

# Hardware Data Diodes for 1G Fiber Networks

Portable, cost-effective unidirectional traffic enforcement.



P1GSSASP



P1GMSASP

A common visibility use case in OT networks is to route mirrored traffic from a SPAN port on an industrial switch to a security or monitoring sensor. Port mirroring, also known as SPAN (Switch Port Analyzer), is a designated port on a network switch that is programmed to mirror, or send a copy, of network packets seen on a specific port, where the packets can be analyzed. In critical network deployments like OT environments, if using SPAN is the only option to connect security sensors then additional security measures should be taken. It is best practice to connect the SPAN/Mirror port to a hardware Data Diode to pass the mirrored data onto the monitoring and security sensors. Using hardware Data Diodes eliminate bidirectional traffic flow ensuring that no data is passed back into the Switch Mirror port. Hardware Data Diodes are purpose-built network devices that enforce one-way data flow for Switch Mirror ports with physical hardware separation. They guarantee protection of critical systems, such as industrial control systems (ICS), from inbound cyber threats. Garland Technology's Hardware Data Diodes ensure any ethernet packet flows in one direction out the monitoring ports.

### BASIC

- Portable
- Two-modes: Regen and Aggregation
- Single power supply
- Two models available

### SAFE

- Hardware Data Diode design
- No IP or MAC address
- Durable metal chassis

### PRACTICAL

- Affordable pricing (when compared to software-based data diodes)
- Help meet NERC CIP v5

### COUNTRY OF ORIGIN: USA

- TAA compliant

## Ordering Information

Product Name	Part #	Product Description
<b>1G Multimode Fiber Hardware Data Diode</b>	P1GMSASP	Portable 1Gigabit-SX MMF Aggregating Hardware Data Diode: (2) 1Gigabit-SX MMF Inputs LC Ports with (2) SFP 1Gigabit
<b>1G Single-mode Fiber Hardware Data Diode</b>	P1GSSASP	Portable 1Gigabit-LX SMF Aggregating Hardware Data Diode: (2) 1Gigabit-LX SMF Inputs LC Ports with (2) SFP 1Gigabit Monitoring Ports, (1) PS AC



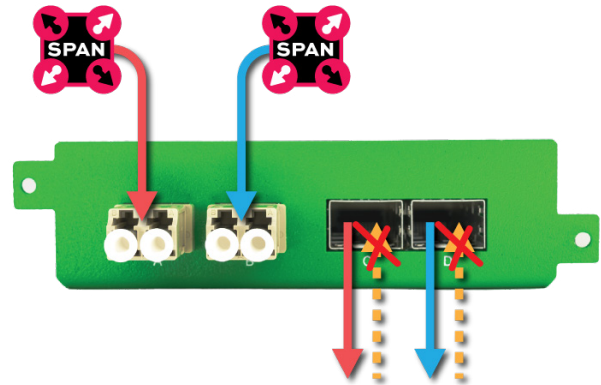
### Have Questions?

sales@garlandtechnology.com | +1 716.242.8500 | GarlandTechnology.com

# Deployment Applications for P1GMSASP

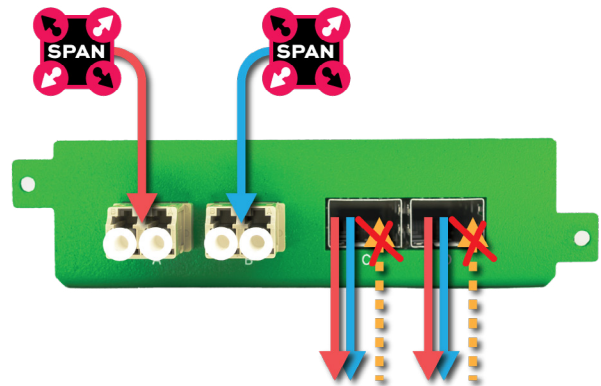
## A. Regen

- 2 SPAN inputs in
- 2 copies out
- No aggregation
- A and B are not paired
- Passive
- Unidirectional physical separation between A & C and B & D



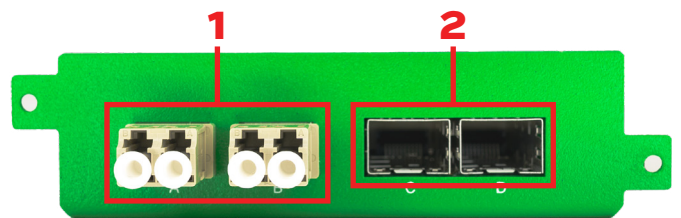
## B. Aggregation

- 2 SPAN inputs in
- 2 aggregated copies out
- Aggregation
- A and B are not paired
- Passive
- Unidirectional physical separation between A & C and B & D



## HARDWARE KEY

1. Two (2) 1G SX Multi-mode, passive LC-Fiber Ports
2. Two (2) SFP Ports
3. DIP Switches
4. Internal Power Supply

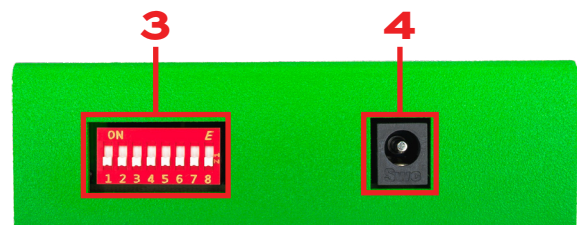


## DIMENSIONS (HxWxD)

1.15" x 3.9" x 6.5"

(29.21mm x 99.06mm x 165.1mm)

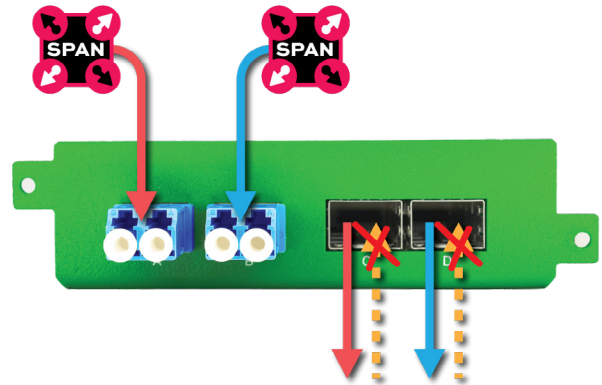
Weight: 0.7lbs (0.317kg)



# Deployment Applications for P1GSSASP

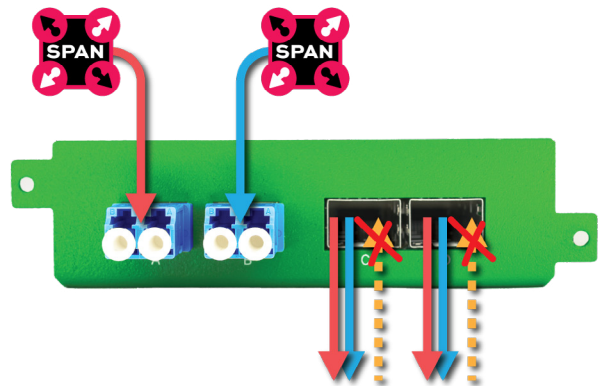
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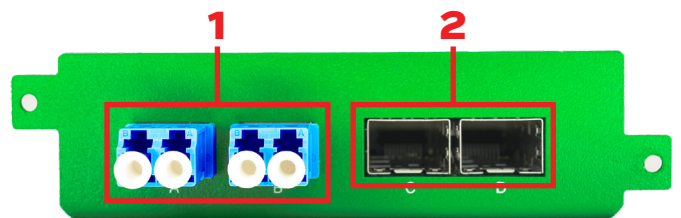
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- 2 aggregated copies out
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- Passive
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## HARDWARE KEY

1. Two (2) 1G LX Single-mode, passive LC-Fiber Ports
2. Two (2) SFP Ports
3. DIP Switches
4. Internal Power Supply

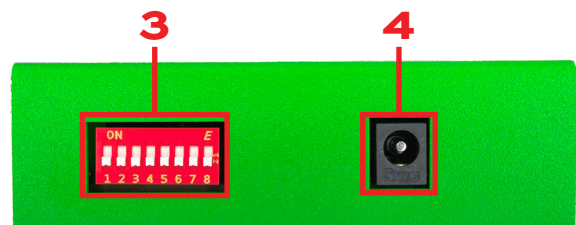


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See every bit, byte, and packet®