DATASHEET

Hardware Data Diodes for 10/100/1000M Copper Networks

Portable, cost-effective unidirectional traffic enforcement.

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
- One-mode: Regen
- 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
- RoHS3
- REACH
- POP
- UL, CE, CSA

Ordering Information

Product Name	Part #	Product Description
Copper Hardware Data Diode for 2 SPAN Inputs	CTAP-P1GCCREG	Portable Copper 10/100/1000M RJ45 Custom Dual SPAN Secure Uni-Directional Regeneration: (2) SPAN Inputs each regenerated through a secure uni-directional monitoring port, Single Power Supply
Copper Hardware Data Diode for 1 SPAN Input	P1GCCAS-Custom	Portable 10/100/1000M Custom SPAN Regen TAP (1) RJ45 Input and (2) RJ45 Outputs, Uni-directional Design, Single Power Supply

Have Questions?
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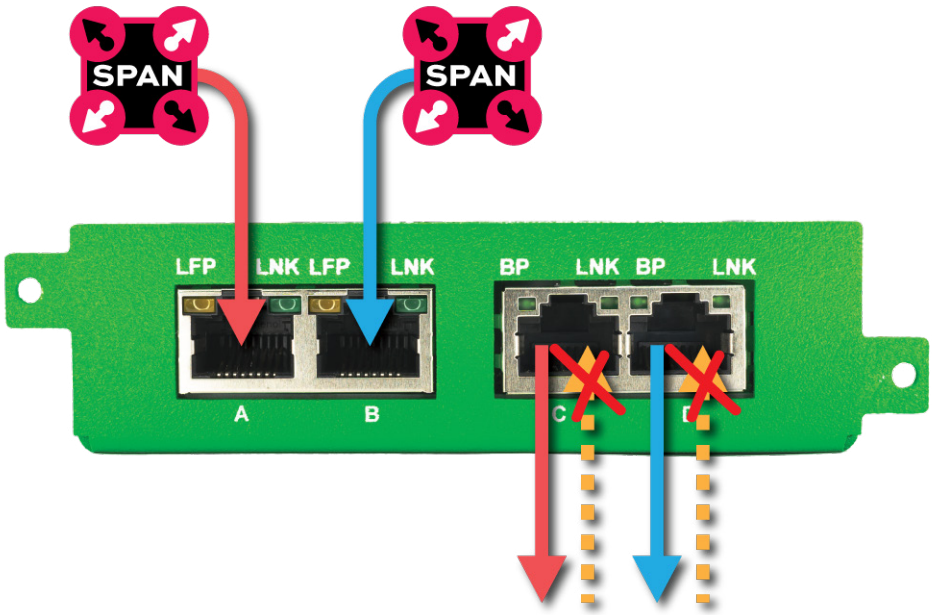
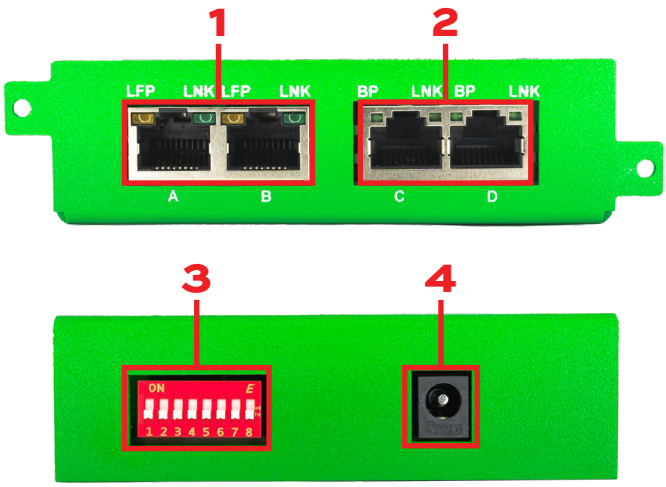
Deployment Applications for CTAP-P1GCCREG

▪ 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



HARDWARE KEY

1. Two (2) 10/100/1000M Copper RJ-45 Network Ports
2. Two (2) 1000M Copper RJ-45 Monitoring Ports
3. DIP Switches
4. Internal Power Supply



DIMENSIONS (HxWxD)

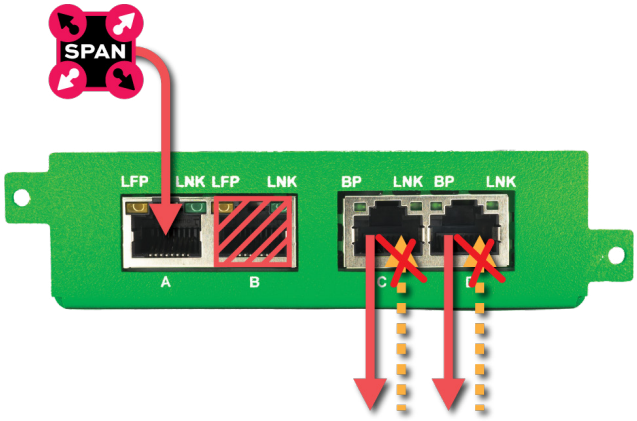
1.15” x 3.9” x 6.5”

(29.21mm x 99.06mm x 165.1mm)

Weight: 0.7lbs (0.317kg)

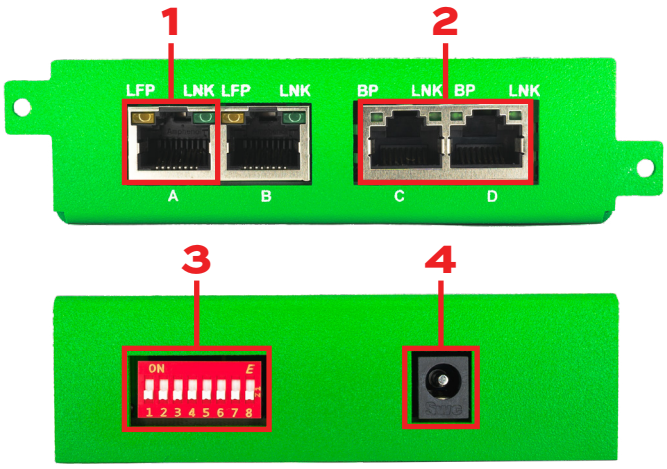
Deployment Applications for P1GCCAS-CUSTOM

▪ 1 SPAN input in ▪ 2 copies out ▪ No aggregation ▪ Unidirectional physical separation between A & C and A & D
▪ B port has been disabled



HARDWARE KEY

1. One (1) 10/100/1000M Copper RJ-45 Network Port
2. Two (2) 1000M Copper RJ-45 Monitoring 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)

Accessories

Part #	Product Description
RMP-1U	1U Rack Mount Kit - Hold up to portable 4 TAPs
Plate-BP	Blanking Plate for RMP-1U
DIN_MOUNT	DIN RAIL Mount
PWR-DCDC1L	DC-DC Converter (AC Power Supply is also included)
PLTYPE1	Power Supply Lock System for Portable TAPs (except P100CCA)
SFPSX_T	SFP 1000 Base-SX Multi-Mode Fiber LC Connector, TAA Compliant
SFPTX_T	SFP 10/100/1000 Copper RJ-45 Connector, TAA Compliant
SFPLX_T	SFP 1000 Base-LX Single Mode Fiber LC Connector, TAA Compliant

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See every bit, byte, and packet®