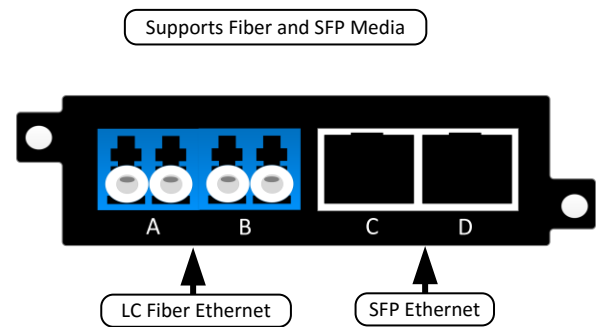
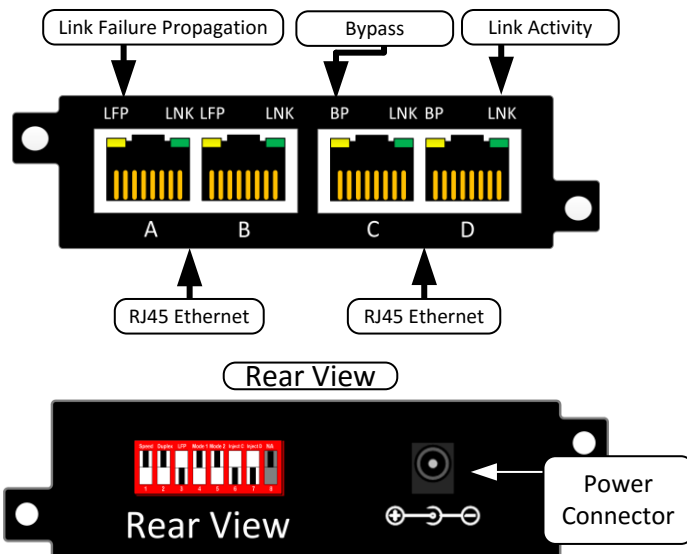


### To deploy the P1GxxBP Portable Bypass Tap into your network, simply:

- Unpack the device and attach it to the optional rack mount bracket (RMP-1U sold separately)
- Install the P1GxxBP assembly into any available slot of the Rack Mount Plate and secure it with rack mount screws
- Utilizing the DIP switches (located on the rear of the unit, next to the power input) configure the P1GxxBP for the operating mode of your choice
- Using standard Ethernet cables, connect ports [A] and [B] (Auto MDI/MDIX) of the P1GxxBP between the two live network devices where you would otherwise deploy an inline appliance or sensor (for example: IPS or DLP). Verify network traffic is flowing, confirming that network cabling is correct – **Do this step with no power applied on the TAP**
- Connect ports [C] and [D] (Auto MDI/MDIX) to the inline appliance or other tools for traditional breakout or aggregated traffic monitoring
- Connect the power supply to the P1GxxBP and plug it into an available power source

- Notes:**
1. Fiber is always 1000Mbps speed. Other operating modes may be desired for monitoring and may be configured using the provided DIP switches
  2. The Bypass TAP is not usually used to tap SPAN traffic but if it should be required there is a way to set this TAP to take a SPAN input on port [A] and replicate the traffic out to ports [B], [C] and [D] (See SPAN Mode on page 2)
  3. Anytime the configuration switches are changed the user must remove and then apply power for the changes to take effect.

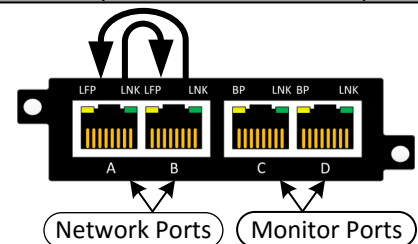


Speed	Duplex	LFP	Mode 1	Mode 2	Inject C	Inject D	NA
1000	AUTO	ON	A B	A S	ON	ON	
100	FULL	OFF	BP S	B BP	OFF	OFF	
1	2	3	4	5	6	7	8

### Portable Bypass TAP Key Features

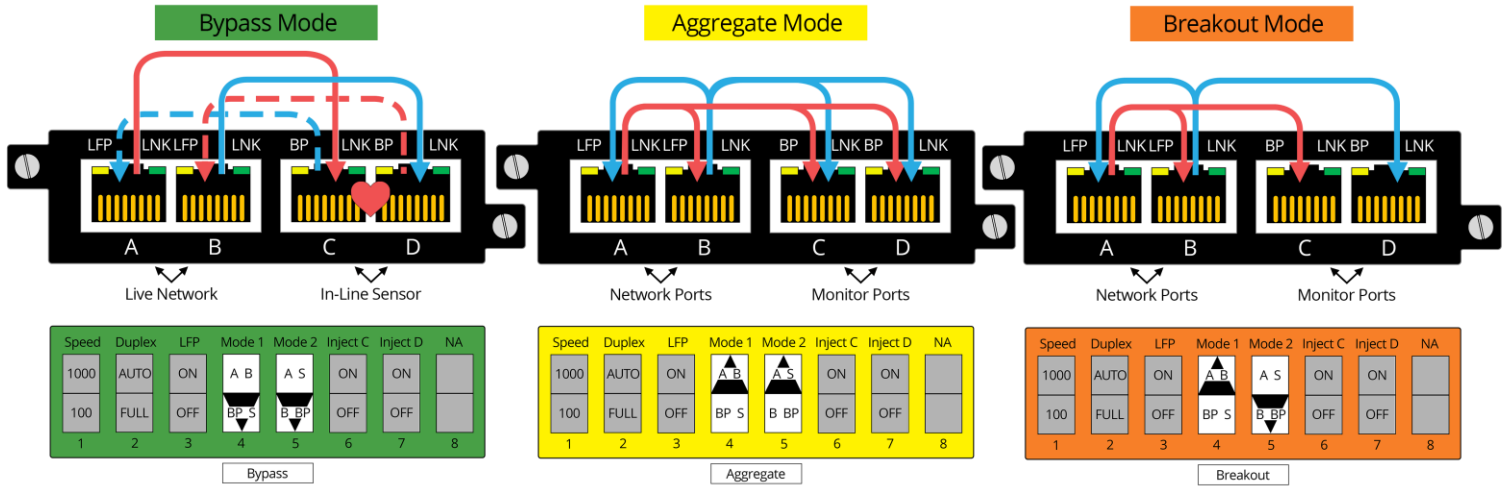
- Supports Bypass with heartbeat, Breakout, Aggregation and SPAN Modes
- Connectivity to copper or fiber ports
- Plug-n-Play design with zero configuration
- Link Speed Synchronization
- Packet Injection: allows monitor ports to Inject packets back into the live network flow
- Supports Jumbo Frames
- Passes physical layer errors
- Supports Link Failure Propagation (LFP)
- Supports FailSafe.
- Captures Full Duplex Traffic up to 2 Gigabits without dropping any packets
- Small portable form factor: 3.942"x1.20"x3.942" (W x H x D)
- Rack Shelf or Plate supports up to four (4) TAPs in a 1U space

**Network Failsafe**  
If TAP loses power, the live link is kept intact.

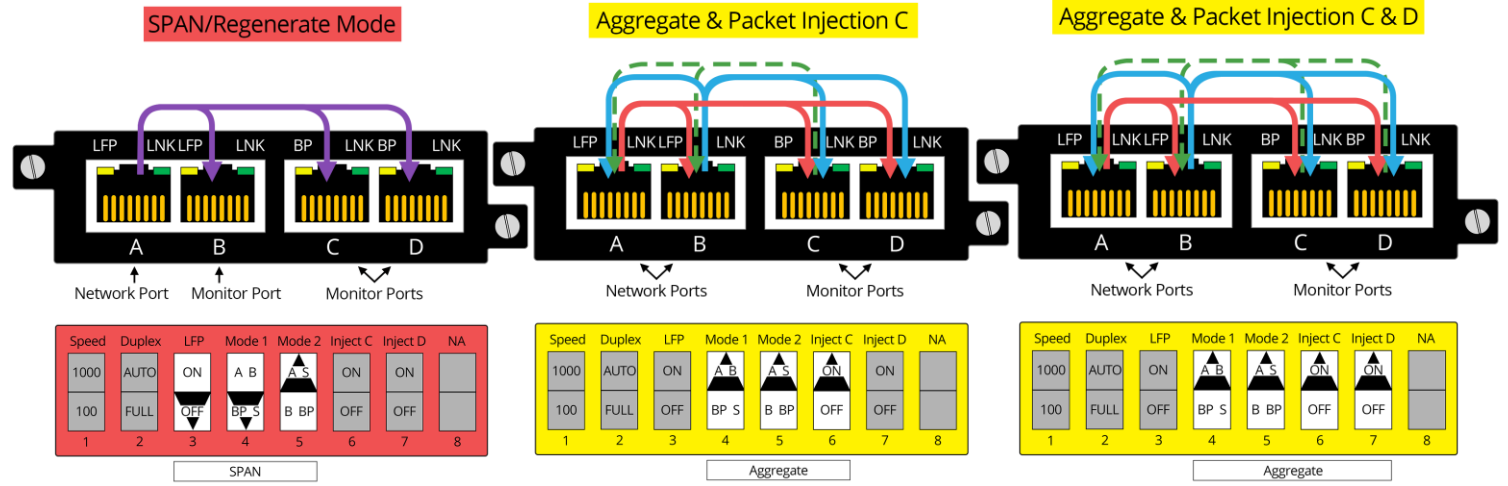


### Configuration Examples

#### P1GxxBP Portable TAP Operating Modes



#### Packet Injection only works in Aggregate Mode

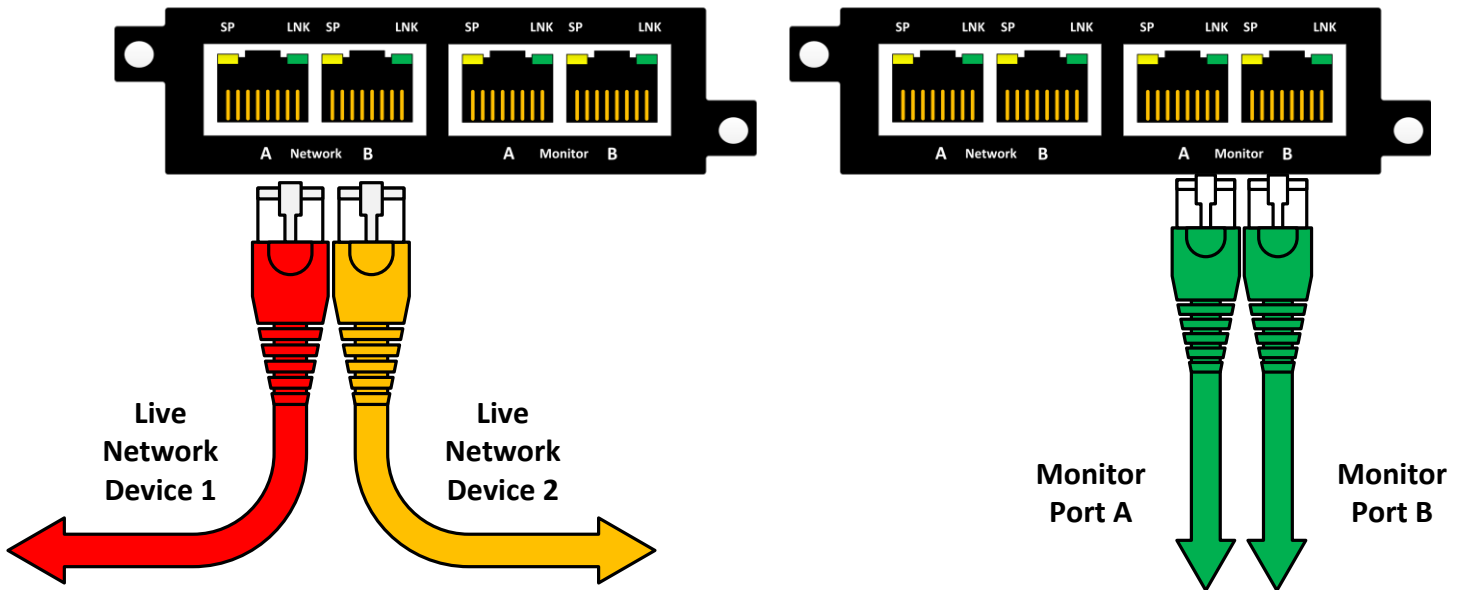


Speed	Duplex	LFP	Mode 1	Mode 2	Inject C	Inject D	NA
1000	AUTO	ON	A B	A S	ON	ON	
100	FULL	OFF	BP S	B BP	OFF	OFF	

**NOTES:**

- When switch is **ON**, black is in the up position: ▲
- When switch is **OFF**, black is in the down position: ▼
- AGG** or **A** (Aggregation): Combines data flows.
- BRE** or **B** (Breakout): Separates data flows.
- BP** (Bypass): Supported on P1GxxBP models.
- LFP** (Link Failure Propagation): Allows link state to be mirrored to adjacent live network interfaces.
- PI** (Packet Injection): Allows monitor ports to inject data back into the live network flows.
- SPAN** or **S** or **Regenerate**: Allows users to multiply one or more inputs into many outputs.

### Network Cabling:



### Definitions:

- **1G, 100M Speed Mode:** Switch position 1, **ON** equals 1000Mbps, **OFF** equals 100Mbps.
- **Duplex:** **AUTO** setting (Sw 2 in ON position default) lets the port negotiate the duplex mode with the link pair (only in copper connections).  
**FULL** setting (Sw 2 in OFF position) forces the link to full duplex mode
- **Link Failure Propagation (LFP):** Switch position 3, used mostly for HA designed networks. It can sense a network failure and reflect the failure to the adjacent port of the live network allowing the network's failover mechanism to switch over to the secondary network path.
- **Bypass Mode:** Switch 4 and 5 "OFF" - In the normal operation in this mode TAP will direct the live traffic through the In-Line Appliance. If the Appliance goes off-line for any reason (TAP no longer receives the Heartbeat packet from the Appliance) the TAP will Bypass the appliance until it goes back on line again.
- **Breakout Mode:** Switch 4 "ON" and 5 "OFF" - An operating mode that allows monitoring of separate traffic streams, one for each direction of network traffic.
- **Aggregation Mode:** Switch 4 and Switch 5 are "ON" - An operating mode that allows monitoring the A&B traffic onto one monitoring port.
- **SPAN Mode:** An operating mode that allows traffic from one or more SPAN outputs of a Switch or Router to be sent out to one or more monitoring ports. Switch 3 (LFP) to "OFF," Switch 4 "OFF" and Switch 5 "ON."
- **Packet Injection Port C:** Switch 6 turns Packet Injection "ON" or "OFF". Only works in Aggregate Mode.
- **Packet Injection Port D:** Switch 7 turns Packet Injection "ON" or "OFF". Only works in Aggregate Mode.
- **Failsafe:** On power loss, the live network TAP ports re-establish link with each other (per IEEE specification, resuming traffic flow between critical network devices).

**Ordering Information:**

**P1GCCBP** Portable 100/1000M TAP: Two (2) Copper 100/1000M RJ-45 TAP Ports with two (2) Copper RJ-45 Monitoring Ports, single Power Supply, supports Breakout Mode, Aggregation Mode, and Bypass Mode with by-directional heartbeat.

**P1GCSBP** Portable 100/1000M TAP: Two (2) Copper 100/1000M RJ-45 TAP Ports with two (2) SFP Monitoring Ports, single Power Supply, supports Breakout Mode, Aggregation Mode, and Bypass Mode with by-directional heartbeat.

**P1GMCBP** Portable 100/1000M TAP: Two (2) Multi-mode Passive Fiber LC TAP Ports with two (2) Copper RJ-45 Monitoring Ports, single Power Supply, supports Breakout Mode, Aggregation Mode, and Bypass Mode with by-directional heartbeat .

**P1GMSBP** Portable 100/1000M TAP: Two (2) Multi-mode Passive Fiber LC TAP Ports with two (2) SFP Monitoring Ports, single Power Supply, supports Breakout Mode, Aggregation Mode, and Bypass Mode with by-directional heartbeat .

**P1GSCBP** Portable 100/1000M TAP: Two (2) Single-mode Passive Fiber LC TAP Ports with two (2) Copper RJ-45 Monitoring Ports, single Power Supply, supports Breakout Mode, Aggregation Mode, and Bypass Mode with by-directional heartbeat.

**P1GSSBP** Portable 100/1000M TAP: Two (2) Single-mode Passive Fiber LC TAP Ports with two (2) SFP Monitoring Ports, single Power Supply, supports Breakout Mode, Aggregation Mode, and Bypass Mode with by-directional heartbeat.

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

