



Long Distance Ethernet Solution

Pace32KLC

- Three Port Single Pair Ethernet Media Adapter/Switch
- IEEE 802.3cg Ethernet, 10Base-T1L SPE over UTP

Installation Guide



Rev. 030426



More than just power.™

Installing Company: _____ Service Rep. Name: _____

Address: _____ Phone #: _____

Overview:

Altronix Pace32KLC is a SPE (Single Pair Ethernet) 3-port T1L Media Adapter/Switch with Failsafe feature that enables connecting up to three (3) 10Base-T1L, IEEE802.3cg compliant devices such as Security/Industrial/BMS/Elevators/HVAC Controllers and sensors, etc. to T1L Ethernet network. Long distance links can be achieved to over 1km (1,000m, 3,280 ft.). The Pace32KLC can be used in a typical star configuration or as a multi-point dropoff node configuration. T1L Outputs 2 & 3 are Fail-safe crossovers (see Fig. 1 for details).

In addition to new T1L (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.

Features:

Agency Listings:

- CE European Conformity.

Input:

- Powered by 12/24VDC or VAC power supply (1.25W; 105mA @12V, 51mA @ 24V).

SPE (Single Pair Ethernet) Connection:

- Three (3) 10Base-T1L ports.
- Wire type: twisted pair (2-wire, UTP, 16/2 AWG or higher).
- Speed: 10Mbps
- Distance: 1km (1,000m, 3,280 ft.).

Failsafe Feature:

- T1L Ports 2 and 3 are Fail-safe crossovers (see pg. 3).

LED Indicators:

- T1L link LED indicators for each port.

Environmental:

- Operating and storage temperature:
– 40°C to 75°C (– 40°F to 167°F).
- Relative humidity:
20 to 85%, non-condensing.

Applications:

- Upgrade LONworks, RS485, 4-20mA control loops to Ethernet over existing wire pair.
- Industrial infrastructure control and remote sensor over extended 1,000m distances.
- Building Automation, Surveillance & Security, BMS & HVAC, Elevators.
- Utilize twisted pair for new installations or retrofit of IP devices over existing twisted pair cabling.

Mechanical:

- Dimensions (W x L x H approx.):
3.5" x 3.5" x 1" (88.9mm x 88.9mm x 25.4mm).

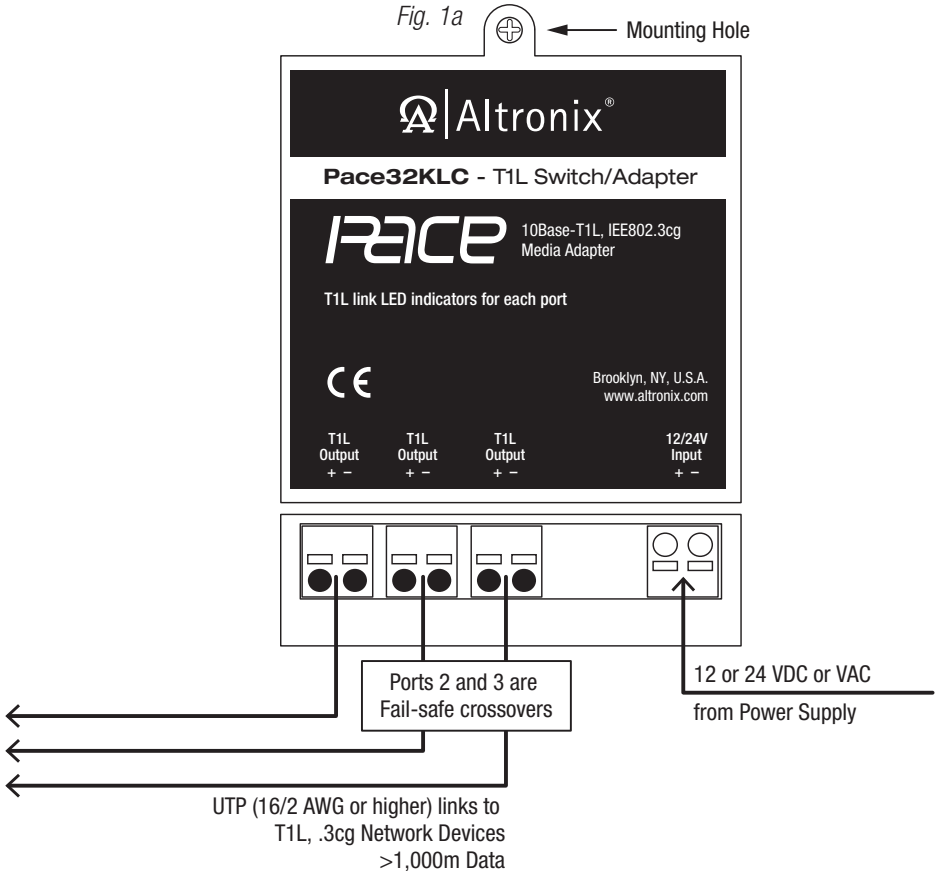
Installation Instructions:

Wiring methods shall be in accordance with the National Electrical Code/NFPA 70/ANSI, and with all local codes and authorities having jurisdiction. Wiring should be UL Listed and/or Recognized wire suitable for the application.

Pace32KLC is not intended to be connected to outside plant leads and should be installed indoors within the protected premises. It is intended for indoor use only.

1. Secure Pace32KLC to the desired mounting surface with a proper fastening device utilizing the unit's mounting hole (Fig. 1a, pg. 3). Unit should be mounted in proximity to ethernet switch/network.
2. Connect 12/24V power supply to connector marked [12/24V Input +, -].
If DC power supply is used, carefully observe polarity.
3. Connect UTP to connectors marked [T1L Output] (Fig. 1, pg. 3, Fig. 2, pg. 4).

Fig. 1

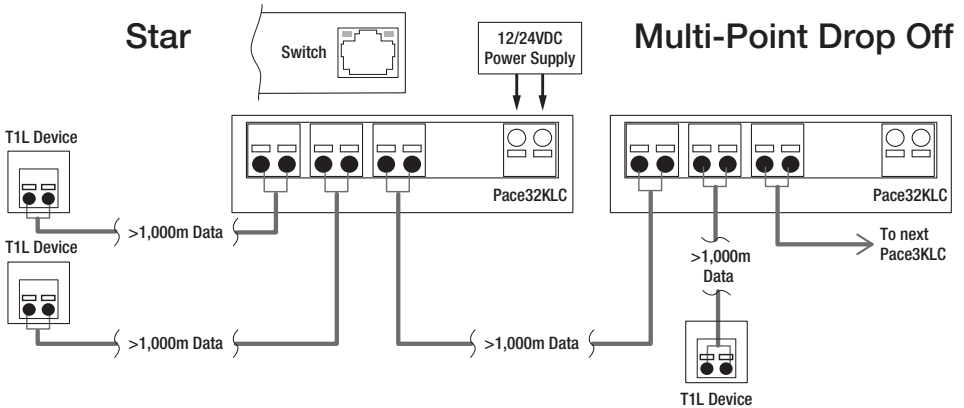


Fail-Safe Crossover Feature:

T1L Ports 2 and 3 are Fail-safe crossovers. If power to Pace32KLC drops, Ports 2 and 3 will be automatically spliced together. This allows any other upstream T1L devices in the concatenated links to continue communication to downstream T1L links, assuring far end arrives at head end irrespective of power failure to Pace32KLC; this is useful where far end link is critical.

Typical Application:

Fig. 2



Technical Specifications:

Parameter	Description
Connections	UTP (2-wire) screw terminals for 10Base-T1L, IEEE 802.3cg compliant devices connection.
Input power requirements	12/24 VDC or VAC power supply (1.25W; 105mA @12VDC, 51mA @ 24VDC).
Indicators	T1L link LED indicators for each port.
Environmental Conditions	Operating Ambient Temperature: – 40°C to 75°C (– 40°F to 167°F). Storage Temperature: – 40°C to 75°C (– 40°F to 167°F). Relative Humidity: 20 to 85%, non-condensing. Operating Altitude: – 304.8 to 2,000m.
Regulatory Compliance	CE European Conformity.
Weights (approx.)	Product: 0.22 lb. (0.1 kg) Shipping: 0.4 lb. (0.18 kg)

Altronix is not responsible for any typographical errors.

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