

PD20W POE Splitter

The trend towards IP-based paging systems, where audio is decoded at network end-points in support of school paging, bells, intercom and emergency communications, creates a need for POE support of networked amplifiers. Otherwise a school power outage eliminates paging and other emergency alert and communication functions. Whereas typical POE devices draw relatively low, fixed power levels, amplifiers require higher power levels that vary with the application (bell volume as opposed to emergency evacuation instruction volume) and the audio signal itself. This requirement is unsupported by nearly all standard POE components.

Designed for use with any qualified, 3rd party POE MidSpan Injector, the Calypso PD20W is a compact product designed to support variable POE requirements and network connectivity for FrontRow amplifiers, including the CM3000, CM800 and CM800S. Installed as a bridge between the POE cable and the network endpoint, the PD20W breaks out both network and power signals from the incoming cable, sending them on as needed for FrontRow amplifier support. In addition the unit offers pass-through power from a local 12VDC power supply, for amplifier support when POE is not required, and automatically and instantly switches to POE power when power loss is detected.

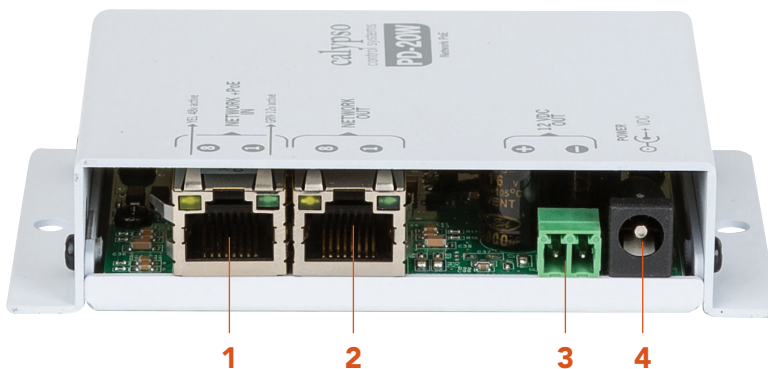


MidSpan Injector Requirements

- POE Type: High Power MidSpan Injector
- POE Standard: POE IEEE 802.3af
- Device Pin-out: Pins 4,5 DC power (+), pins 7,8 DC power (-)
- POE Protection: Over Temp, Over Current, Over/Under Voltage
- Shielded RJ-45 Ports: 16 or 24 Ports
- Power: >15W per Port (e.g., Tycon 16.8W, 350mA @ 48V)

PD20W

Left Side



Usage

- 1 Connect POE Network cable to "Network In"
- 2 Connect "Network Out" to CM800, CM800S or CM3000 Network jack
- 3 Use 2-conductor cable to wire 12VDC Output to CM800, CM800S or CM3000 power input
- 4 Connect power adapter to Power +VDC input on the PD20W for standard DC power support, bypassing POE functionality when no power loss

Operating Modes

Though the PD20W supports both Type A and Type B POE operating modes, the switches between them automatically, Type B, which separates power and network signals on difference conductors, is preferred for it's ability to support higher power with less interference.

Specifications

Network support: 10/100Mb/s (auto sensing)

Power supply: 12VDC at 3.5A

Size (WxHxD): 10.8 x 6.4 x 2.3cm/4.25 x 2.5 x .91in

INPUTS/OUTPUTS

- (1) RJ45 network input jack
- (1) RJ45 network output jack
- (1) captive screw power output terminal
- (1) power input jack input/output terminal (3 position)

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