



## Installation Guide

### Overview:

Altronix eBridge100SPR passes data and sends power over the coax to eBridge200WPM. Data transmission and power over the Coax is possible up to 300m. Maximum range from headend to the PoE camera/device is 500m, taking into consideration that up to 100m of structured cable may be deployed at each end. Built in IP management allows for remote camera reset, monitoring, and reporting via various IP protocols.

**Note:** Ethernet maximum distance (*see Maximum Length of Coax Type vs. Camera Power/PoE Class, pg. 3*).

### Features:

#### Agency Listings:

- UL/cUL Listed for Information Technology Equipment (UL 60950-1).
- CE European Conformity.

#### Input:

- 51-56VDC/60W max. power.\*

#### Power Output:

- Total output power: 60W.

#### Ethernet:

- Connectivity: RJ45, auto-crossover.
- Wire type: 4-pair Cat-5 or better structured cable.
- Distance: up to 100m.
- Speed: 100BaseT, half/full duplex, auto negotiation.

#### Coax:

- Distance: up to 300m.
- Connectivity: BNC, RG-59/U or similar.
- Throughput is rated to pass 100Mbps from camera to receiver. Data distances of up to 300m can be achieved. With the proper headend equipment multiple Megapixel cameras can be used.

#### LED Indicators:

- Blue LED - Coax link connection.
- Green LED - Power.
- Yellow and Green LED (RJ45) IP Link status, 100Base-T/active.

#### Environmental:

- Operating temperature:  
– 20°C to 50°C (– 4°F to 122°F).
- Storage temperature:  
– 30°C to 70°C (– 22° to 158°F).
- Humidity: 20 to 85%, non-condensing.

#### Applications:

- Works with Megapixel, HD720, HD1080 and VGA (SD) cameras (*see note, pg. 2*).
- Extend Network link distance in an industrial environment.
- 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.):  
3.5" x 4.375" x 1" (88.9mm x 111.1mm x 25.4mm).

\*UL Listed Class 2 or limited power source.

## 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. eBridge100SPR is not intended to be connected to outside plant leads and should be installed indoors within the protected premises. The eBridge100SPR is intended for indoor use only.

1. Secure unit to desired mounting surface with a proper fastening device utilizing the unit's mounting hole. Unit should be mounted in proximity to ethernet switch/network, NVR or video server.
2. Connect 56VDC UL Listed Class 2 or limited power source to terminals marked [Power – Input +] (polarity observed) (Fig. 1, pg. 2). Use 22AWG-16AWG wire for this connection.  
**Caution:** 56VDC will be present on coax. The other end of the coax should only be connected to the eBridge200WPM.
3. Connect structured cable from ethernet switch/NVR (network video server) to RJ45 jack marked [10/100 BaseT] (Fig. 1, pg. 2).
4. Connect Coax cable to BNC connector marked [Coax].
5. **Refer to eBridge200WPM for proper connection and setup information.**

**Note:** The eBridge is designed to accommodate Megapixel, HD720, HD1080 and VGA (SD) cameras. It is important to note that some high resolution and high frame rate cameras may demand faster headend processing ability, such as a PC graphics card to present a quality image. If the headend processing equipment is insufficient in speed, the image may show pixelation and latency. It is advisable to pretest system if unsure. Alternatively, frame rate and resolution may be reduced to accommodate system equipment.

## Technical Specifications:

Parameter	Description
Connections	BNC for Coax link. RJ45 for ethernet link.
Input Power Requirements	51-56VDC/60W @ max. power.
Indicators	Blue: Coax Link. Yellow (RJ45 connector): On - Link, Off - No Link, Blinking - Activity. Green (RJ45 connector): On - 100Base-TX, Off - 10Base-T.
Environmental Conditions	Operating ambient temperature (UL60950-1): – 20°C to 50°C (– 4°F to 122°F). Storage temperature: – 30°C to 70°C (– 22° to 158°F). Relative humidity: 85%, +/- 5%. Operating Altitude: – 304.8 to 2,000m.
Regulatory Compliance	UL/cUL Listed for Information Technology Equipment (UL 60950-1). CE European Conformity.
Weights (approx.)	Product: 5.1 oz. (0.144 kg)   Shipping: 7.76 oz. (0.22 kg)

## Cable Type, Total Device Power, Data, and Power Distance:

Cable Type	Total Power Consumption	Max. Data Distance	Max. Power Distance	Cable Type	Total Power Consumption	Max. Data Distance	Max. Power Distance
RG59u/23awg	15W	300m	264m	RG59u/20awg	15W	300m	532m
RG59u/23awg	30W	300m	132m	RG59u/20awg	30W	300m	266m
RG59u/23awg	60W	300m	66m	RG59u/20awg	60W	300m	133m
RG59u/22awg	15W	300m	334m	RG59u/18awg	15W	300m	846m
RG59u/22awg	30W	300m	167m	RG59u/18awg	30W	300m	423m
RG59u/22awg	60W	300m	83m	RG59u/18awg	60W	300m	211m

# 60W Coax Application:

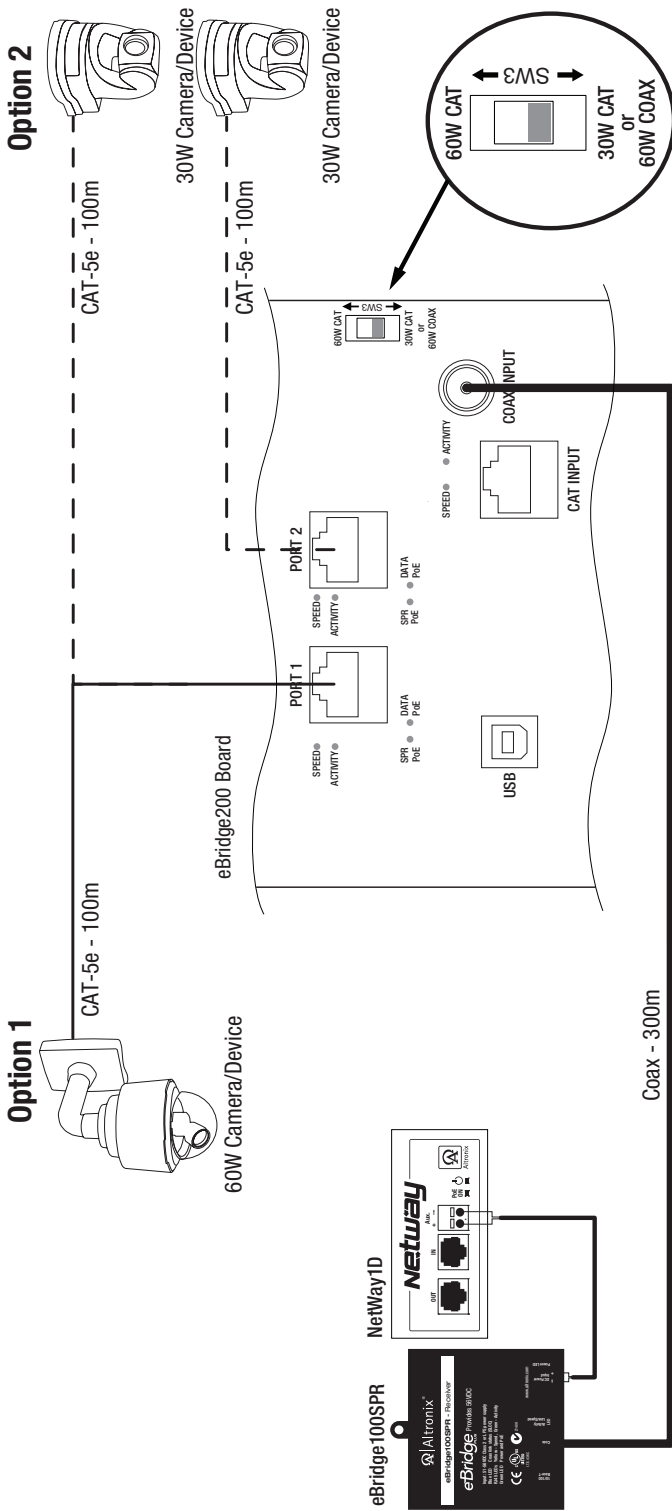


Fig. 1

## Notes:

Altronix is not responsible for any typographical errors.

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IleBridge100SPR Rev. 102814 G19U



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