



Pace1PRD

IP and Hi-PoE Receiver over extended distance CAT5e



Installation Guide

Overview:

Pace1PRD is a long range Ethernet receiver which transmits data at 100Mbps full duplex and power via a CAT5e or higher cable. The Pace1PRD receiver is powered via Altronix NetWay1D midspan injector. The receiver passes the Hi-PoE (60W) power over the cable to the eBridge200WPM transceiver which, in turn, passes this power to an enabled IP camera/device. These plug and play units facilitate cost-effective solutions for IP devices that need to be installed at distances greater than 100m.

Features:

Agency Listings:

- UL/cUL Listed for Information Technology Equipment (UL 60950-1).
- CE European Conformity.

Input:

- Powered by NetWay1D (60W).

Ethernet:

- Connectivity: RJ45, auto-crossover.
- Wire type: 4-pair CAT5 structured cable.
- Distance: up to 500m.
- Speed: 10/100BaseT, half/full duplex, auto negotiation.
- Throughput is rated to pass 100Mbps of data at distances up to 500m. With proper headend equipment this supports Megapixel, HD720, HD1080.

CAT5e or Higher:

- Distance: up to 500m @ 100Mbps (see *Cable Type, Total Device Power, Data and Power Distance*, pg. 3).

LED Indicators:

- Green - PoE ON (by respective RJ45 jack).
- Yellow and Green LED IP Link status, 10/100Base-T/active.

Environmental:

- **Operating Temperature:**
 - 20°C to 49°C (– 4°F to 120.2°F).
- **Storage Temperature:**
 - 30°C to 70°C (– 22°F to 158°F).
- Humidity: 20 to 85%, non-condensing.

Functions:

- Auto detection and protection of legacy non-PoE cameras/devices.

Applications:

- Extend Network link distance in an industrial environment (see *note*, pg. 2).
- Works with Megapixel, HD720, HD1080 and VGA (SD) cameras (see *note*, pg. 2).

Mechanical:

- Dimensions (W x L x H approx.):
3.5" x 3.5" x 1"
(88.9mm x 88.9mm x 25.4mm).

Installation Instructions:

Wiring methods shall be in accordance with the National Electrical Code/NFPA 70/ANSI, and with all local codes and authorities having jurisdiction. Wiring should be UL Listed and/or Recognized wire suitable for the application. Pace1PRD is intended for indoor use only.

1. Pace1PRD Installation:

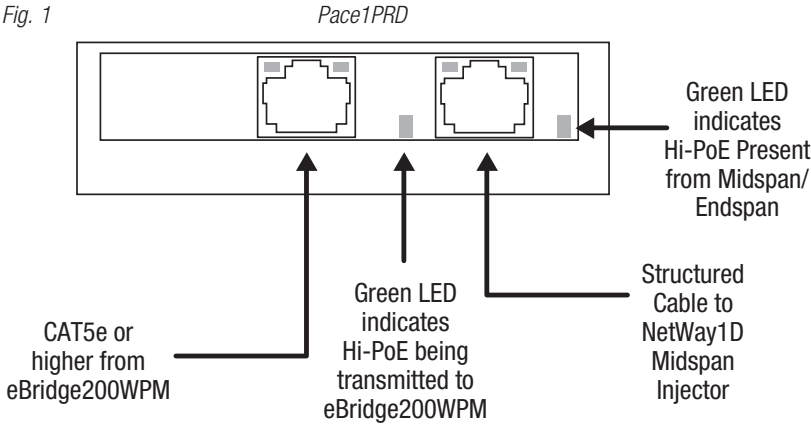
- a. Secure unit to desired mounting surface with a proper fastening device utilizing the unit's mounting hole (Fig. 2a, pg. 3). Unit should be mounted in proximity to ethernet switch/network, NVR or video server.
- b. Connect structured cable from NetWay1D to RJ45 jack marked [PoE Input] (Fig. 2, pg. 3).
- c. **CAT5e or higher:** Connect CAT5e or higher cable to connector marked [RJ45 Link] (Fig. 2, pg. 3).

2. eBridge200WPM Connections:

- a. Connect CAT5e from Pace1PRD (60W) to connector marked [CAT INPUT] (Fig. 2, pg. 3)
- b. Select input power SW3 on switch marked [60W CAT, 30W CAT or 60W COAX] (Fig. 2, pg. 3).
- c. Connect structured cable from one (1) 60W camera/device to RJ45 jack marked [Port 1] or connect two (2) individual structured cables from two (2) 30W cameras/devices to RJ45 jacks marked [Port 1] & [Port 2] (Fig. 2, pg. 3).

Technical Specifications:

Parameter	Description
Connections	RJ45 for ethernet link.
Input Power Requirements	60W from Midspan or endspan port connected. PoE compliant to IEEE 802.3af (15W) and PoE+ compliant to IEEE 802.3at (30W), Hi-PoE (60W)
Indicators	Yellow (RJ45 connector): On - Link, Off - No Link, Blinking - Activity. Green (RJ45 connector): On - 100Base-TX, Off - 10Base-T. Green: PoE Active.
Environmental Conditions	Operating Ambient Temperature (UL60950-1): – 20°C to 49°C (– 4°F to 120.2°F). Relative humidity: 20 to 85%, non-condensing. Storage Temperature: – 30°C to 70°C (– 22°F to 158°F). Operating Altitude: – 304.8 to 2,000m.
Regulatory Compliance	UL/cUL Listed for Information Technology Equipment (UL 60950-1). CE European Conformity.
Weights (approx.)	Product: 3.88 oz. (0.11 kg.) Shipping: 6.70 oz. (0.19 kg.)

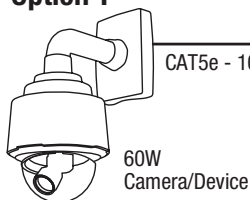


***Note:** Caution: once Hi-PoE connection is established between Pace1PRD and eBridge200WPM, disconnection from eBridge200WPM will not disable the Hi-PoE output voltage on the Pace1PRD, although the eBridge200WPM can be reconnected, caution should be taken not to connect the CAT5e wiring from Pace1PRD to any non-PoE device.

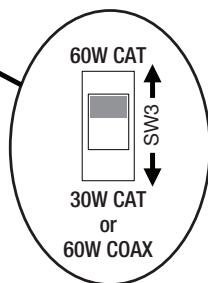
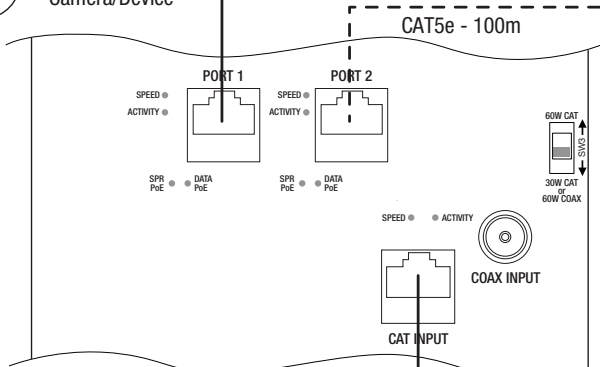
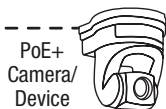
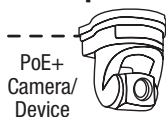
Single PoE Camera Connection:

Fig. 2

Option 1

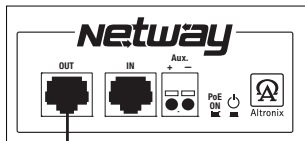


Option 2



CAT5e - 500m

NetWay1D



Pace1PRD



Cable Type, Total Device Power, Data and Power Distance:

Cable Type	Total Power Consumption	Max. Data Distance	Max. Power Distance
CAT5e	15W	500m	500m
CAT5e	30W	500m	423m
CAT5e	60W	500m	211m

Note: Higher gauge wiring will allow for longer distances.

Notes: