

Pace1KT

Long Range Single Pair (UTP) Ethernet Adapter/Transceiver



Altronix Pace1KT is a long-range Ethernet adapter/transceiver that transmits data and power from Pace1KR or Pace4KR(Q) receivers 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, Pace1KR or Pace4KR(Q) is connected to a PoE midspan/endspan switch at the headend and passes network data and power to the Pace1KT from the switch via UTP up to 1km (1,000m, 3,280 ft.) to a remote 10/100 PoE device, such as a camera. For non-PoE remote devices, data only is transmitted.



Pace1KT

Key Features

- 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
- Works with Megapixel, HD720, HD1080 & VGA (SD) cameras
- Extends Network link distance in an industrial environment
- Building Automation, Elevator Systems, HVAC, Lighting, Surveillance & Security
- Utilize twisted pair for new installations or retrofit of IP devices over existing twisted pair cabling
- Compatible with Pace KR Receivers
- UL Listed in the U.S. and Canada
- CE European Conformity
- Lifetime Warranty

Typical Application Diagram

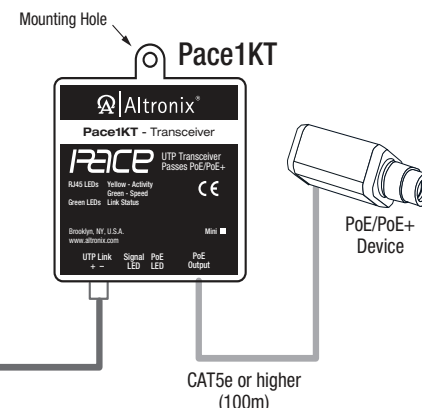
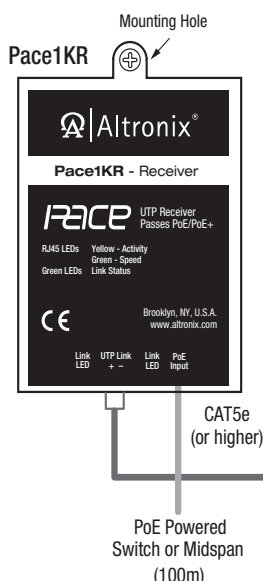
Pace1KR Receiver is shown
Similar with Pace4KR(Q) with up to four (4) Pace1KT transceivers

Maximum Length of Cable Type
vs. Total Power Consumption

Wire type	Total Power Consumption	Max. Data Distance	Max. Power Distance
18 AWG (2-wire/UTP)	7.5W	1,000m (3,280 ft.)	1,996m (6,548 ft.)
	15W	1,000m (3,280 ft.)	998m (3,274 ft.)
	25W	1,000m (3,280 ft.)	269m (882 ft.)
16 AWG (2-wire/UTP)	7.5W	1,000m (3,280 ft.)	3,169m (10,396 ft.)
	15W	1,000m (3,280 ft.)	1,584m (5,196 ft.)
	25W	1,000m (3,280 ft.)	427m (1,400 ft.)

1000m twisted pair

See Maximum Length of Cable Type vs. Total Power Consumption chart



Lifetime Warranty

Specifications

Input

Powered by Pace KR receiver
PoE compliant to IEEE 802.3af (15W) and
PoE+ compliant to IEEE 802.3at (30W).

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 Pace KR receiver
(headend), 100m from Pace1KT 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 Pace KR receiver
Power provided by Pace KR to Pace1KT 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

UL/cUL UL 62368-1
(Audio/Video, Information and
Communication Technology Equipment)
CE European Conformity

Physical and Environmental

Dimensions (W x L x H)

Enclosure: 2.27" x 2.65" x 1.12" (57.7mm x 67.2mm x 28.4mm)
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° to 167°F)
Storage: - 40°C to 75°C (- 40° to 167°F)

Relative Humidity

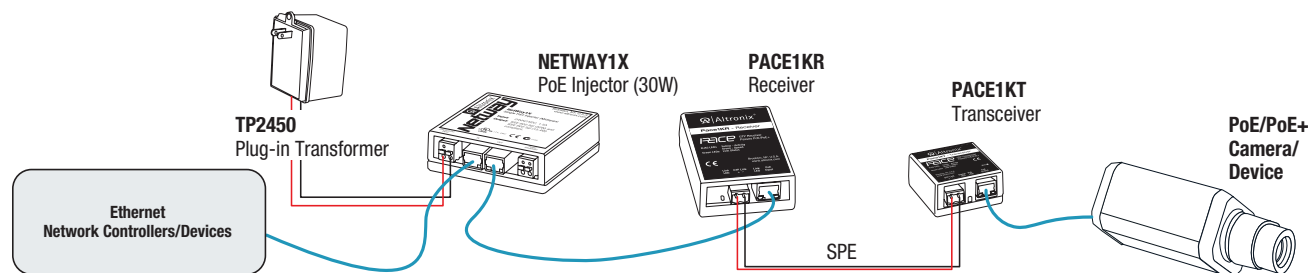
85% +/- 5%

Operating Altitude

- 304.8 to 2,000m

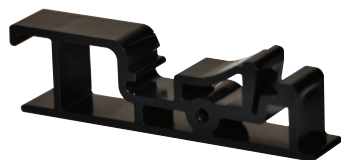
Typical Operation Diagram

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



For dual port connectivity please see kit model: Pace2KRT

Accessories



DCL2 - DIN Rail Mounting Clip

Allows for easy installation of Altronix adapters utilizing screw mounting holes to mount on a standard DIN rail (Altronix Din Rail models D10, D12, D19, or D24).

Lifetime Warranty

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