



## Altronix Pace1PRD IP and Hi-PoE Receiver over Extended Distance CAT5e Installation Guide

[Home](#) » [Altronix](#) » Altronix Pace1PRD IP and Hi-PoE Receiver over Extended Distance CAT5e Installation Guide



### Pace1PRD IP and Hi-PoE Receiver over Extended Distance CAT5e Installation Guide



**Pace1PRD**  
IP and Hi-PoE Receiver over extended distance CAT5e

## Installation Guide



### Contents

- [1 Overview:](#)
- [2 Features:](#)
- [3 Installation Instructions:](#)
- [4 Technical Specifications:](#)
- [5 Documents / Resources](#)
  - [5.1 References](#)
- [6 Related Posts](#)

### Overview:

Pace1PRD is a long-range Ethernet receiver that transmits data at 100Mbps full duplex and power via a CAT5e or higher cable. The Pace1PRD receiver is powered via the 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, and 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 a 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 the unit to the 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 an ethernet switch/network, NVR or video server.
- b. Connect the 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).

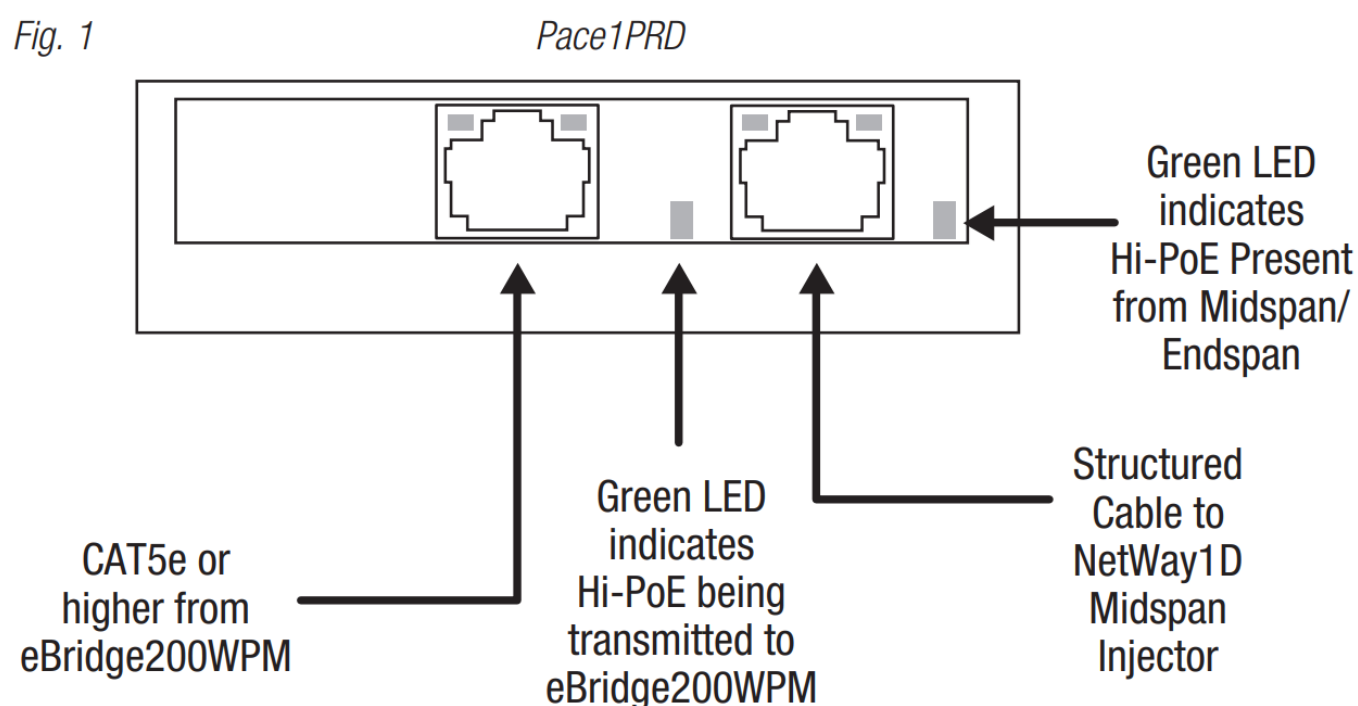
##### **2. eBridge200WPM Connections:**

- a. Connect CAT5e from Pace1PRD (60W) to the connector marked [CAT INPUT] (Fig. 2, pg. 3)
- b. Select input power SW3 on the switch marked [60W CAT, 30W CAT, or 60W COAX] (Fig. 2, pg. 3).
- c. Connect the structured cable from one (1) 60W camera/device to the 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	UUCUL 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.)

Fig. 1

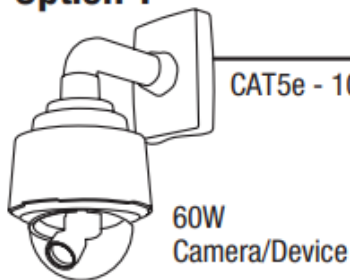


**\*Note Caution:** once the Hi-PoE connection is established between Pace1PRD and eBridge200WPM, disconnection from eBridge200WPM will not disable the Hi-PoE output voltage on the Pace1PRD, although the eBridge200WPM can be reconnected, caution should be taken not to connect the CAT5e wiring from Pace1PRD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

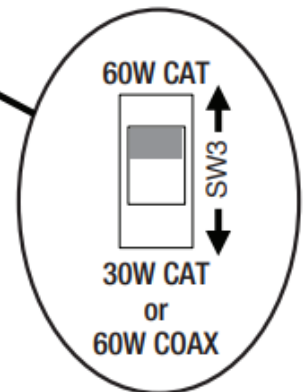
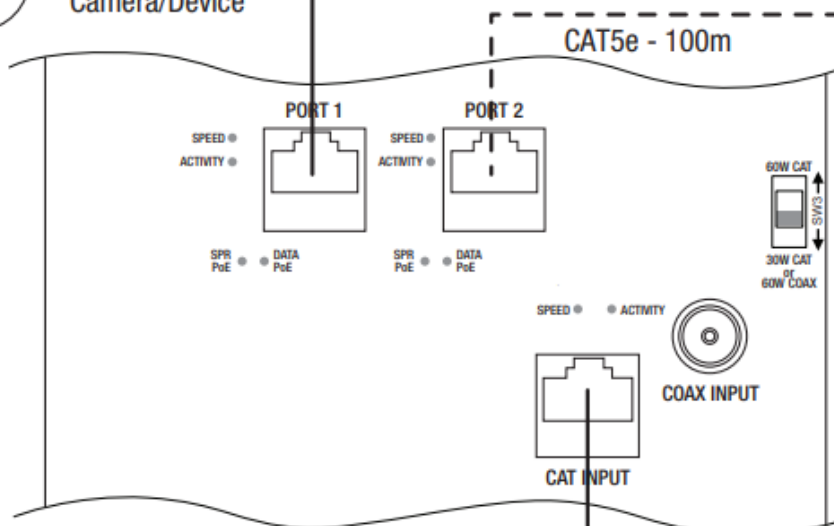
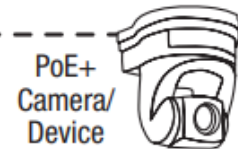
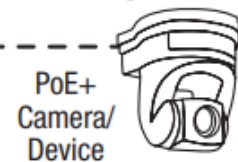
#### Single PoE Camera Connection:

Fig. 2

## Option 1

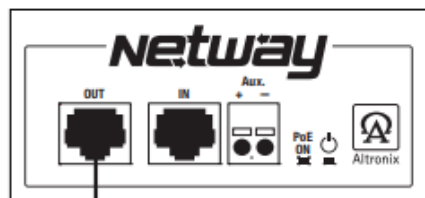


## Option 2



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:**



Altronix is not responsible for any typographical errors.

140 58th Street, Brooklyn, New York 11220 USA

phone: 718-567-8181

fax: 718-567-9056

website: [www.altronix.com](http://www.altronix.com)

e-mail: [info@altronix.com](mailto:info@altronix.com)

Lifetime Warranty

IIPace1PRD Rev. 0116151



**MEMBER**

Pace1PRD Installation Guide

## Documents / Resources

	<p><a href="#">Altronix Pace1PRD IP and Hi-PoE Receiver over Extended Distance CAT5e</a> [pdf] Installation Guide</p> <p>Pace1PRD IP and Hi-PoE Receiver over Extended Distance CAT5e, Pace1PRD, IP and Hi-PoE Receiver over Extended Distance CAT5e</p>
--	--

## References

- [Altronix Home](#)