

Pace4KRQ

Network Managed Four Port Single Pair Ethernet Media Adapter/Switch IEEE 802.3cg Ethernet. SPE over UTP



Altronix Pace4KRQ 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/Intercoms and 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 Pace4KRQ 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 a sa 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

Pace4KRQ features built-in LINQ™ Network Power Management which facilitates monitoring, reporting and control of power/diagnostics.

For unmanaged switch see model 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, Intercoms, HVAC, Lighting, Surveillance & Security
- Utilize twisted pair for new installations or retrofit of IP devices over existing twisted pair cabling
- Compatible with Pace1KT, Pace2KT, Pace1KL12S, Pace1KL24S receivers
- Management interface software included (USB flash drive)
- VLAN (Virtual Local Area Networks) subnetwork allows for the grouping together of devices for improved network traffic and higher security
- 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.)



Pace4KRQ

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



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 pq. 1)

Ethernet

Connectivity: RJ45, auto-crossover
Wire type: 4-pair CAT5e or higher
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 Pace4KRQ

Power provided by Pace4KRQ 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

LINQ Technology:

Remote network power management allows for device reset and monitoring

Provides local and/or remote access to critical information via LAN/WAN

Email and Windows Dashboard Alert notifications report real-time diagnostics

Event log tracks history

VLAN:

Multiple management VLAN assignment

802.1Q Tagged VLAN

Up to 10 VLAN groups. ID Range 2-4095

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

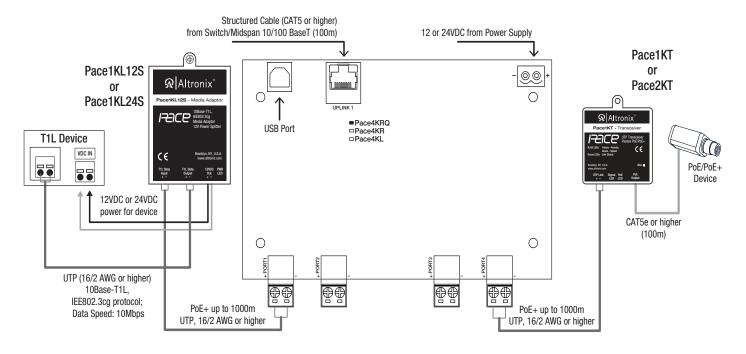


Pace4KRQ

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



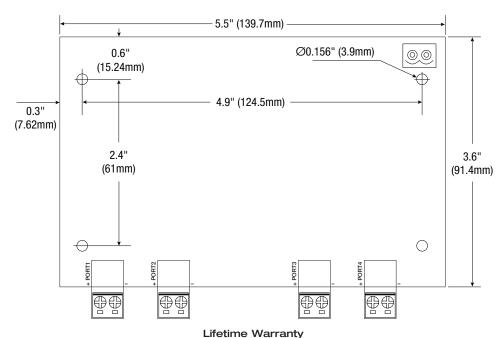
Typical Application Diagram



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)



Altronix Corporation | 140 58th St | Brooklyn, NY 11220 USA