

Pace1KRT

# Long Range Single Pair (UTP) Ethernet Adapter Kit

Altronix Pace1KRT 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 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.



#### For dual port connectivity please see kit model: Pace2KRT

### 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

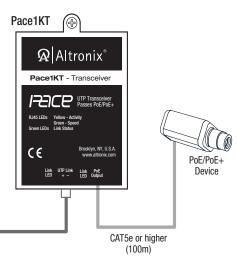
- Extends Network link distance in an industrial environment
- Building Automation, Elevator Systems, HVAC, Lighting, Surveillance & Security
- Utilize twisted pair for new installations or retrofit of IP devices over existing twisted pair cabling
- Kit includes: Pace1KR Receiver and Pace1KT Transceiver For dual port connectivity please see kit model: Pace2KRT
- CE European Conformity
- Lifetime Warranty

## Typical Application Diagram



# 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.)



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

1000m twisted pair



Rev. 03282024



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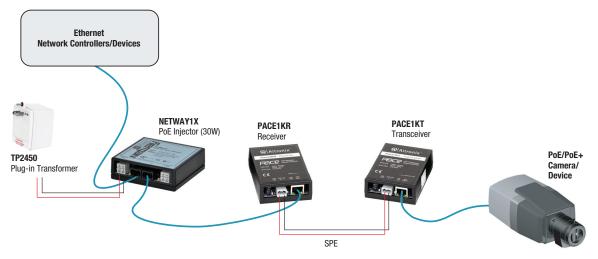
Long Range	Single	Pair	(UTP)	Ethernet	Adapter Kit
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☐ Specification	าร				
Input		Indicators (LED)			
Pace1KR:	Powered by midspan or endspan	Green LED (left):	PoE (link)		
	PoE compliant to IEEE 802.3af (15W) and	Green LED (right):	Data transmission (link)		
	PoE+ compliant to IEEE 802.3at (25W)	Yellow and Green LED (by RJ45 jack):			
Pace1KT:	Powered by Pace1KR		IP Link status, 10/100Base-T/active		
UTP Connection		Agency Listings			
Wire type: Twisted pair (2-wire, UTP or shielded)		CE	European Conformity		
Distance: 1km (1,000m, 3,280 ft.), 16/2 AWG or higher @ 10Mbps		Physical and Environmental			
	(see Maximum Length of Cable Type vs. Total Power		Dimensions (W x L x H)		
	Consumption chart on $pg$ . 1)		Enclosure (Pace1KR and Pace1KT):		
Ethornot Con	Ethernet Connection		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)		
Connectivity: RJ45, auto-crossover Wire type: 4-pair, CAT5e or higher		Weight (approx.) Product:	0.4 lb. (0.18 kg)		
Distance: up to 100m from midspan to Pace1KR receiver		Shipping:	1 lb. (0.45 kg)		
(headend), 100m from PaceKT transceiver to device		Temperature	(		
Speed: 10/100BaseT, half/full duplex, auto negotiation.		Operating:	– 40°C to 75°C (– 40° to 167°F)		
PoE: IEEE 802.3af (15W) and PoE+ compliant to IEEE 802.3at		Storage:	– 40°C to 75°C (– 40° to 167°F)		
	(25W) delivered to device by Pace1KR Power provided by		85% +/- 5%		
	ce1KT by PoE protocol	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