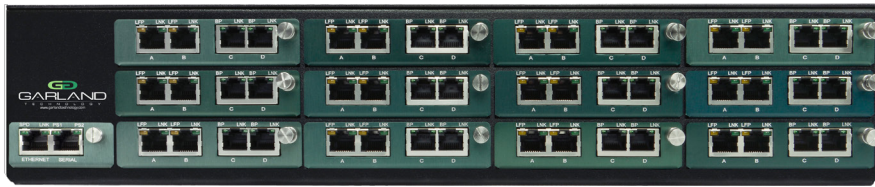


# PacketSTAX™: Modular Hybrid Packet Broker

1G | 1U/2U Chassis | Port-to-Port Aggregator with Port Mapping Filtering



The PacketSTAX™: Modular Hybrid Packet Broker provides a scalable packet broker solution, purpose built with integrated TAP functionality. The PacketSTAX supports tap 'breakout,' aggregation, filtering, regeneration/SPAN and bypass modes. This modular system allows you to fully deploy and manage your monitoring and security appliances and guarantee 100% network uptime letting you see every bit, byte and packet.®

The port-to-port aggregation feature in the 1G Modular Chassis combines both filtering and aggregation functionality, ensuring the links are aggregated together. Filtering ensures that monitoring ports do not become oversubscribed with un-requested data.

## Key Features •

- **Scalable Modular TAPs System:**
  - 2U holds up to 12 TAPs - backplane filtering within TAP row
  - 1U holds up to 4 TAPs - backplane filtering between TAPs and port
- **Management and Non-Management options:**
  - Management: CLI/GUI/SSH/HTTP/Telnet
  - Non-management chassis available; (management card can be added at later date)
- **Port Mapping:** filter allows granular selection of network traffic at layers 2, 3 and 4 of the packet to provide monitoring tools only the traffic they are designed (or intended) to inspect.
- **Multi-Tier Filtering Supports:** MAC, VLAN, IP, DSCP, TCP, UDP
- SNMP V2c/V3
- Dual internal AC or DC power supplies
- TAP modules are hot swappable, fully configurable and interchangeable
- Accommodates GT legacy modular TAPs
- Network Failsafe recognizes power outages and automatically closes the relay circuitry in less than 8 milliseconds then reconnects the two network devices connected to Ports A & B.
- Supports jumbo frames and passes physical errors.
- Packet slicing and packet injection (aggregate mode for copper network port TAPs).
- 100% secure and invisible; no IP address, no MAC address; cannot be hacked
- Made, tested and certified in USA

### APPLICATIONS:

- Remote Management
- High density data center design.
- Network efficiency; only filter the packets required.
- Media Conversion for 1G networks

### SOLUTIONS:

#### Aggregation / Regeneration

Port mapping between multiple TAPs and ports for aggregation, regeneration or filtering. Aggregate data to a single link or regenerate the traffic up to 4 links for 1U or up to 12 links for 2U.

Multiple analyzers and security tools see and share the same data, which reduces the number of ports required by the monitoring tools and security devices.

#### Media Conversion

Converting media allows you to use monitoring tools that you already have or use monitoring tools that cost less.

- Fiber (SX, LX, ZX) to copper (TX)
- Copper (TX) to fiber (SX, LX, ZX)
- Short range fiber (SX) to long range fiber (LX or ZX).

### Competitive Edge

- Flexible design - accommodates any 1G network scenario
- Scalable design - add modules as needed
- Remote management with Ethernet GUI (optional)
- Highest density 1G integrated TAP packet broker on the market



### Have Questions?

sales@garlandtechnology.com  
+716.242.8500  
garlandtechnology.com

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| 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"<br>(441.96mm x 44.45mm x 341.63mm) |
| M1G1DCE         | 1U; up to 4 TAPs   | Dual Internal DC | 36-60VDC   | 1A@48VDC          | 48 Watts              |  |
| M1G2ACE         | 2U; up to 12 TAPs  | Dual Internal AC | 100-240VAC | 1A@115VAC         | 115 Watts             | 17.40" x 3.47" x 13.45"<br>(441.96mm x 88.14mm x 341.63mm) |
| M1G2DCE         | 2U; up to 12 TAPs  | Dual Internal DC | 36-60VDC   | 2.8A@48VDC        | 134.4 Watts           |  |
| M1GC*           | Management card: Ethernet/GUI - and - Serial/CLI for M1GxxxE |                  |            |                   |                       |  |

\*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.

| Breakout TAP options |               |                        |               |          |             |                   |           |        |                           |
|----------------------|---------------|------------------------|---------------|----------|-------------|-------------------|-----------|--------|---------------------------|
| Model #              | Network Speed | Media                  |               | Modes    |             |                   |           |        | Features                  |
|                      |               | Network                | Monitor       | Breakout | Aggregation | Regeneration/SPAN | Filtering | Bypass |                           |
| M100CCB*             | 10/100M       | 2 Copper-RJ45, passive | 2 Copper-RJ45 | Yes      | No          | No                | No        | No     | Passive                   |
| M1GCCB               | 10/100/1000M  | 2 Copper-RJ45          | 2 Copper-RJ45 | Yes      | No          | No                | No        | No     | Link Synch with Fail Safe |

\*Supports Power over Ethernet (POE)

| Aggregation TAP options |               |                                    |               |          |             |                   |           |        |                          |                |
|-------------------------|---------------|------------------------------------|---------------|----------|-------------|-------------------|-----------|--------|--------------------------|----------------|
| Model #                 | Network Speed | Media                              |               | Modes    |             |                   |           |        | Packet Injection Support | Packet Slicing |
|                         |               | Network                            | Monitor       | Breakout | Aggregation | Regeneration/SPAN | Filtering | Bypass |                          |                |
| M1GCCBP                 | 100/1000M     | 2 Copper-RJ45                      | 2 Copper-RJ45 | Yes      | Yes         | Yes               | No        | Yes    | Yes                      | Yes            |
| M1GCSBP                 | 100/1000M     | 2 Copper-RJ45                      | 2 SFP         | Yes      | Yes         | Yes               | No        | Yes    | Yes                      | Yes            |
| M1GMCA                  | 1G            | 2 SX Multi-mode, passive LC-Fiber  | 2 Copper-RJ45 | Yes      | Yes         | Yes               | No        | No     | No                       | Yes            |
| M1GMSA                  | 1G            | 2 SX Multi-mode, passive LC-Fiber  | 2 SFP         | Yes      | Yes         | Yes               | No        | No     | No                       | Yes            |
| M1GSCA                  | 1G            | 2 LX Single-mode, passive LC-Fiber | 2 Copper-RJ45 | Yes      | Yes         | Yes               | No        | No     | No                       | Yes            |
| M1GSSA                  | 1G            | 2 LX Single-mode, passive LC-Fiber | 2 SFP         | Yes      | Yes         | Yes               | No        | No     | No                       | Yes            |

| Bypass TAP options |               |                                    |               |          |             |                   |           |        |                          |                |
|--------------------|---------------|------------------------------------|---------------|----------|-------------|-------------------|-----------|--------|--------------------------|----------------|
| Model #            | Network Speed | Media                              |               | Modes    |             |                   |           |        | Packet Injection Support | Packet Slicing |
|                    |               | Network                            | Monitor       | Breakout | Aggregation | Regeneration/SPAN | Filtering | Bypass |                          |                |
| M1GCCBP            | 100/1000M     | 2 Copper-RJ45                      | 2 Copper-RJ45 | Yes      | Yes         | Yes               | No        | Yes    | Yes                      | Yes            |
| M1GCSBP            | 100/1000M     | 2 Copper-RJ45                      | 2 SFP         | Yes      | Yes         | Yes               | No        | Yes    | Yes                      | Yes            |
| M1GMCBP            | 1G            | 2 SX Multi-mode, passive LC-Fiber  | 2 Copper-RJ45 | Yes      | Yes         | Yes               | No        | Yes    | Yes                      | Yes            |
| M1GMSBP            | 1G            | 2 SX Multi-mode, passive LC-Fiber  | 2 SFP         | Yes      | Yes         | Yes               | No        | Yes    | Yes                      | Yes            |
| M1GSCBP            | 1G            | 2 LX Single-mode, passive LC-Fiber | 2 Copper-RJ45 | Yes      | Yes         | Yes               | No        | Yes    | Yes                      | Yes            |
| M1GSSBP            | 1G            | 2 LX Single-mode, passive LC-Fiber | 2 SFP         | Yes      | Yes         | Yes               | No        | Yes    | Yes                      | Yes            |



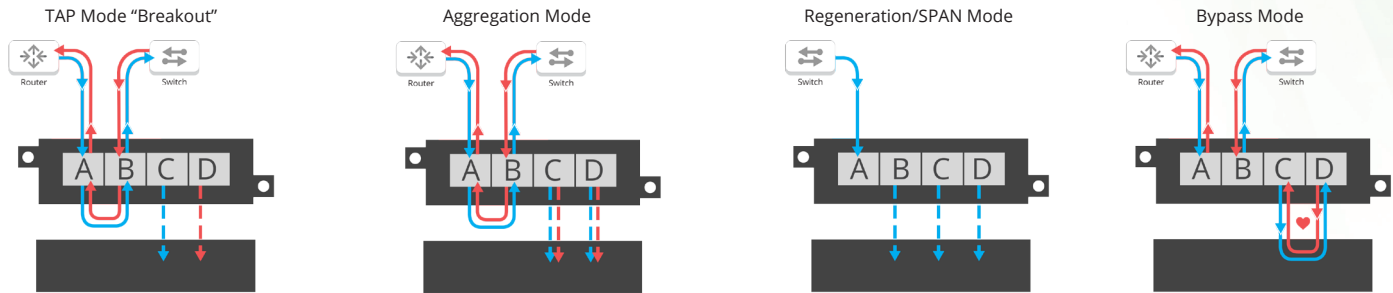
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# PacketSTAX™: Modular Hybrid Packet Broker

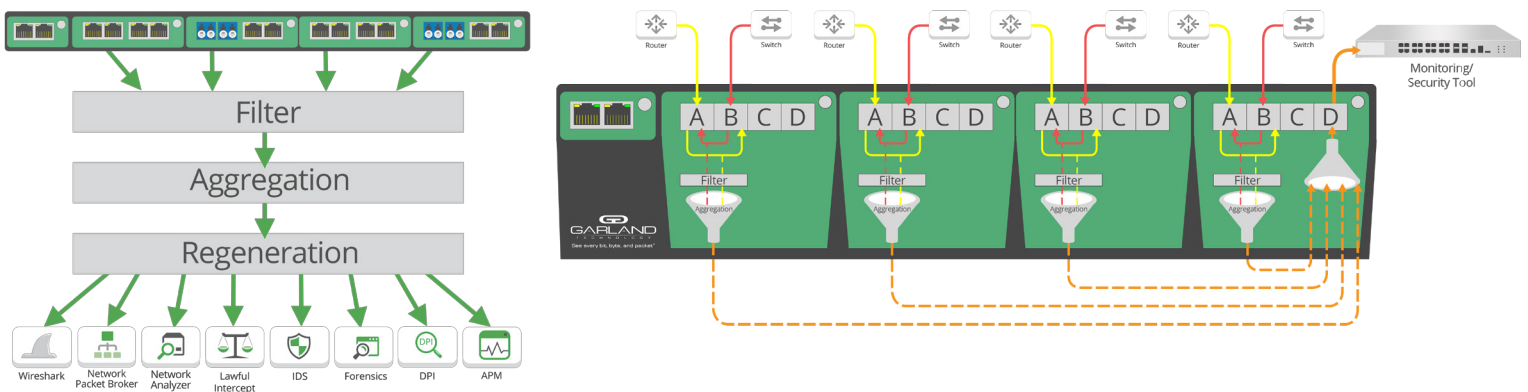
1G | 1U/2U Chassis | Port-to-Port Aggregator with Port Mapping Filtering

| Filtering TAP options |               |                                    |               |          |             |                   |           |        |                            |
|-----------------------|---------------|------------------------------------|---------------|----------|-------------|-------------------|-----------|--------|----------------------------|
| Model #               | Network Speed | Media                              |               | Modes    |             |                   |           |        | Link Speed Synchronization |
|                       |               | Network                            | Monitor       | Breakout | Aggregation | Regeneration/SPAN | Filtering | Bypass |                            |
| M1GCCF                | 10/100/1000M  | 2 Copper-RJ45                      | 2 Copper-RJ45 | Yes      | Yes         | Yes               | Yes       | No     | Yes                        |
| M1GCSF                | 10/100/1000M  | 2 Copper-RJ45                      | 2 SFP         | Yes      | Yes         | Yes               | Yes       | No     | Yes                        |
| M1GMCF                | 1G            | 2 SX Multi-mode, passive LC-Fiber  | 2 Copper-RJ45 | Yes      | Yes         | Yes               | Yes       | No     | No                         |
| M1GMSF                | 1G            | 2 SX Multi-mode, passive LC-Fiber  | 2 SFP         | Yes      | Yes         | Yes               | Yes       | No     | No                         |
| M1GSCF                | 1G            | 2 LX Single-mode, passive LC-Fiber | 2 Copper-RJ45 | Yes      | Yes         | Yes               | Yes       | No     | No                         |
| M1GSSF                | 1G            | 2 LX Single-mode, passive LC-Fiber | 2 SFP         | Yes      | Yes         | Yes               | Yes       | No     | No                         |

## Network Flow



## Use Case



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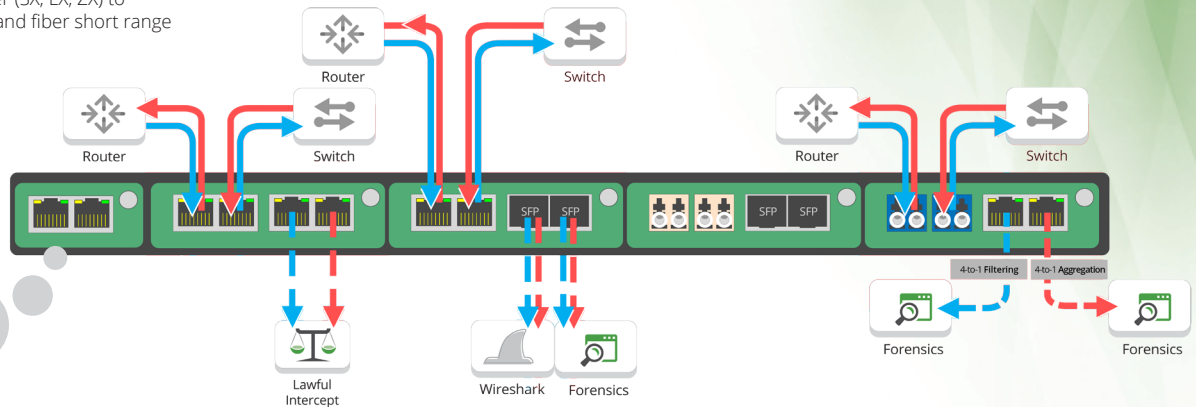
1G | 1U/2U Chassis | Port-to-Port Aggregator with Port Mapping Filtering

## Use Case

### Out of Band Monitoring Solution with 1U - 4 TAP Modules; supports 1Gbps

TAP 1 is in breakout mode delivering 100% packet capture for Lawful Intercept purposes, TAP 2 is aggregating network traffic to Wireshark and Forensic tools, TAP 3 is for future media conversion needs, and TAP 4 supports backplane filtering and aggregation from 4-TAP links to one Forensics tool.

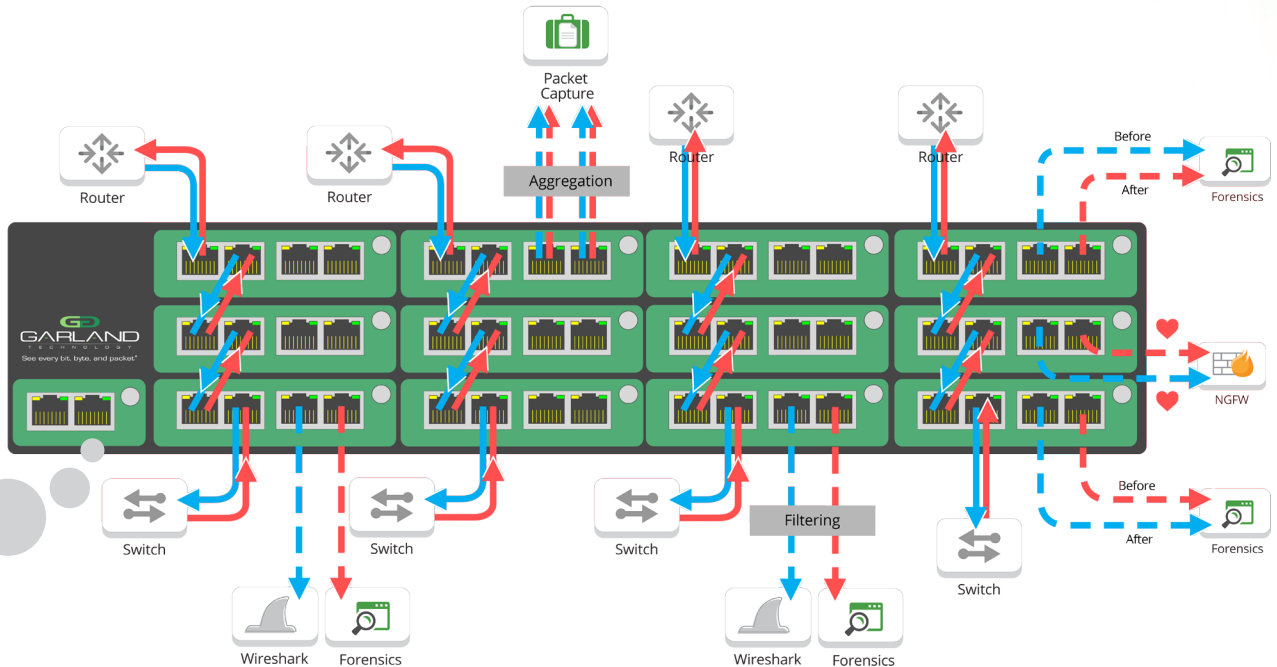
Supports Media Conversion: Fiber (SX, LX, ZX) to Copper (TX), to Fiber (SX, LX, ZX) and fiber short range (SX) to long range (LX or ZX).



### Historical Lookback (before & after) Solution with Filtering, Aggregation and Bypass with 2U - 12 TAP Modules; supports 1Gbps

TAPs in columns 1, 2, 3 are deployed independently for TAP/breakout mode, aggregation and filtering with out-of-band monitoring tools.

TAPs in column 4 are providing a before and after view of packets as they pass from router to forensics with active, inline security and back to forensics - before exiting through the switch.



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