

Pace2KRT

Long Range Single Pair (UTP) Ethernet Adapter Kit



Altronix Pace2KRT is a long-range Ethernet adapter kit solution that transmits data and power via twisted pair (2-wire, UTP or shielded) in a PoE(+) compliant format. In addition to new SPE (UTP) Ethernet network installations for Surveillance-cameras/Security/Industrial/BMS/HVAC/Elevator Controllers, applications include upgrading of legacy networks, i.e. LONworks, RS485, 4-20ma Control Loops, etc. by using the existing two wire cabling, thus saving rip-out & reinstallation costs.

Operationally, the Pace1KR is connected to a POE midspan/endspan switch at the headend and passes network data and power to the Pace2KT from the switch via UTP up to 1km (1,000m, 3,280 ft.) to two (2) remote 10/100 POE devices, such a as a camera/s or controllers. Data is only supplied to the remote device for non-enabled devices. Cable distances and multi-node device drop-offs are facilitated by using one of the two Pace2KT ports for the continued network link in a daisy chain manner.



Pace2KRT

For single port connectivity please see kit model: Pace1KRT

Key Features

(100m)

- Provides SPE (single pair Ethernet) over twisted pair (2-wire, UTP or shielded) or 16/2 AWG or higher wire up to 1km (1,000m, 3,280 ft.)
- Utilize twisted pair for new installations or retrofit of IP devices over existing twisted pair cabling
- Cost-effective solution to facilitate IP devices that need to be installed at longer distances such as in elevator shafts, tunnels, bridges, HVAC, and more...
- PoE, IEEE 802.3af (15W) and IEEE 802.3at (25W) compliant
- Auto detection allows it to safely work with non-PoE cameras/devices
- Extends Network link distance in an industrial environment: Building Automation, Elevator Systems, HVAC, Lighting, Surveillance & Security
- Works with Megapixel, HD720, HD1080 & VGA (SD) cameras
- Utilize twisted pair for new installations or retrofit of IP devices over existing twisted pair cabling
- Kit includes Pace1KR Receiver and Pace2KT Transceiver For single port connectivity please see kit model: Pace1KRT
- CE European Conformity
- Lifetime Warranty

Typical Application Diagram

vs. Total Power Consumption Mounting Hole Mounting Hole Pace1KR Pace2KT **Total Power** Max. Max. Wire type Consumption **Data Distance Power Distance \Omega** Altronix Altronix^{*} 1,996m (6,548 ft.) 7.5W 1,000m (3,280 ft.) Pace1KR - Receive **18 AWG** 15W 1,000m (3,280 ft.) 998m (3,274 ft.) PoF/PoF-(2-wire/UTP) Device³ 25W 1,000m (3,280 ft.) 269m (882 ft.) 7.5W 1,000m (3,280 ft.) 3,169m (10,396 ft.) 16 AWG 15W 1,000m (3,280 ft.) 1,584m (5,196 ft.) PoE/PoE+ (2-wire/UTP) Link PoE Device* 25W 1,000m (3,280 ft.) 427m (1,400 ft.) CAT5e (or higher) 1000m twisted pair CAT5e or higher See Maximum Length of Cable Type vs. (100m)Total Power Consumption chart PoE Powered Switch or Midspan

Maximum Length of Cable Type

*Not to exceed 25W



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Specifications

Input

Pace1KR: Powered by midspan or endspan

PoE compliant to IEEE 802.3af (15W) and PoE+ compliant to IEEE 802.3af (25W)

Pace2KT: Powered by Pace1KR

UTP Connection

Wire type: Twisted pair (2-wire, UTP or shielded)

Distance: 1km (1,000m, 3,280 ft.),

16/2 AWG or higher @ 10Mbps

(see Maximum Length of Cable Type vs. Total Power

Consumption chart on pg. 1)

Ethernet Connection

Connectivity: RJ45, auto-crossover Wire type: 4-pair, CAT5e or higher

Distance: up to 100m from midspan to Pace1KR receiver (headend), 100m from PaceKT transceiver to device Speed: 10/100BaseT, half/full duplex, auto negotiation. PoE: IEEE 802.3af (15W) and PoE+ compliant to IEEE 802.3at

(25W) delivered to device by Pace1KR Power provided by

Pace1KR to Pace2KT by PoE protocol

Indicators (LED)

Green LED (left): PoE (link)

Green LED (right): Data transmission (link)
Yellow and Green LED (by RJ45 jack):

IP Link status, 10/100Base-T/active

Agency Listings

CE European Conformity

Physical and Environmental

Dimensions (W x L x H)

Enclosure (Pace1PKR and Pace1KT):

2.5" x 3.8" x 1" (63.5mm x 96.5mm x 25.4mm)

Shipping: 8" x 6" x 5" (203.2mm x 152.4mm x 127mm)

Weight (approx.)

Product: 0.4 lb. (0.18 kg) Shipping: 1 lb. (0.45 kg)

Temperature

Operating: -40°C to 75°C (-40°F to 167°F) Storage: -40°C to 75°C (-40°F to 167°F)

Relative Humidity 85% +/- 5% Operating Altitude -304.8 to 2,000m

Typical Operation Diagram

Multi-point SPE Application utilizing Altronix PoE Injector and PoE Splitter(s)

