Altronix®

Rev. 05192026

Pace1KRL24S

10Base-T1L, IEE802.3cg Ethernet Media Adaptor/Power Splitter Kit

Altronix Pace1KRL24S is SPE (Single Pair Ethernet) media adaptors/splitters kits that enable connecting 10Base-T1L, IEE802.3cg compliant devices such as Security/Industrial/BMS/Elevators/HVAC Controllers and sensors, etc. to an Ethernet network. The kit provides T1L data & 24V power separately to power the remote device, thus eliminating the need for local power. Long distance headend to remote-end device cabling can be achieved to over 1km (1,000m, 3,280 ft.).

In addition to new SPE (UTP) Ethernet network installations, upgrading of legacy networks, i.e. LONworks, RS485, 4-20ma Control Loops, etc. can be achieved by using the existing two wire cabling, thus saving rip-out & reinstallation costs.

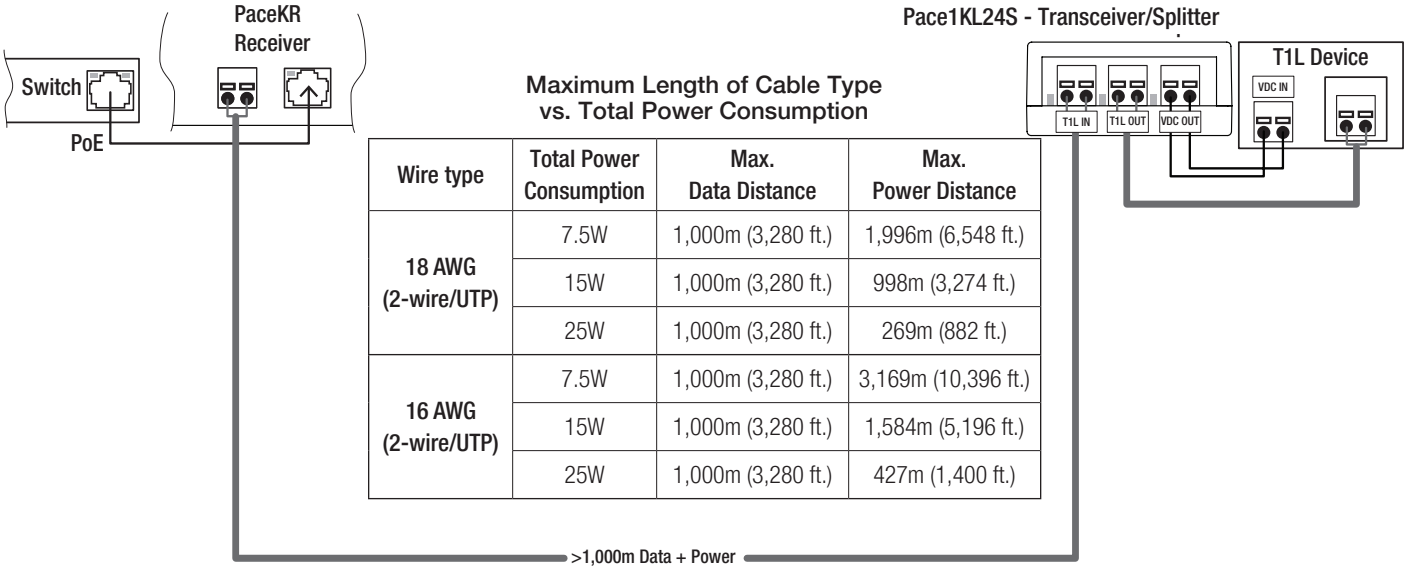
Operationally, the Pace1KR passes network data & POE power from the POE switch via UTP up to 1km (1,000m, 3,280 ft.) to the Pace1KL24S, which then passes the T1L data to the device and separately provides 24V power to the device.

Pace1KRL24S

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
- 10Base-T1L, IEE802.3cg protocol; Data Speed: 10Mbps
- Provides 24VDC to power compatible devices
- Extends Network link distance in an industrial environment and provides Aux. power to device
- Building Automation, Surveillance & Security, BMS & HVAC, Elevators
- UL Listed in the U.S. and Canada
- CE European Conformity
- Lifetime Warranty

Typical Operation 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.)

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Specifications

Input

Pace1KR: Powered by midspan or endspan PoE compliant to IEEE 802.3af (15W) and PoE+ compliant to IEEE 802.3at (25W)

Pace1KL24S: Powered by Pace1KR

SPE (Single Pair Ethernet) over UTP or 16/2 AWG or Higher Link

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

Distance: > 1km (1,000m, 3,280 ft.) @ 10Mbps

Power Output

Pace1KL24S: 20W

Available power depends on distance & wire gauge

See Altronix online voltage drop calculator & allow for 10V cable drop

Indicators (LED)

Pace1KR:

Link LED: Green, PoE Active (left of UTP link)

Link LED: Green, Active Indicate Data transmission

Yellow and Green LED Next to Ethernet link: IP Link status, 10/100Base-T/active

Pace1KL24S:

Red LED: Output power ON

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 (Pace1KR and Pace1KL24S): 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

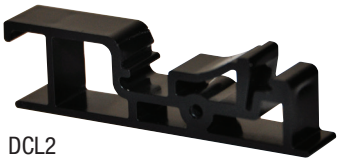
Operating: – 40ºC to 75ºC (– 40º to 167ºF)

Storage: – 40ºC to 75ºC (– 40º to 167ºF)

Relative Humidity: 85% +/– 5%

Operating Altitude: – 304.8 to 2,000m

Accessories



DCL2

DCL2 - **DIN Rail Mounting Clip**

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

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