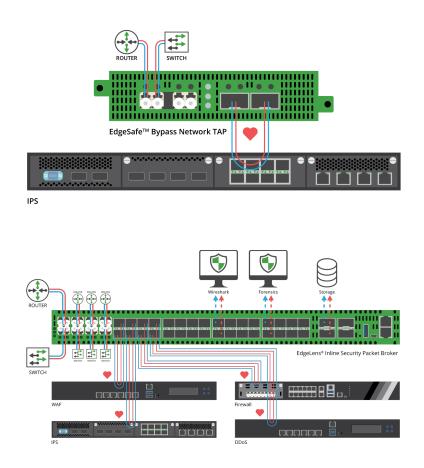
INLINE BYPASS OVERVIEW

Ensure Complete Availability and Reliability for Inline Security Tool Connectivity Across Your IT Environments

Real-time prevention tools like WAF, IPS, SSL Decryption, and firewalls actively analyze network traffic to detect and prevent vulnerability exploits and attacks. These tools sit inline, meaning they are actively blocking threats as traffic passes through them on critical links at the edge or perimeter of the network. This is unlike passive monitoring solutions that analyze out-of-band production network traffic.

As important as these tools are to protect the network – both failure and maintenance of these devices become just as important for network and business availability. And because they sit in the stream of traffic, the deployment, management, failure response and replacement of these devices must be planned out in advance to ensure network continuity and availability.

That is why architects rely on external bypass TAPs (also referred to as a bypass switch) as an industry best practice to resolve the issue of these inline tools causing a single point of failure (SPOF) in the network, which can lead to network downtime and a possible security lapse.



Bypass Benefits

- Prevent your active inline tools from being a single point of failure (SPOF).
- Inline Bypass allows you to sandbox, deploy, troubleshoot and replace active inline tools without taking the network link down.
- Network Failsafe automatically closes the relay circuitry in less than eight milliseconds, keeping the network up.
- Heartbeat health checks monitor the health of the inline appliance. If the tools availability changes, the Bypass TAP will automatically 'bypass' the tool.
- Support speeds from 10/100M, 1G, 10G, 40G, and 100G and are available in passive single-mode and multi-mode fiber or copper ethernet (1G).

INLINE BYPASS TAPS



EdgeSafe[™]: 1G Modular Bypass TAP

Ensure multiple inline tool protection and reliability

- Supports 1G; 1U/2U modular chassis, 1U holds 4 bypass TAPs; 2U holds 12 bypass TAPs, hot swappable
- · Ideal for data centers and media conversion
- Take your inline appliance out-of-band without interrupting traffic for sandboxing, updates, maintenance and troubleshooting
- Guarantee 100% production network uptime with configurable heartbeat and failsafe technology
- Simple easy to use GUI management

Chassis Options

Model #	Chassis/TAPs*	Power Supplies	Voltage	Current (nominal)	Consumption (maximum)	Dimensions (WxHxD)			
M1G1ACE	1U; up to 4 TAPs	Dual Internal AC	100-240VAC	0.75A@115VAC	86.25 Watts	17.40" x 1.75" x 13.45"			
M1G1DCE	1U; up to 4 TAPs	Dual Internal AC	36-60VDC	DC 1A@48VDC 48 Watts		(441.96mm x 44.45mm x 341.63mm) 2 SFP			
M1G2ACE	2U; up to 12 TAPs	Dual Internal AC	100-240VAC	1A@115VAC	115 Watts	17.40" x 3.47" x 13.45"			
M1G2DCE	2U; up to 12 TAPs	Dual Internal AC	36-60VDC	2.8A@48VDC	134.4 Watts	(441.96mm x 88.14mm x 341.63mm)			
M1GC*	Management card: Ethernet/GUI - and- Serial/CLI for M1GxxE								

*M1GL or blanking plates (Model #: Tray-BG) are used if management card is not required or if not all TAP modules are populated. Management card and additional GT TAP modules can be added to chassis. 1U and 2U Chassis also Accommodates Copper Breakout, Aggregation and Filtering TAP modules

EdgeSafe[™]: 1G Bypass Modular Network TAP | Bypass TAP Options

Model #	Network Speed	Network	Monitor	Bypass	Breakout	Aggregation	Regeneration /SPAN	Failsafe	Power
M1GCCBP	10/100/1000M	2 Copper-RJ45	2 Cop- per-RJ45	Yes	Yes	Yes	Yes	Yes	Dual AC/DC
M1GCSBP	10/100/1000M	2 SX Multi- Mode, passive LC-Fiber	2 SFP	Yes	Yes	Yes	Yes	Yes	Dual AC/DC
M1GMCBP	1G	2 Copper-RJ45	2 Cop- per-RJ45	Yes	Yes	Yes	Yes	Yes	Dual AC/DC
M1GMSBP	1G	2 SX Multi- Mode, passive LC-Fiber	2 SFP	Yes	Yes	Yes	Yes	Yes	Dual AC/DC
M1GSCBP	1G	2 LX Sin- gle-Mode, passive LC-Fiber	2 Cop- per-RJ45	Yes	Yes	Yes	Yes	Yes	Dual AC/DC
M1GSSBP	1G	2 LX Sin- gle-Mode, pas- sive LC-Fiber	2 SFP	Yes	Yes	Yes	Yes	Yes	Dual AC/DC





EdgeSafe™: Integrated Bypass TAP

Purpose-built for High Availability

(HA) deployments

- Supports 1G; 1U chassis integrated bypass TAP
- 8 Port High Availability (HA) solution; TAP one link and connect one primary and one back up inline appliance and an additional out-of-band monitoring appliance
- Take your inline appliance out-of-band without interrupting traffic for sandboxing, updates, maintenance and troubleshooting
- Guarantee 100% production network uptime with configurable heartbeat and failsafe technology

Model #	Network Speed	Network	Monitor	Bypass	Breakout	Aggregation	Failsafe	Power
INT1G8CCBP	1G	2 Copper-RJ45	6 Copper-RJ45	Yes Ports CDEF	Yes Ports CDEFGH	Yes Ports GH	Yes	AC
INT1G8SCBP	1G	2 LX Single-Mode, LC-Fiber	6 Copper-RJ45	Yes Ports CDEF	Yes Ports CDEFGH	Yes Ports GH	Yes	AC
INT1G8MCBP	1G	2 SX Multi-Mode, LC-Fiber	6 Copper-RJ45	Yes Ports CDEF	Yes Ports CDEFGH	Yes Ports GH	Yes	AC



EdgeSafe[™]: Bypass TAP

Ensure single inline tool protection and reliability

- Supports 1G/10G; Portable Bypass TAP
- Take your inline appliance out-of-band without interrupting traffic for sandboxing, updates, maintenance and troubleshooting
- Guarantee 100% production network uptime with configurable heartbeat and failsafe technology
- Simple easy to use GUI management

Model #	Network Speed	Network	Monitor	Bypass	Filtering	Breakout	Aggregation	Regenera- tion /SPAN	Failsafe	Power
RMS-1U-V2	1U Rack Mo	unt Kit - Hold u	p to 4 Portab	le TAPs						
P10GMSBPE	1G/10G	2 SR Multi- Mode	2 SFP+	Yes	Yes	Yes	Yes	Yes	Yes	Dual DC
P10GSSBPE	1G/10G	2 LR Sin- gle-Mode	2 SFP+	Yes	Yes	Yes	Yes	Yes	Yes	Dual DC

EdgeSafe[™]: Bypass Network TAP

Model #	Network Speed	Network	Monitor	Bypass	Breakout	Aggregation	Regeneration /SPAN	Failsafe	Power
RMP-1U	1U Rack Mount Kit - H	Hold up to 4 Por	rtable TAPs						

1G Bypass with Remote Management

P1GCCBPE	100/1000M	2 Copper RJ-45	2 Copper RJ45	Yes	Yes	Yes	Yes	Yes	DC
P1GCSBPE	100/1000M	2 Copper RJ-45	2 SFP	Yes	Yes	Yes	Yes	Yes	DC
P1GCCBP- POE+E	100/1000M	2 Copper RJ-45	2 Copper RJ45	Yes	Yes	Yes	Yes	Yes	DC/POE
P1GCSBP- POE+E	100/1000M	2 Copper RJ-45	2 SFP	Yes	Yes	Yes	Yes	Yes	DC/POE
P1GMCBPE	1G	2 SX Multi- Mode	2 Copper RJ45	Yes	Yes	Yes	Yes	Yes	DC
P1GMSBPE	1G	2 SX Multi- Mode	2 SFP	Yes	Yes	Yes	Yes	Yes	DC
P1GSCBPE	1G	2 LX Sin- gle-Mode	2 Copper RJ45	Yes	Yes	Yes	Yes	Yes	DC
P1GSSBPE	1G	2 LX Sin- gle-Mode	2 SFP	Yes	Yes	Yes	Yes	Yes	DC

1G Bypass with Manual Programming

P1GCCBP	100/1000M	2 Copper-RJ45	2 Copper RJ45	Yes	Yes	Yes	Yes	Yes	DC
P1GCSBP	100/1000M	2 Copper-RJ45	2 SFP	Yes	Yes	Yes	Yes	Yes	DC
P1GCCBPPOE+	100/1000M	2 Copper-RJ45	2 Copper RJ45	Yes	Yes	Yes	Yes	Yes	DC/POE
P1GCSBPPOE+	100/1000M	2 Copper-RJ45	2 SFP	Yes	Yes	Yes	Yes	Yes	DC/POE
P1GMCBP	1G	2 SX Multi- Mode, Fiber-LC	2 Copper RJ45	Yes	Yes	Yes	Yes	Yes	DC
P1GMSBP	1G	2 SX Multi- Mode, Fiber-LC	2 SFP	Yes	Yes	Yes	Yes	Yes	DC
P1GSCBP	1G	2 LX Sin- gle-Mode, Fiber-LC	2 Copper RJ45	Yes	Yes	Yes	Yes	Yes	DC
P1GSSBP	1G	2 LX Sin- gle-Mode, Fiber-LC	2 SFP	Yes	Yes	Yes	Yes	Yes	DC





EdgeLens® Focus Inline Security Packet Broker

Manage multiple inline and out-of-band tools from one device

- Supports 1G/10G; 1U half rack integrated bypass TAP -TAP a 1G or 10G link and deliver data to 1G and 10G tools
- Take your inline appliance out-of-band without interrupting traffic for sandboxing, updates, maintenance and troubleshooting
- Guarantee 100% production network uptime with configurable heartbeat and failsafe technology
- Supports High Availability (HA) and tool chaining
- Supports filtering, aggregating, load balancing, and regeneration

Model #	Network Speed	Bypass TAP	Monitor	Power
INT10G12MSBP	1/10/100G	SR Multi-Mode Fiber	(10)SFP+	Dual AC/DC
INT10G12SSBP	1/10/100G	LR Single-Mode Fiber	(10)SFP+	Dual AC/DC



EdgeLens[®] Inline Security Packet Broker

Manage multiple inline and out-of-band tools from one device

- Supports 1G/10G/40G; 1U high density integrated bypass TAP -TAP four 1G, 10G or 40G links and deliver data to 1G, 10G and 40G tools
- Take your inline appliance out-of-band without interrupting traffic for sandboxing, updates, maintenance and troubleshooting
- Guarantee 100% production network uptime with configurable heartbeat and failsafe technology
- Supports High Availability (HA) and tool chaining
- Supports filtering, aggregating, load balancing, and regeneration

Model #	Network Speed	Bypass TAP	10G Ports	40G Ports	Power
INT10G8LR56	1/10/40G	(4) SMF 1G-LX/10G-LR	(32) 1G/10G SFP+	(4) QSFP + (4x 10G)	Dual AC/DC
INT10G8SR56	1/10/40G	(4) MMF 1G-SX/10G-SR	(32) 1G/10G SFP+	(4) QSFP + (4x 10G)	Dual AC/DC
INT40G2SR44	1/10/40G	(2) MMF 40G-SR4	(32) 1G/10G SFP+	(8) 40G QSFP + (4x10G	Dual AC/DC
INT40G2LR44	1/10/40G	(2) SMMF 40G-LR4	(32) 1G/10G SFP+	(8) 40G QSFP + (4x10G	Dual AC/DC

ACCESSORIES PLUGGABLE TRANSCEIVERS



Pluggable Transceivers

Connect your tools with Transceivers, Direct Attach Cables, Copper & Fiber Cables and Accessories

Garland provides high quality pluggable transceivers and cables, designed to excel with the increasing demands for network bandwidth and data storage. Fully compliant with Ethernet, Fibre Channel, Infiniband, SONET/ SDH/OTN, CPRI and PON standards and feature high performance over extended voltage and temperature ranges, while minimizing jitter, electromagnetic interference (EMI) and power dissipation.

1GbE SFP | Pluggable Transceivers

Model #	Network Speed	Туре	Media	Connector	Optical Bandwidth
SFP+LR	1Gbps/10Gbps	1000BASE-LX 1G Ethernet 10GBASE-LR/LW 10G Ethernet	9u SMF	LC	1260nm-1600nm RX 1260nm-1355nm TX
SFP+T	1Gbps/10Gbps	1000BASE-SX 1G Ethernet 10GBASE-SR/SW 10G Ethernet	50u MMF/62.5u MMF	LC	840nm-860nm RX 840nm- 860nm TX
SFPEX40km	1Gbps	SONET OC-48 LR-1 / SDH STM L-16.1 SONET OC-12 / SDH STM 4 SONET OC-3 / SDH STM-1 Gigabit Ethernet / 1x/2x Fibre Channel	9u SMF	LC	1270nm-1600nm RX 1280nm-1355nm TX
SFPEX90km	1Gbps	SONET OC-48 LR-1 / SDH STM L-16.1 SONET OC-12 / SDH STM 4 SONET OC-3 / SDH STM-1 Gigabit Ethernet / 1x/2x Fibre Channel	9u SMF	LC	1270nm-1600nm RX 1280nm-1355nm TX
SFPFX	1Gbps	1000Base-SX	50u MMF/ 62.5u MMF	LC	770nm-860nm RX 830nm- 860nm TX
SFPLX	1Gbps	1000Base-LX	9u SMF	LC	1270nm-1500nm RX 1270nm-1355nm TX
SFPLX-WB	1Gbps	1000Base-LX	9u SMF	LC	1265nm-1600nm RX 1270nm-1360nm TX
SFPSX	1Gbps	1000Base-SX Ethernet	50u MMF/ 62.5u MMF	LC	770nm-860nm RX 830nm- 860nm TX
SFPTX	1Gbps	10/100/1000 BASE-T	Category 5 UTP	RJ45	-
SFPTX1G	1Gbps	10/100/1000 BASE-T	Category 5 UTP	RJ45	-
SFPZX	1Gbps	1000BASE-LW 1G Ethernet	9u SMF	LC	1270nm-1600nm RX 1430nm-1580nm TX

10G Optical SFP+ | Pluggable Transceivers

	, 33				
Model #	Network Speed	Туре	Media	Connector	Optical Bandwidth
SFP+-10GBiDi-1270-1330	10Gbps	SFP-10G-BX	9u SMF	LC simplex	1270nm-TX /1330nm-RX
SFP+-10GBiDi-1330-1270	10Gbps	SFP-10G-BX	9u SMF	LC simplex	1330nm-TX /1270nm-RX
SFP+ER	10Gbps	10GBASE-ER/EW 10G Ethernet	9u SMF	LC	1260nm-1600nm RX 1530nm-1565nm TX
SFP+SR	1Gbps/10Gbps	1000BASE-SX 1G Ethernet 10GBASE-SR/ SW 10G Ethernet	50u MMF/ 62.5u MMF	LC	840nm-860nm RX 840nm-860nm TX
SFP+LR	1Gbps/10Gbps	1000BASE-LX 1G Ethernet 10GBASE-LR/ LW 10G Ethernet	9u SMF	LC	1260nm-1600nm RX 1260nm-1355nm TX
SFP+LR10G	10Gbps	10GBASE-LRM 10G Ethernet 1200-SM- LL-L 10G Fibre Channel	9u SMF	LC	1260nm-1600nm RX 1260nm-1355nm TX
SFP+LRM10G	10Gbps	10GBASE-LRM 10G Ethernet	50u MMF/ 62.5u MMF	LC	1260nm-1600nm RX 1260nm-1355nm TX
SFP+SR10G	10Gbps	10GBASE-SR/SW 10G Ethernet	50u MMF/ 62.5u MMF	LC	840nm-860nm RX 840nm-860nm TX
SFP+T	10 mbps/100 mbps/1 gbps	10/100/1000 BASE-T	Category 5 UTP	RJ45	
SFP+SR_T	1Gbps/10Gbps	10GBASE-SR/SW 10G Ethernet	50u MMF/ 62.5u MMF	LC	840nm-860nm RX 840nm-860nm TX
SFP+ZR80	10Gbps	10GBASE-ER/EW 10G Ethernet	9u SMF	LC	1260nm-1600nm RX 1530nm-1565nm TX

QSFP | Pluggable Transceivers

Model #	Network Speed	Туре	Media	Connector	Optical Bandwidth
QSFP+100GBiDi	1Gbps/10Gbps	40GBASE-SR4	OM4 50 / 125µm MMF	Single 1x12 MPO receptacle	840nm-860nm RX 840nm-860nm TX
QSFP+10GLR	10Gbps	10GBASE-SR/SW	OM4 50 / 125µm MMF	LC	840nm-860nm RX 840nm-860nm TX
QSFP+28SR4	100Gbps	100GBASE-SR4 100G Ethernet	OM4 50 / 125µm MMF	Single MPO12 recep- tacle	840nm-860nm RX 840nm-860nm TX
QSFP+28SRSWDM4	100Gbps	100G Ethernet over Duplex MMF	OM4 50 / 125µm MMF	Duplex LC recepta- cles	λ1 850 RX, 850 TX λ2 880 RX, 880 TX λ3 910 RX, 910 TX λ4 940 RX, 940 TX
QSFP+40-LR4	Supports 41.2 Gb/s aggregate bit rates	40BASE-LR4	SMF	LC Connector	Lane center wavelengths (range) 1264.5 – 1277.5 1284.5 – 1297.5 1304.5 – 1317.5 1324.5 – 1337.5
QSFP+40G	Multi-rate capa- bility: 1.06Gb/s to 10.5Gb/s per channel	40BASE-SR4	MMF	Single 1x12 MPO re- ceptacle QSFP+ Gen2 Optical Transceiver Module	840nm-860nm RX 840nm-860nm TX
QSFP+40G-ER4	Multi-rate capa- bility: 1.06Gb/s to 10.5Gb/s per channel	40BASE-SR4	MMF	Single 1x12 MPO re- ceptacle QSFP+ Gen2 Optical Transceiver Module	840nm-860nm RX 840nm-860nm TX
QSFP+40GBiDi	Multi-rate capa- bility: 1.06Gb/s to 10.5Gb/s per channel	40BASE-SR4	MMF	Single 1x12 MPO re- ceptacle QSFP+ Gen2 Optical Transceiver Module	840nm-860nm RX 840nm-860nm TX
QSFP28PSM4	10Gbps	10GBASE-SR/SW 10G Ethernet	50u MMF / 62.5u MMF	LC	840nm-860nm RX 840nm-860nm TX

ACCESSORIES CABLES



Cables

Connect your tools with Transceivers, Direct Attach Cables, Copper & Fiber Cables and Accessories

Garland provides high quality pluggable transceivers and cable designed to excel with the increasing demands for network bandwidth and data storage. Fully compliant with Ethernet, Fik Channel, Infiniband, SONET/SDH/OTN, CPRI and PON standard feature high performance over extended voltage and tempera ranges, while minimizing jitter, electromagnetic interference (E and power dissipation.

1GbE SFP | Pluggable Transceivers

Model #	Network Speed	Reach	Туре	Media	Connector	Optical Bandwidth	Description
100401BK 1FT Black Ethernet Cable	-	100 M	Copper	Cat 5e Cat 6	RJ45	-	Ethernet Cable
102617 50um 10Gb Fiber Optic Cable	10Gbps	-	-	50u MMF / 62.5u MMF	-	840nm-860nm RX 840nm-860nm TX	Fiber Cable
102732 Multimode Fiber Cable	10Gbps	-	-	50u MMF / 62.5u MMF	-	840nm-860nm RX 840nm-860nm TX	Fiber
102794 9/125 Single- mode Fiber Cable	-	-	-	9u SMF	-	1260nm-1600nm RX 1260nm-1355nm TX	Fiber cable
Cable Tie Mount	-	0.50" long x 0.50" wide	-	-	-	-	The 4-way adhesive backed c tie mount made of nylon 6.6, v increases mechanical strength, h wear resistance, and stiffness. De for indoor, high-temperature er ments, and comes in packages c
Cable Ties	-	-	-	-	-	-	Cable ties
Console Cable DB9- RJ45	-	-	Copper	Cat 5e Cat 6	RJ45	-	Console Cable DB9 Female to F Feet
Console Serial Cable M10GxxBP Modules	-	-	Copper	-	RJ11	-	Console Serial Cable M10GxxBF ules: DB9 Female to RJ11 4 Foot
MTP12F-Y-Cable-1	-	-	-	-	-	-	MTP Y Monitoring Cable - OM meter
QSFP28-4SFP28-Ca- ble_1	-	-	-	-	-	-	100-Gigabit Ethernet QSFP28 1 25-Gigabit Ethernet SFP28 Splitt∉ - 1 Meter
QSFP28-4SFP28-Ca- ble_2	-	-	-	-	-	-	Direct Attach Copper Cable QSF 4x 25Gb SFP28, Pre-Cut 2 Mŧ
QSFP28-4SFP28-Ca- ble_3	-	-	-	-	-	-	Direct Attach Copper Cable QSF 4x 25Gb SFP28, Pre-Cut 3 Mŧ
Serial Cable 10Ft DB9 Male to Female for 8 Port	-	10 ft	Copper	-	DB9	-	Serial Cable 10Ft DB9 Male to F for 8 Port
USB25	-	2.5 ft	Copper	USB	mini-USB Type B (M) to RJ-45 (M)	-	USB 2.5 foot



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