

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

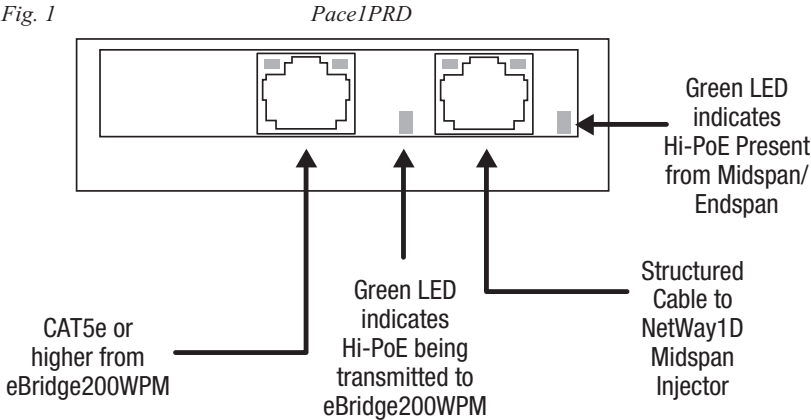
- a. Secure unit to desired mounting surface with a proper fastening device utilizing the unit's mounting hole (*Fig. 2a, pg. 3*). Unit should be mounted in proximity to ethernet switch/network, NVR or video server.
- b. Connect structured cable from NetWay1D to RJ45 jack marked [PoE Input] (*Fig. 2, 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   |
|---------------------------------|---|
| <b>Connections</b>              | RJ45 for ethernet link.   |
| <b>Input Power Requirements</b> | 60W from Midspan or endspan port connected.<br>PoE compliant to IEEE 802.3af (15W) and<br>PoE+ compliant to IEEE 802.3at (30W), Hi-PoE (60W)  |
| <b>Indicators</b>               | <b>Yellow (RJ45 connector):</b> On - Link, Off - No Link, Blinking - Activity.<br><b>Green (RJ45 connector):</b> On - 100Base-TX, Off - 10Base-T.<br><b>Green:</b> PoE Active.  |
| <b>Environmental Conditions</b> | <b>Operating Ambient Temperature (UL60950-1):</b><br>– 20°C to 49°C (– 4°F to 120.2°F).<br><b>Relative humidity:</b> 20 to 85%, non-condensing.<br><b>Storage Temperature:</b> – 30°C to 70°C (– 22°F to 158°F).<br><b>Operating Altitude:</b> – 304.8 to 2,000m. |
| <b>Regulatory Compliance</b>    | UL/cUL Listed for Information Technology Equipment (UL 60950-1).<br>CE European Conformity.   |
| <b>Weights (approx.)</b>        | 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:



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

| <b>Cable Type</b> | <b>Total Power Consumption</b> | <b>Max. Data Distance</b> | <b>Max. Power Distance</b> |
|-------------------|--------------------------------|---------------------------|----------------------------|
| 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.

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