This portable network TAP series is ideal for 10/100/1000MB copper network monitoring. The innovative design allows these TAPs to be easily installed into any copper 10/100/1000MB network segment.

Once installed in your network the P1GXXAS network TAPs will enable you to monitor your network segments quickly and effectively using a network analyzer, security devices, or any monitoring appliance or tool. These 100/1000MB TAPs will allow you to capture full-duplex traffic without dropping any packets or, in the SPAN Mode the input traffic to be replicated to up to 3 monitor ports.

### P1GXXAS TAP Key Features

- Supports Breakout, Aggregation and SPAN Modes
- Copper media connectivity
- Plug-n-Play design with zero configuration
- Link Speed Synchronization
- Jumbo Frames
- Passes physical layer errors on network ports
- Supports Link Failure Propagation (LFP)
- Monitor Port Speed selectable (100Mbps or 1Gbps)
- Supports FailSafe in case of power failure.
- Captures Full Duplex Traffic up to 2 Gigabits without dropping any packets
- Small portable form factor: 3.9"x1.15"x6.53" (W x H x D)
- Rack Shelf or Plate supports up to four (4) TAPs in a 1U space
To deploy the P1GXXAS Portable Tap into your network, simply:

- Unpack the device and attach it to an optional rack mount bracket (sold separately).
- Install the P1GCCAS assembly into any available 1U slot of a network rack and secure it with rack mount screws.
- Utilizing the DIP switches (located on the reverse side of the unit, next to the power input) configure the P1GXXAS for the operating mode of your choice (see next page). Install network TAP into the live network. **THIS STEP NEEDS TO BE DONE WITH NO POWER CONNECTED TO THE TAP**
- Using standard Ethernet cables, connect ports [A] and [B] (Auto MDIX) of the P1GXXAS between the two live network devices where monitoring is desired. Verify network traffic is flowing, confirming that network cabling is correct.
- Connect ports [C] and [D] (Auto MDIX) to the monitoring tools for traditional traffic monitoring (SPAN mode may also be used for regenerating outputs).
- Connect the power supply to the P1GXXAS and plug it in to an available power source.
- **Note:** Other operating modes are available for monitoring and may be configured using the provided DIP switches. Using SPAN or regeneration mode on fiber models may require both [A] and [B] ports to be connected to obtain link on port [A] or [B].
- The “BP” LED serves no purpose on this model.
- Anytime the configuration switches are changed the user must remove and then re-apply power for the changes to take effect.

**Network Cabling:**

![Network Cabling Diagram]
P1GXXAS Portable Tap Installation Guide (cont)

Configuration Examples

P1GXXAS Portable TAP Operating Modes

- **Aggregate Mode**
- **Breakout Mode**
- **SPAN/Regenerate Mode**

Network Ports | Monitor Ports
---|---

<table>
<thead>
<tr>
<th>Speed</th>
<th>TAP Mode</th>
<th>LFP</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>100Mbps</td>
<td>Breakout</td>
<td>LFP Off</td>
<td>No Function</td>
</tr>
<tr>
<td>10Mbps</td>
<td></td>
<td>LFP Off</td>
<td>No Function</td>
</tr>
<tr>
<td>1Gbps</td>
<td>SPAN</td>
<td>LFP Off</td>
<td>No Function</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Speed</th>
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<tr>
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<tr>
<td>10Mbps</td>
<td></td>
<td>LFP Off</td>
<td>No Function</td>
</tr>
<tr>
<td>1Gbps</td>
<td>SPAN</td>
<td>LFP Off</td>
<td>No Function</td>
</tr>
</tbody>
</table>

Black indicates the position of the switch
UP is on and DOWN is off

Factory Default Setting: Synchronize mode, Aggregation Mode, Monitor Port Speed 1Gbps and LFP ON

Definitions

**AGG** or A (Aggregation): Combines Data Flows

**BRE** or B (Breakout): Separates Data Flows

**LFP** (Link Failure Propagation): Allows link state to be mirrored to the adjacent live network interfaces.

**SPAN** or S or Regenerate: Allows users to multiply one or more inputs to one or more outputs.

**SYNC** (Synchronization) Allows link speed synchronization.

**N/A** (Not Applicable): The N/A DIP Switches have no effect on this product.
### DIP switch Settings

<table>
<thead>
<tr>
<th>SPEED Mode</th>
<th>Switch 1 (Speed_1)</th>
<th>Switch 2 (Speed_2)</th>
<th>Switch 3 (Speed_3)</th>
<th>TAP Mode determined by Sw 4 &amp; 5</th>
<th>Switch 4 TAP Mode</th>
<th>Switch 5 TAP Mode</th>
<th>Switch 6 Sets Monitor Port Speed</th>
<th>Switch 7 LFP Mode</th>
<th>Switch 8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Auto Neg 1G only</td>
<td>OFF</td>
<td>OFF</td>
<td>OFF</td>
<td>BRE</td>
<td>OFF</td>
<td>OFF</td>
<td>No LFP ON</td>
<td>No Effect</td>
<td></td>
</tr>
<tr>
<td>Auto Neg 1G</td>
<td>ON</td>
<td>OFF</td>
<td>OFF</td>
<td>BRE</td>
<td>OFF</td>
<td>OFF</td>
<td>NO LFP ON</td>
<td>No Effect</td>
<td></td>
</tr>
<tr>
<td>Auto Neg 1G</td>
<td>OFF</td>
<td>ON</td>
<td>OFF</td>
<td>AGG</td>
<td>ON</td>
<td>OFF</td>
<td>NO LFP OFF</td>
<td>No Effect</td>
<td></td>
</tr>
<tr>
<td>Forced 100M Full</td>
<td>ON</td>
<td>ON</td>
<td>OFF</td>
<td>SPAN</td>
<td>OFF</td>
<td>ON</td>
<td>No Effect</td>
<td>No Effect</td>
<td></td>
</tr>
<tr>
<td>Forced 100M Full</td>
<td>OFF</td>
<td>OFF</td>
<td>ON</td>
<td>SPAN</td>
<td>ON</td>
<td>ON</td>
<td>No Effect</td>
<td>No Effect</td>
<td></td>
</tr>
<tr>
<td>Forced 10M</td>
<td>ON</td>
<td>OFF</td>
<td>ON</td>
<td>SPAN</td>
<td>OFF</td>
<td>NO LFP OFF</td>
<td>No Effect</td>
<td>No Effect</td>
<td></td>
</tr>
<tr>
<td>Sync Mode</td>
<td>OFF</td>
<td>ON</td>
<td>ON</td>
<td>SPAN</td>
<td>OFF</td>
<td>NO LFP OFF</td>
<td>No Effect</td>
<td>No Effect</td>
<td></td>
</tr>
<tr>
<td>Sync Mode</td>
<td>ON</td>
<td>ON</td>
<td>ON</td>
<td>SPAN</td>
<td>OFF</td>
<td>NO LFP OFF</td>
<td>No Effect</td>
<td>No Effect</td>
<td></td>
</tr>
</tbody>
</table>

Garland Technology’s unique Synchronization Mode provides the user a Plug-n-Play zero configuration design. Network ports [A] and [B] will synchronize to determine the highest supported network speed, drop link across all ports, and then only advertise and link to the highest supported common network speed on all ports. See LED Table for how you know what speed the TAP connects at.

---

### Ordering Information

**P1GCCAS**  
Portable 100/1000M Aggregating Tap: Two (2) Copper 100/1000M RJ-45 Tap Ports with two (2) Copper 100M or 1G RJ-45 Monitor Ports*, single Power Supply supports Breakout Mode, Aggregation Mode, and SPAN Mode

**P1GCSAS**  
Portable 100/1000M Aggregating Tap: Two (2) Copper 100/1000M RJ-45 Network Ports with two (2) SFP Monitor Ports*, single Power Supply supports Breakout Mode, Aggregation Mode, and SPAN Mode

**P1GMCAS**  
Portable 1000M Aggregating Tap: Two (2) Multi-Mode Passive Fiber LC Tap Ports with two (2) Copper 100M or 1G RJ-45 Monitoring Ports*, single Power Supply supports Breakout Mode, Aggregation Mode, and SPAN Mode

**P1GMSAS**  
Portable 1000M Aggregating Tap: Two (2) Multi-Mode Passive Fiber LC Tap Ports with two (2) SFP Monitor Ports*, single Power Supply supports Breakout Mode, Aggregation Mode, and SPAN Mode

**P1GSCAS**  
Portable 1000M Aggregating Tap: Two (2) Single Mode Passive Fiber LC Tap Ports with two (2) Copper 100M or RJ-45 Monitor Ports*, single Power Supply supports Breakout Mode, Aggregation Mode, and SPAN Mode

**P1GSSAS**  
Portable 1000M Aggregating Tap: Two (2) Single Mode Passive Fiber LC Tap Ports with two (2) SFP Monitor Ports*, single Power Supply supports Breakout Mode, Aggregation Mode, and SPAN Mode

**RMP-1U**  
Four (4) Slot 1U Rack Mount Plate, holds up to four (4) Portable TAPs

*Note*  
Speed of Monitor Ports is controlled by DIP Sw 6 – ON = 100Mbps, OFF = 1Gbps