

Pace4KR

Four Port Single Pair Ethernet Media Adapter/Switch
IEEE 802.3cg Ethernet, SPE over UTP

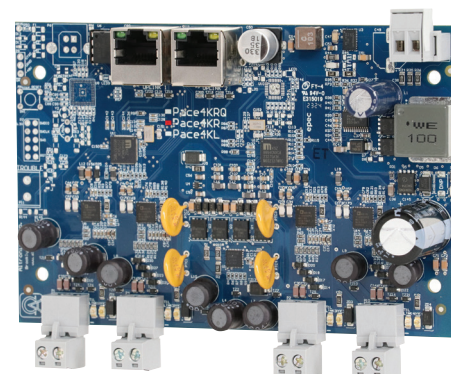


Altronix Pace4KR is a 4-port SPE (Single Pair Ethernet) Media Adapter/Switch that transmits data and power via twisted pair (2-wire, UTP or shielded) in a PoE(+) compliant format. In addition to new SPE (UTP) Ethernet network installations for Surveillance-cameras/Security/Industrial/BMS/HVAC/Elevator 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 Pace4KR is connected to a PoE midspan/endspan switch at the headend and passes network data and power to the remote PaceKT Series transceiver(s) over UTP up to 1km (1,000m, 3,280 ft.). Pace1KT & Pace2KT transceivers can connect to one or two remote devices, such as a camera(s) or controllers, respectively. For non-enable PoE devices, only data will be transmitted. 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.

For a direct T1L remote device, use Pace1K12/24S adapter to split T1L data & power for a compatible device.

For managed switch see model Pace4KRQ.



Pace4KR

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
- Up to four (4) Pace4KR can be daisy-chained for expansion
- Utilize twisted pair for new installations or retrofit of IP devices over existing twisted pair cabling
- Compatible with Pace1KT, Pace2KT, Pace1KL12S, Pace1KL24S receivers
- CE European Conformity
- Lifetime Warranty

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.)
	30W	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.)
	30W	1,000m (3,280 ft.)	427m (1,400 ft.)

Lifetime Warranty



Specifications

Input

12/24V power supply
 24VDC: supports 100W Total POE output power.
 12VDC: supports 60W Total POE output power.
 (For 24V/12VDC Power Supply add a minimum of 15% margin to input power)

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. 7*)

Ethernet

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
PoE: IEEE 802.3af (15W) and PoE+ compliant to
IEEE 802.3at (25W) delivered to device by Pace4KR
Power provided by Pace4KR to
Pace transceiver by PoE protocol

Indicators (LED)

Yellow and Green LED (by RJ45 jack):
IP Link status, 10/100Base-T/active
Link LED for each UTP port

Agency Listings

CE European Conformity

Physical and Environmental

Dimensions (W x L x H)
Board: 5.5" x 3.6" x 1.125" (139.7mm x 91.4mm x 28.6mm)
Shipping: 8" x 6" x 5" (203.2mm x 152.4mm x 127mm)

Weight (approx.)

Product:	0.4 lb. (0.18 kg)
Shipping:	0.75 lb. (0.34 kg)

Temperature

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

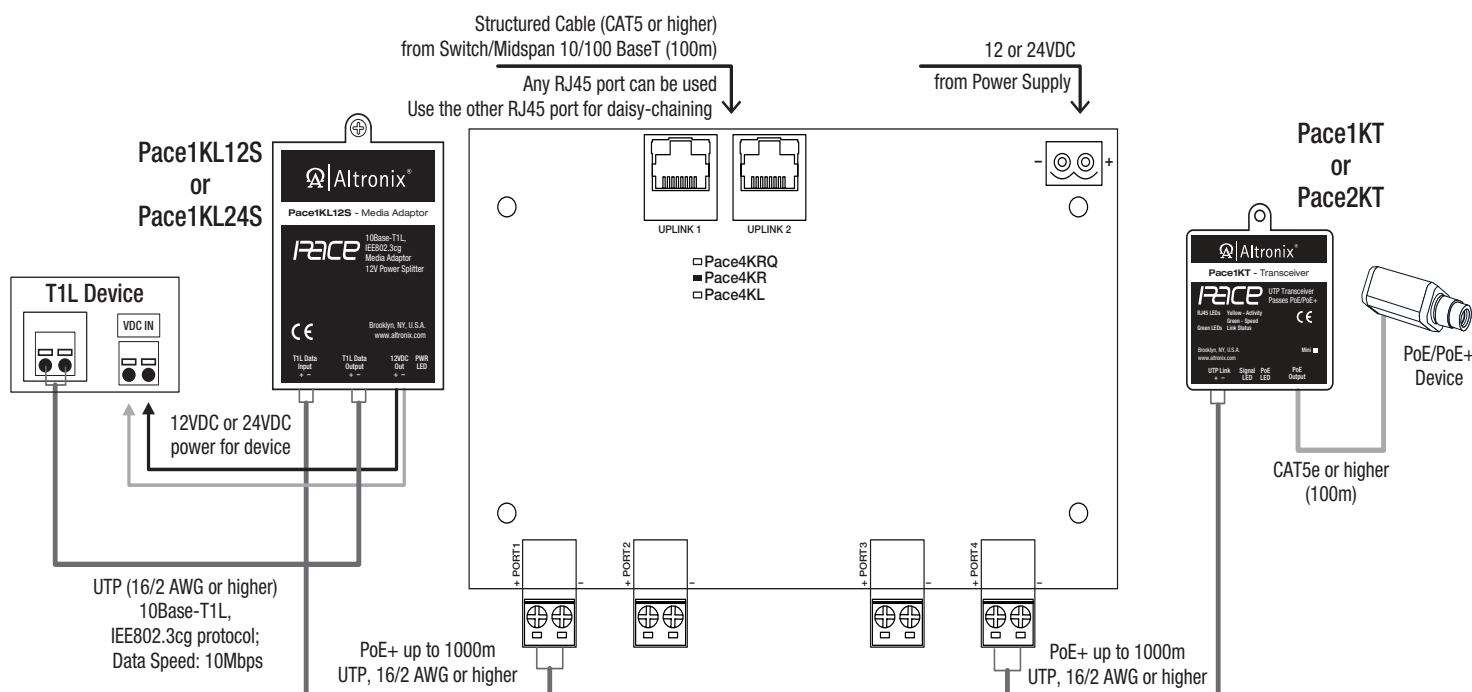
Relative Humidity

85% \pm 5%

Operating Altitude

– 304.8 to 2,000m

Typical Application Diagram



Lifetime Warranty

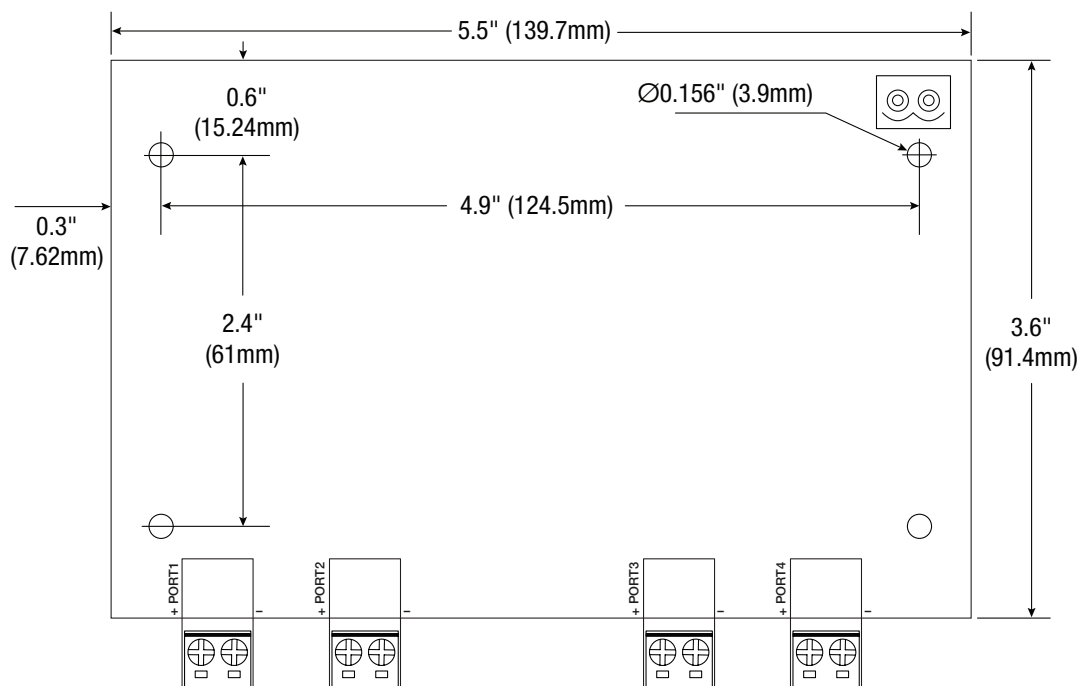
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Dimensions and Drawing

Board Dimensions (L x W x H approximate)

5.5" x 3.6" x 1.125" (139.7mm x 91.4mm x 28.6mm)

Mounting Holes' Tolerance: ± 0.04 in. (1mm)**Lifetime Warranty**

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