



Long Distance Ethernet Solution

# Pace1KL

- Single Pair Ethernet Media Adaptor
- IEEE 802.3cg Ethernet, 10Base-T1L SPE over UTP

## Installation Guide



Rev. 021521

**More than just power.™**

Installing Company: \_\_\_\_\_ Service Rep. Name: \_\_\_\_\_

Address: \_\_\_\_\_ Phone #: \_\_\_\_\_

## Overview:

Pace1KL is a single pair Ethernet media adapter that enables connecting 10Base-T1L, IEEE 802.3cg SPE compliant devices such as temperature sensors, industrial controllers, etc. to the network in an industrial environment at distances up to 1000m.

## Features:

### Agency Listings:

- CE European Conformity.

### Input:

- Powered by PoE midspan or endspan.

### SPE (Single Pair Ethernet) Connection:

- Wire type: twisted pair (2-wire, UTP, 18/2AWG).
- Speed: 10Mbps
- Distance: 1000m.

### Ethernet Connection:

- Connectivity: RJ45, auto-crossover.
- Wire type: 4-pair CAT5e or higher.
- Distance: up to 100m from midspan.
- Speed: 10/100BaseT, half/full duplex, auto negotiation.

### LED Indicators:

- **Green Link LED (next to Ethernet link):**  
Indicates Data transmission.
- **Yellow and Green LED (RJ45 jack):**  
IP Link status, 10/100Base-T/active.

### Environmental:

- Operating and storage temperature:  
– 40°C to 75°C (– 40°F to 167°F).
- Relative humidity:  
20 to 85%, non-condensing.

### Applications:

- Upgrade 4-20ma control loops to Ethernet over existing wire pair.
- Industrial infrastructure control and remote sensor over extended 1000m distances.
- Building Automation, Surveillance & Security.
- Utilize twisted pair for new installations or retrofit of IP devices over existing twisted pair cabling.

### Mechanical:

- Dimensions (W x L x H approx.):  
3.8" x 2.5" x 1"  
(96.52mm x 63.5mm 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.

Pace1KL is not intended to be connected to outside plant leads and should be installed indoors within the protected premises. It is intended for indoor use only.

1. Secure Pace1KL 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 ethernet switch/network.
2. Connect structured cable from ethernet midspan or endspan device to RJ45 jack marked [PoE Input] (Fig. 1, 2, pg. 3).
3. Connect UTP to connector marked [+ , -] (Fig. 1, 2, pg. 3).

Fig. 1

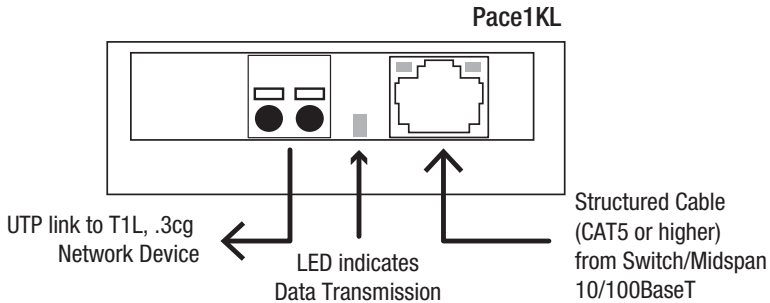
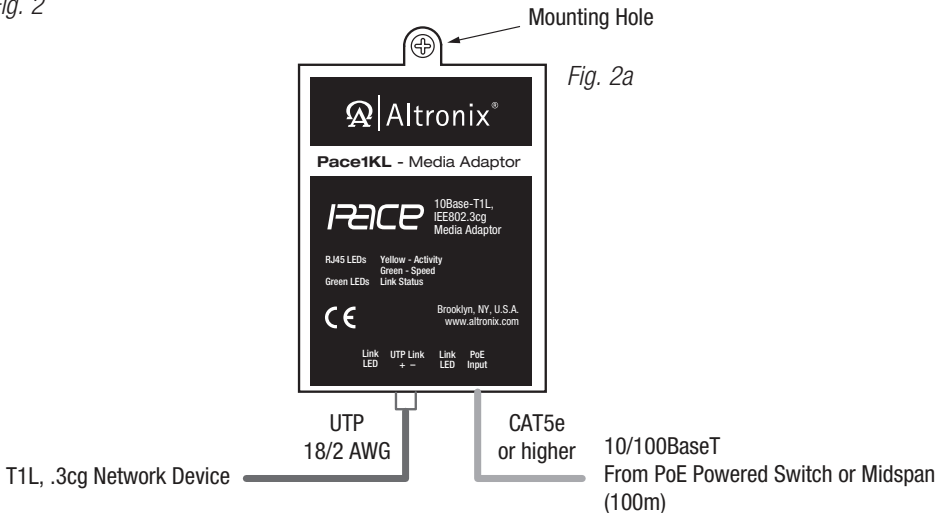


Fig. 2

## Typical Application:



## Technical Specifications:

Parameter	Description
<b>Connections</b>	RJ45 for CAT5/6 or higher ethernet link. UTP (2-wire) screw terminals for 10Base-T1L, IEEE 802.3cg compliant device connection.
<b>Input power requirements</b>	Midspan or switch port connected. 2W.
<b>Indicators</b>	<b>Yellow (RJ45 connector):</b> On - Link, Off - No Link, Blinking - Activity. <b>Green (RJ45 connector):</b> On - 100Base-TX, Off - 10Base-T. <b>Green Link LEDs:</b> Link active
<b>Environmental Conditions</b>	<b>Operating Ambient Temperature:</b> – 40°C to 75°C (– 40°F to 167°F). <b>Storage Temperature:</b> – 40°C to 75°C (– 40°F to 167°F). <b>Relative Humidity:</b> 20 to 85%, non-condensing. <b>Operating Altitude:</b> – 304.8 to 2,000m.
<b>Regulatory Compliance</b>	CE compliant.
<b>Weights (approx.)</b>	Product: 0.4 lbs. (0.18 kg)   Shipping: 1 lbs. (0.45 kg).

Altronix is not responsible for any typographical errors.

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 IIPace1KL A10V

