

eBridge1PCRT - IP/PoE over Coax Kit

Rev. DSeBridge1CRT_03052014

Overview

The eBridge1PCR and eBridge1PCT are CAT5 to Coax cable Ethernet adapters 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 eBridge1PCR receiver sends power over the coax to the eBridge1PCT transmitter under PoE protocol. The eBridge1PCT in turn delivers that PoE compliant power to a PoE enabled camera or IP device. The eBridge1PCR will not deliver power to non compliant devices, thus avoiding damage to 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.). 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.

Specifications

Agency Listings:

eBridge1PCR

and eBridge1PCT

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

Sloc Compliant:

- Incorporates *sloc™ (Security Link over Coax) technology.
- 24VDC Class 2 power supply (polarity not observed) or 24VAC Class 2 plug-in transformer.

Power Consumption (under maximum load):

• eBridge1PCR: 24VDC/1,000mA, 24VAC/900mA. eBridge1PCT: Powered by eBridge1PCR.

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) Delivered to camera by eBridge1PCT. Power provided by eBridge1PCR to eBridge1PCT 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.

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

LED Indicators:

• eBridge1PCR:

Blue LED - Coax link connection (SLOC).

Green - PoE ON.

Green - Power ON.

LED Indicators (cont'd):

- Yellow and Green LED (RJ45) IP Link status, 10/100Base-T/active.
- eBridge1PCT:

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

Environmental:

• Operating Temperature:

eBridge1PCR: – 4°F to 113°F (–20°C to +45°C). **eBridge1PCT:** $-4^{\circ}F$ to $140^{\circ}F$ ($-20^{\circ}C$ to $+60^{\circ}C$).

• Storage Temperature:

 -22° to 158° F (-30° to $+70^{\circ}$ C) Storage.

• Humidity: 20 to 85%, non-condensing.

Electrical:

• BTU/Hr.: 24VDC: 12.28. 24VAC: 11.1.

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.
- 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, Hospitality, Arenas, Casinos, Airports, Schools, Hospitals, Transportation, etc.

Mechanical:

• Dimensions (W x L x H approx.):

eBridge1PCR:

3.5" x 4.375" x 1" (88.89mm x 111.125mm x 25.4mm) eBridge1PCT:

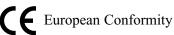
2.5" x 4.375" x 1" (63.5mm x 111.125mm x 25.4mm)

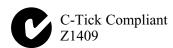
sloc is a registered trademark of Intersil Corporation

Agency Approvals



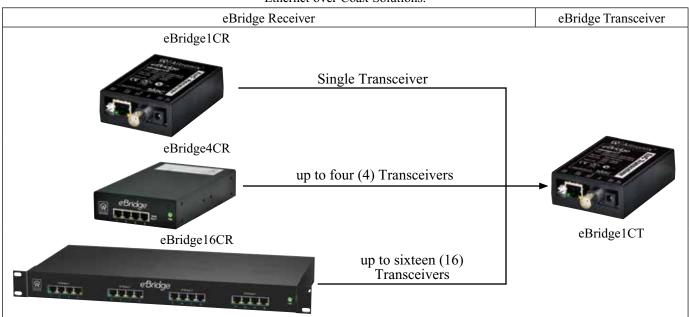
UL/CUL Listed for Information Technology Equipment (UL 60950-1).





<u>eBridge Receiver / eBridge Transceiver Compatibility:</u>

Ethernet over Coax Solutions.



eBridge Plus Receiver / eBridge Plus Transceiver Compatibility:

Ethernet and Power over Coax Solutions.

