


 eBridge1PCRX
and eBridge1PCTX



Overview

The eBridge1PCRX and eBridge1PCTX are CAT5 to Coax cable Ethernet adapters media converters that deliver data and power over the coax cable in a PoE+ compliant format. The paired set enables fast 10/100Base-T Ethernet digital communication to be transmitted over Coax cable. An eBridge1PCRX receiver sends power over the coax to the eBridge1PCTX transmitter under PoE protocol. The eBridge1PCTX in turn delivers that PoE+ compliant power to a PoE enabled camera or IP device. The eBridge1PCRX will not deliver power to non compliant devices, thus avoiding accidental power turn into improperly connected analog cameras. These plug and play units facilitate system upgrades from analog to IP cameras/devices utilizing existing legacy Coax and eliminating the costs and labor associated with installing new network cabling. In addition, data transmission and power over the Coax is possible up to 1500 ft. in comparison to 100m (328 ft.) Ethernet maximum distance. A maximum range from head end to the PoE camera/device is 610m (2000 ft.) taking into consideration that up to 100m (328 ft.) of structured cable may be deployed at each end.

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Specifications

Agency Listings:

- UL/CUL Listed for Information Technology Equipment (UL 60950-1).
- CE approved.
- C-Tick compliant.

sloc™ Compliant:

- Incorporates *sloc™ (Security Link over Coax) technology.

Input:

- 24VDC to 56VDC Class 2 power supply (polarity observed).

Power Consumption (under maximum load):

- eBridge1PCRX: 24VDC/1,500mA, 56VDC/900mA.
- eBridge1PCTX (30W): Powered by eBridge1PCRX.
- eBridge1PCTX (15W): Powered by eBridge1PCRX.

Ethernet:

- Connectivity: RJ45, auto-crossover.
- Wire type: 4-pair CAT5 or better structured cable.
- Distance: up to 100m (328 ft.).
- Speed: 10/100BaseT, half/full duplex, auto negotiation. PoE compliant to IEEE 802.3af (15W) and PoE+ compliant to IEEE 802.3at (30W) Delivered to camera by eBridge1PCTX. Power provided by eBridge1PCRX to eBridge1PCTX by PoE protocol.
- Throughput is rated to pass 25mbps of data at distances up to 1500 ft. With proper headend equipment, this supports Megapixel, HD720, HD1080.

Coax:

- Distance: up to 1,500 ft. for power delivery of coax.
- Connectivity: BNC, RG-59/U or similar.

LED Indicators:

- eBridge1PCRX:
 - Blue LED - Coax link connection (sloc).
 - Green - PoE ON. Green - Power ON.
- eBridge1PCTX:
 - Yellow and Green LED (RJ45) IP Link status, 10/100Base-T/active.

LED Indicators (cont'd):

- eBridge1PCTX:
 - Blue LED - Coax link connection (SLOC).
 - Green LED - PoE from eBridge1PCR.

Environmental:

- **Operating Temperature:**
 - eBridge1PCRX:**
 - 15W: -4°F to 113°F (-20°C to +45°C).
 - 30W for 24VDC: -4°F to 98.6°F (-20°C to +37°C).
 - 30W for 48VDC: -4°F to 113°F (-20°C to +45°C).
 - eBridge1PCTX:** -4°F to 120.2°F (-20°C to +49°C).
- **Storage Temperature:**
 - 22° to 158°F (-30° to +70°C) Storage.
- Humidity: 20 to 85%, non-condensing.

Electrical:

- BTU/Hr.:
 - 24VDC: 18.43 BTU/Hr.
 - 56VDC: 25.8 BTU/Hr.

Functions:

- Auto detection and protection of legacy non-PoE cameras/devices.

Applications:

- Retrofit digital IP cameras in an analog CCTV installation.
- Works with Megapixel, HD720, HD1080 and VGA (SD) cameras (*see note, pg. 2*).
- Extend Network link distance in an industrial environment over 610m (2000 ft.) (*see note, pg. 2*).
- Upgrade deployed CCTV Coax to a digital network in Retail, Casinos, Airports, Schools, Hospitals, etc.

Mechanical:

- Dimensions (W x L x H approx.):
 - eBridge1PCRX:
 - 3.5" (88.89mm) x 4.375" (111.125mm) x 1" (25.4mm)
 - eBridge1PCTX:
 - 2.5" (63.5mm) x 4.375" (111.125mm) x 1" (25.4mm)

Agency Approvals



UL/CUL Listed for Information
Technology Equipment (UL 60950-1).



European Conformity



C-Tick Approved - Z1409