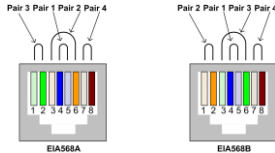


Specifications

Environment	PoE CCTV IP
Devices	PoE CCTV IP cameras with a 10/100Mb/s Ethernet port, using up to 30 Watts.
Transmission	Transparent to the user
Standard supported	Ethernet side: IEEE 802.3 10BaseT, IEEE 802.3U 100Base-TX IEEE 802.3af/at compatible PoE
PoE Power	Class 3
Connectors	One (1) BNC 75 Ohms. One (1) RJ45S for Cat 5e/6 unshielded or shielded twisted pair.
LED Indicators	Power, IP Traffic, 100MBps
Maximum Distance	RG6: Up to 1969ft (600m) @ 100Mbps (with PoE) Up to 3281ft (1000m) with IP only (without PoE) UTP Cat 5e/6: Up to 330ft (100 m) <i>Note: When installed in an electrically noisy environment, an STP cable must be used. Also, cross-connection reduces the effective distance depending on the grade of twisted cable used.</i>
RJ45 Pin Configuration	<p>RJ45 Link</p> <p>Pin 1 (R) Pin 2 (T) Pin 3 (R) Pin 6 (T) Pin 4 (R) Pin 5 (T) Pin 7 (R) Pin 8 (T)</p>  <p><i>Reverse Polarity Sensitive. Use EIA/TIA 568A or 586B straight-through wiring.</i></p>
Cable	UTP/STP: One (1) Cat 5e/6 or better twisted pair cables required RG59/RG6: 75 Ohms (avoid CCS cable)
Power Supply	Optional Power Supply (110-240V/56VDC) min.65W (sold separately). <i>Required at the Camera Side Device when coax cable quality or length results in insufficient power reaching the camera. Required at the Network Side Device when used in a non-PoE environment.</i>
Power Consumption	Network Side: 3.2 Watt Camera Side: 3.0 Watt
Temperature	Operating: 0° to 60°C Storage: -20° to 85°C Humidity: Up to 95% non-condensing
Enclosure	Metal
Dimensions	3.54/3.11" x 1.65" x 0.87" (90/79 x 42 x 22 mm)
Weight	0.78 lb (0.354 kg)
Compliance	Regulatory: FCC, CE, RoHS Flammability: 94V0
Warranty	2 years
Order Information	500115 CCTV IP PoE Extender Kit, 600m
Accessories	500116-(US/UK/EU) 56VDC 65W PSU (sold separately)



8495 Dalton Road, Mount Royal, Quebec, Canada. H4T 1V5
 Tel: (514) 905-0588 Fax: (514) 905-0589
 Toll Free (North America): (877) 689-5228
 E-mail: videoease@muxlab.com URL: www.muxlab.com



LongReach CCTV IP PoE Extender Kit, 600m 500115 Quick Installation Guide

Overview

The LongReach CCTV IP PoE Extender Kit, 600m (500115) allows one IP camera (up to 30 Watts) to be connected up to 1969ft (600m) via a single 75-ohm coax cable in a point-to-point configuration. The maximum distance depends on the grade and quality of coaxial cable used, and if PoE is used. An optional 56VDC (65W) Power Supply (sold separately) can be used if required, which also helps to extend distance.

Applications

CCTV IP surveillance

Installation

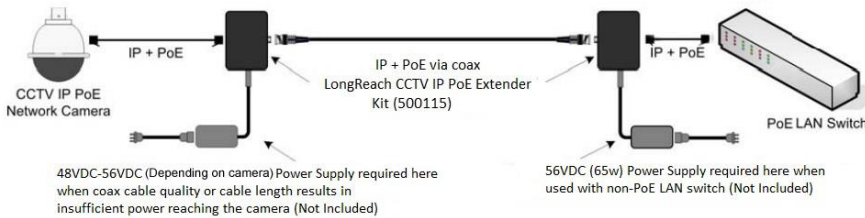
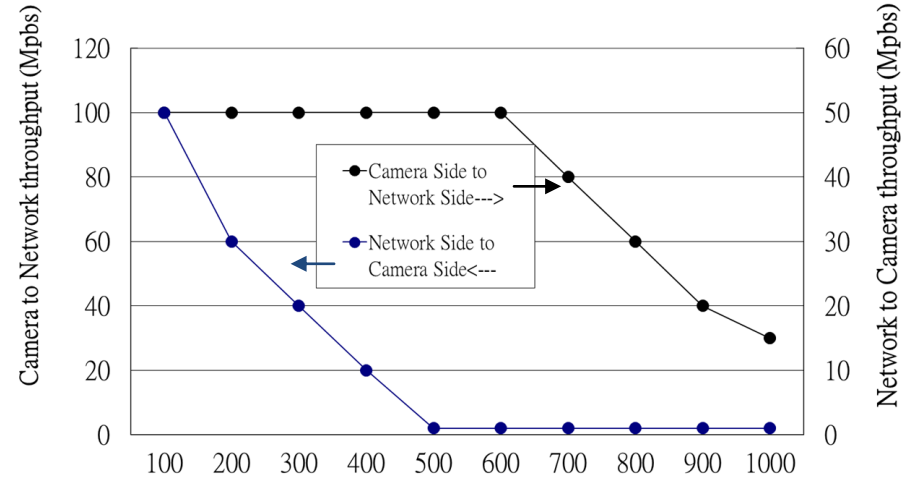
1. Identify the connectors on the Extenders as indicated on the product labels.



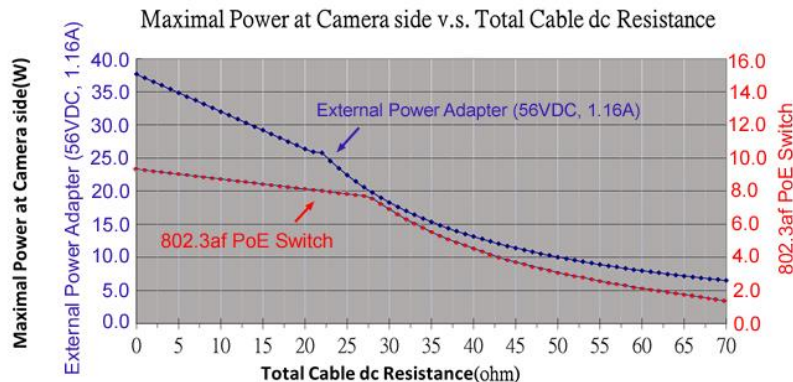
2. Position each unit in the intended installation location.

3. Verify that the distance between the CCTV IP PoE extenders is within MuxLab specifications (see Specifications table).
4. To install the Network Side Device:
 - 4a. Connect the extender to the PoE Ethernet Switch with a UTP Cable.
Note: If the Ethernet Switch is not PoE; you will need to connect an optional 56VDC (65W) Power Supply (sold separately) to the Network Side Device.
 - 4b. Connect one (1) length of RG59 or RG6 coaxial cable to the COAX LINK connector on the Extender.
5. To install the Camera Side Device:
 - 5a. Connect the extender to the camera with a Cat5e/6 cable.
Note: If the quality or length of the coaxial cable reduces the power to a level that is insufficient to power the camera, you will need to connect a separate 48-56VDC (with appropriate wattage, depending on camera) Power Supply to the Camera Side Device.
 - 5b. Connect one (1) length of RG59 or RG6 coaxial cable to the COAX LINK connector on the Extender.
6. Power on the equipment and verify the image quality. The following is a diagram of a typical configuration.

Typical Throughput over RG6 Cable v.s Cable Length



Tables



Troubleshooting

The following table describes some of the symptoms, probable causes and possible solutions in respect to the installation of the LongReach CCTV IP PoE Extender Kit, 600m:

Symptom	Network Side LEDs		Camera Side LEDs		Probable Cause	Possible Solutions
	Power	IP Traffic	Power	IP Traffic		
No Image	OFF	OFF	OFF	OFF	No power	<ul style="list-style-type: none"> Check if the Ethernet switch is PoE. Check the power connection.
No Image	ON	OFF	OFF	OFF	Coaxial Cable	<ul style="list-style-type: none"> Check the coaxial cable.
No Image	ON	OFF	OFF	OFF	Distance	<ul style="list-style-type: none"> Check the coaxial cable length and quality.
No Image	ON	OFF	ON	OFF	UTP Cable	<ul style="list-style-type: none"> Check the UTP Cable pin out.
No Image	ON	ON	ON	ON	No Traffic	<ul style="list-style-type: none"> Check network configuration.
Choppy Image	ON	BLINK	ON	BLINK	Distance	<ul style="list-style-type: none"> Check cable length Check the coaxial cable quality.

If you still cannot diagnose the problem, please call MuxLab Customer Technical Support at 877-689-5228 (toll-free in North America) or (+1) 514-905-0588 (International).

Typical resistance for RG59 is 17Ω/100m, RG6 is 13Ω/100m and RG11 is 4.9Ω/100m