

# eBridge1PCRTX IP and PoE/PoE+ over Coax Solution

## Description

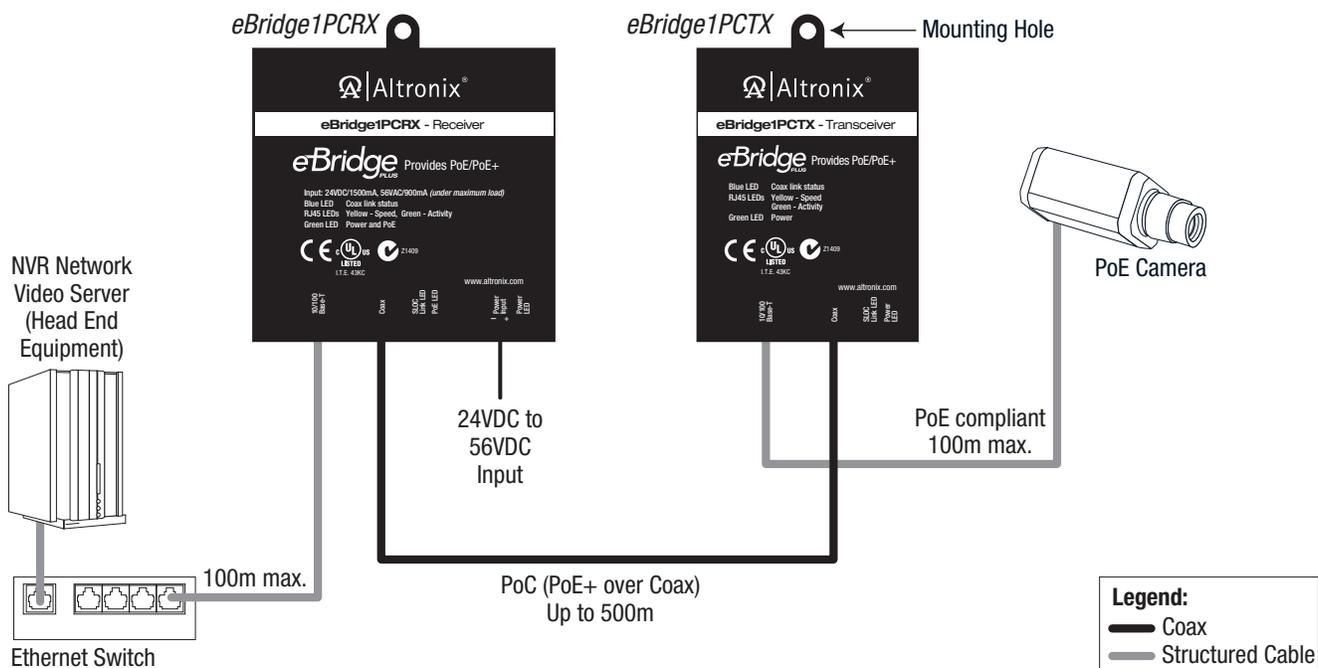
Altronix eBridge1PCRTX single port EoC Receiver and hardened Transceiver kit transmits data and power over coax cable. eBridge1PCRX generates PoE/PoE+ up the coax to an eBridge1PCTX transceiver. The transceiver, in turn, delivers that PoE-compliant power to an edge device/camera. This plug and play unit facilitates system upgrades from analog to IP utilizing existing legacy Coax and eliminates the costs and labor associated with installing new network cabling. Data transmission and power over the Coax is possible up to 500m in comparison to 100m Ethernet distance (CAT5e). A maximum range from head end to the edge device/camera is 700m, taking into consideration that up to 100m of structured cable may be deployed from the receiver to the network switch and the transceiver to the edge device/camera.



## Key Features

- IEEE 802.3af (15W) and IEEE 802.3at (30W).
- Throughput is rated to pass 25Mbps at distances up to 500m.
- Eliminates the costs and labor associated with installing new network cabling.
- Retrofit digital IP cameras in an analog CCTV installation.
- Auto detection and protection of legacy non-PoE cameras/devices.
- Works with Megapixel, HD720, HD1080 & VGA (SD) cameras.
- Extends Network link distance in an industrial environment.
- Upgrades deployed CCTV Coax to a digital network for Retail, Casinos, Airports, Schools, Hospitals, etc.
- UL Listed in the U.S. and Canada.
- CE Approved.
- C-Tick compliant.
- Lifetime Warranty

## Typical Operation Diagram



# eBridge1PCRTX

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### Specifications

#### Input

eBridge1PCRX:	24VDC to 56VDC Class 2 power supply (polarity observed).
eBridge1PCTX:	Powered by eBridge1PCRX.

#### Ethernet

Connectivity: RJ45, auto-crossover.  
 Wire type: 4-pair CAT5 or better structured cable.  
 Distance: up to 100m.

#### Coax

Throughput is rated to pass 25Mbps of data at distances up to 500m.  
 With proper headend equipment multiple Megapixel cameras can be used.  
 Speed: 10/100BaseT, half/full duplex, auto negotiation.  
 Connectivity: BNC, RG-59/U or similar.

#### Indicators (LED)

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

#### Agency Listings

UL/cUL	UL 60950-1 (Information Technology Equipment ).
CE	European Conformity.
C-Tick compliant.	

#### Physical and Environmental

##### Dimensions (W x L x H)

eBridge1PCRX:	3.5" x 4.375" x 1" (88.89mm x 111.125mm x 25.4mm)
eBridge1PCTX:	2.5" x 4.375" x 1" (63.5mm x 111.125mm x 25.4mm)

##### Weight (approx.)

Product Weight	0.4 lbs. (0.18 kg).
Shipping Weight	1 lbs. (0.45 kg).

##### Temperature

###### Operating

##### eBridge1PCTX

For 15W:	-40°C to 75°C (-40°F to 167°F).
For 30W:	-40°C to 49°C (-40°F to 120.2°F).

##### eBridge1PCRX

15W:	-20°C to 45°C (-4°F to 113°F).
30W for 24VDC:	-20°C to 37°C (-4°F to 98.6°F).
30W for 48VDC:	-20°C to 45°C (-4°F to 113°F).

##### Storage

-30°C to 75°C (-22° to 167°F).

##### Relative Humidity

85% +/-5%.	
Operating Altitude:	-304.8 to 2,000m.
BTU/Hr. (eBridge1PCRX, approx.):	24VDC: 18 BTU/Hr. 56VDC: 26 BTU/Hr.