



# Pace1PRMHT

IP and PoE+ Over

Extended Distance CAT5e

Kit includes Pace1PRMHT Receiver and Pace1PTM Transceiver



## Installation Guide

### Overview:

Pace1PRMHT is a long range Ethernet receiver which transmits data at 100Mbps full duplex and power via a CAT5e or higher cable in a PoE(+) compliant format. Pace1PRMHT receiver is powered via a PoE midspan, such as the Altronix Netway series, or by an endspan. The receiver passes the PoE(+) compliant power over the cable to the Pace1PTM 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:

- CE European Conformity.

#### Input:

- Powered by midspan or endspan.  
PoE compliant to IEEE 802.3af (15W) and PoE+ compliant to IEEE 802.3at (30W).

#### Ethernet:

- Connectivity: RJ45, auto-crossover.
- Wire type: 4-pair CAT5 structured cable.
- Distance: up to 500m.
- Speed: 100BaseT, full duplex, auto negotiation.  
PoE compliant to IEEE 802.3af (15W) and PoE+ compliant to IEEE 802.3at (30W) delivered to camera by Pace1PTM.  
Power provided by Pace1PRMHT to Pace1PTM by PoE protocol.\*
- 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 Maximum Length of CAT5e vs. Camera Power/PoE Class, pg. 4).*

#### LED Indicators:

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

\* See note on Page 3.

#### Environmental:

- **Operating Temperature:**

##### Pace1PRMHT:

- For 15W: - 40°C to 75°C (- 40°F to 167°F).
- For 25W: - 40°C to 49°C (- 40°F to 120°F).

##### Pace1PTM:

- For 15W: - 40°C to 75°C (- 40°F to 167°F).
- For 25W: - 40°C to 70°C (- 40°F to 158°F).
- For 30W: - 40°C to 60°C (- 40°F to 140°F).

- **Storage Temperature:**

- 40°C to 75°C (-40°F to 167°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 over 700m.
- Retrofit digital IP cameras in an analog CCTV CAT5e wired installations.
- Works with Megapixel, HD720, HD1080, and VGA (SD) cameras.

#### 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. Pace1PTM and Pace1PRMHT are not intended to be connected to outside plant leads and should be installed indoors within the protected premises. Pace1PRMHT and Pace1PTM are intended for indoor use only.

### 1. Pace1PRMHT 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 ethernet midspan or endspan device to RJ45 jack marked [PoE Input] (Fig. 2, pg. 3).
- c. **CAT5e or higher:** Connect CAT5e or higher to connector marked [RJ45 Link] (Fig. 2, pg. 3).

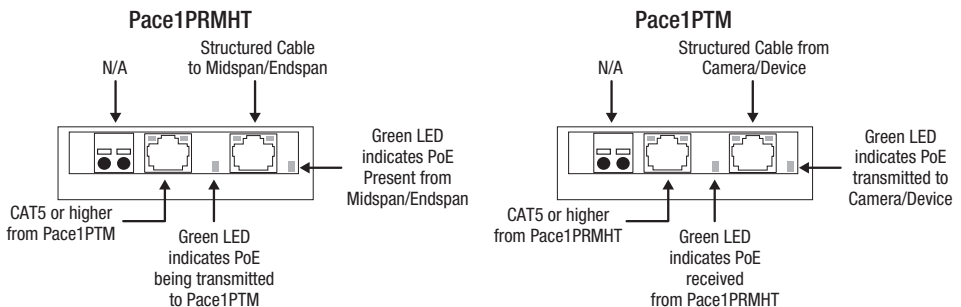
### 2. Pace1PTM installation:

- a. Secure unit to desired mounting surface with a proper fastening device utilizing the case's mounting hole (Fig. 2a, pg. 3). Unit should be mounted in proximity of camera/device.
- b. Connect structured cable from IP camera/device to RJ45 jack marked [PoE Out] (Fig. 2, pg. 3).
- c. **CAT5e or higher:** Connect CAT5e or higher to connector marked [RJ45 Link] (Fig. 2, pg. 3).

## Technical Specifications:

Parameter	Description
<b>Connections</b>	RJ45 for ethernet link.
<b>Input power requirements</b>	Midspan or endspan port connected. PoE compliant to IEEE 802.3af (15W) and PoE+ compliant to IEEE 802.3at (30W)
<b>Indicators</b>	<b>Yellow (RJ45 connector):</b> On - Link, Off - No Link, Blinking - Activity. <b>Green (RJ45 connector):</b> On - 100Base-TX. <b>Green:</b> PoE Active.
<b>Environmental Conditions</b>	<b>Operating Ambient Temperature (UL60950-1):</b> <b>Pace1PRMHT:</b> For 15W: - 40°C to 75°C (- 40°F to 167°F). For 25W: - 40°C to 49°C (- 40°F to 120°F). <b>Pace1PTM:</b> For 15W: - 40°C to 75°C (- 40°F to 167°F). For 25W: - 40°C to 70°C (- 40°F to 158°F). For 30W - 40°C to 60°C (- 40°F to 140°F). <b>Relative Humidity:</b> 20 to 85%, non-condensing. <b>Storage Temperature:</b> - 40°C to 75°C (- 40°F to 167°F). <b>Operating Altitude:</b> - 304.8 to 2,000m.
<b>Regulatory Compliance</b>	CE European Conformity.
<b>Weights (approx.)</b>	Product: 0.25 lb. (0.11 kg)   Shipping: 0.42 lb. (0.19 kg).

Fig. 1



**\*Note:** Caution: once PoE connection is established between Pace1PRMHT and Pace1PTM, disconnection from Pace1PTM will not disable the PoE output voltage on the Pace1PRMHT, although the Pace1PTM can be reconnected, caution should be taken not to connect the CAT5e from Pace1PRMHT to any non-PoE device.

## Single PoE Camera Connection Utilizing Pace1PRMHT & Pace1PTM:

Fig. 2

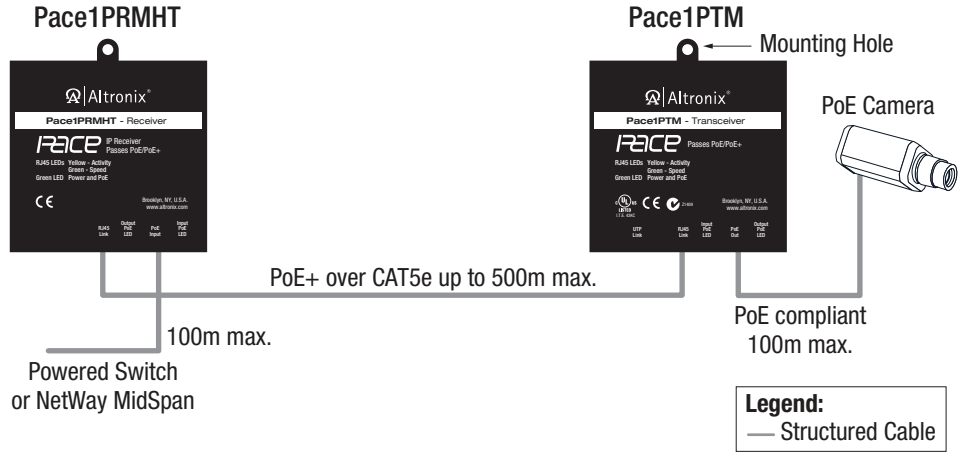
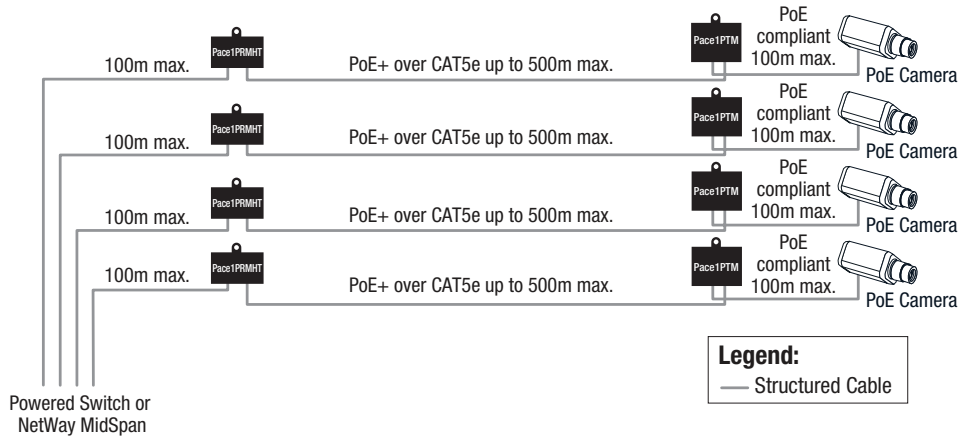


Fig. 2a

## Multiple PoE Cameras Connection:

Fig. 3



## Maximum Length of CAT5e Type vs. Camera Power/PoE Class:

Camera Power/PoE Class	CAT5e or Higher (Pace1PTM)
	Max. Length (meters)
13W/0	500
4W/1	500
6.5W/2	500
13W/3	500
25W/4	500

**Note:** Higher gauge wiring will allow for longer distances.

Altronix is not responsible for any typographical errors.

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