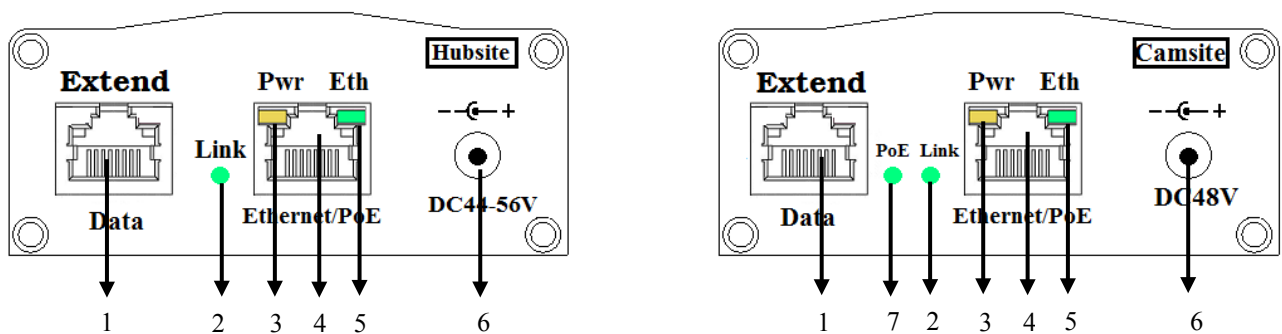


# Ethernet/PoE Extender over UTP Cable Installation Guide v1.2

## Product Overview:

1. **Extend:** RJ45 Female Connector (No LED) converter allows 10/100 Base-T Ethernet and PoE power to be transmitted using Cat. 5 or better UTP cable with 4 pair wires.
2. **Link:** The LED indicates the cable link status. The LED will be on after 10 seconds when first connection is success; Off: No connection.
3. **Pwr:** The LED indicates the power status. On: Power on; Off: No power.
4. **Ethernet/PoE:** RJ45 connector, attaches to POE IP Camera or Hub via Cat5, 5e, 6 or 7 patch cables.
5. **Eth:** The LED indicates the communication status. Flash: Communicate with Traffic; Off: No connection.
6. **Power jack:** Plug DC power adapter to for PoE source when PoE Hub cannot provide enough power source.
7. **PoE:** The LED indicates the PoE power status. On: PoE power is provided; Off: No PoE power.



## Packing Checklist:

Check the package box the following items are included:

EPOC-131VAJ (Or EOPC-131PSJ) \* 1 ea;

Menu \* 1 pc.

## Installation Steps:

### IP camera end

1. Connect the IP camera RJ45 connector to the 10/100BaseT Ethernet port of EPOC-131PSJ using a standard Cat5/6 cable of maximum 100 m (328 feet) in length.
2. Connect one end of the long UTP cable such as Cat.5, 5e, 6, or 7 cable to the RJ45 (No light) connector of EPOC-131PSJ.
3. When the IP camera and EPOC-131PSJ cannot receive power through the UTP cable, even through using the POE+ Hub or plug DC56V power adapter for EPOC-131VAJ. Plug the DC48V power adapter into the EPOC-131PSJ will be needed at this end. Please refer to “**Power Distance VS. Cable Impedance**” table.

### Switch Hub end

1. Connect the PoE switch Hub RJ45 connector to the 10/100BaseT Ethernet port of EPOC-131VAJ using a standard Cat5/6 cable of maximum 100 m (328 feet) in length.
2. Connect one end of the long UTP cable such as Cat.5, 5e, 6, or 7 cable to the RJ45 (No light) of EPOC-131VAJ.
3. When the IP camera and EPOC-131PSJ cannot receive power through the Wire cable, please change the POE+ Hub or plug DC56V power adapter to EPOC-131VAJ.

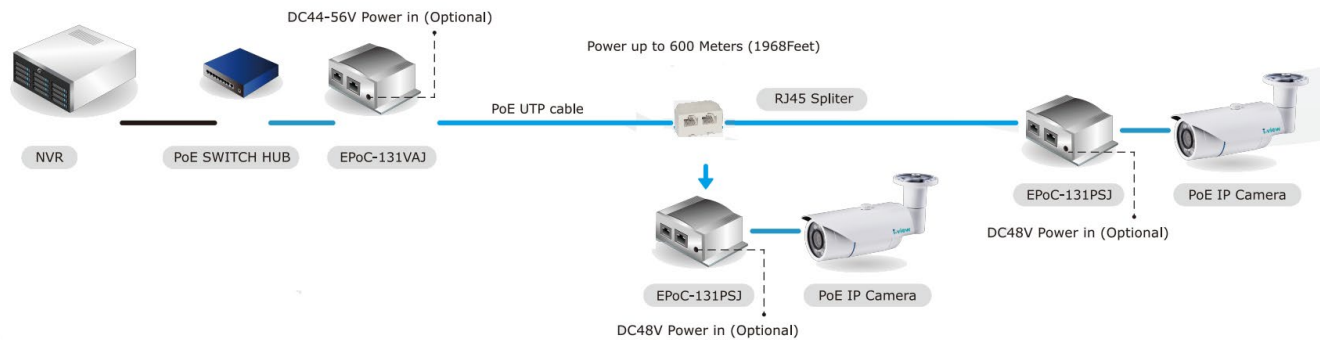
## ❖ Product Application Diagram

The Ethernet over UTP Cable system allows the Star topology or Daisy-chained communication. It supports virtually any type of Cat. UTP wire, including such as Cat.5, 5e, 6, or 7 cable. And different wire types can be concatenated together, as needed.

**⚠ To avoid the interference signal, we strongly recommend using the Cat. STP cable with metal RJ45**

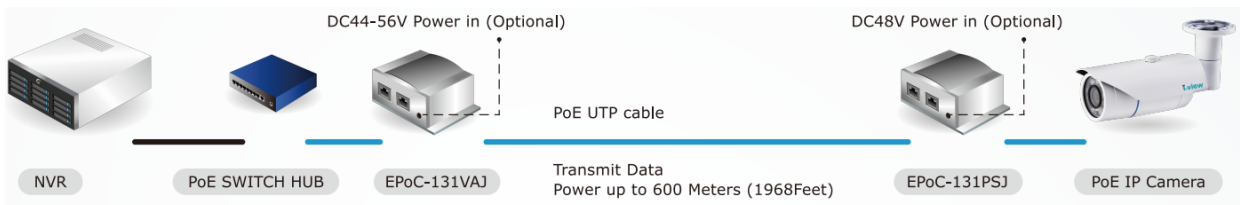
**Connector for Ethernet/PoE signal transmission when there are more 16 pcs EPOC-131VAJ install at the same Hub site.**

### Daisy Chain



Plug DC56V power adapter to EPOC-131VAJ or DC48V to EPOC-131PSJ when the IP Camera cannot receive

### Point to Point Topology



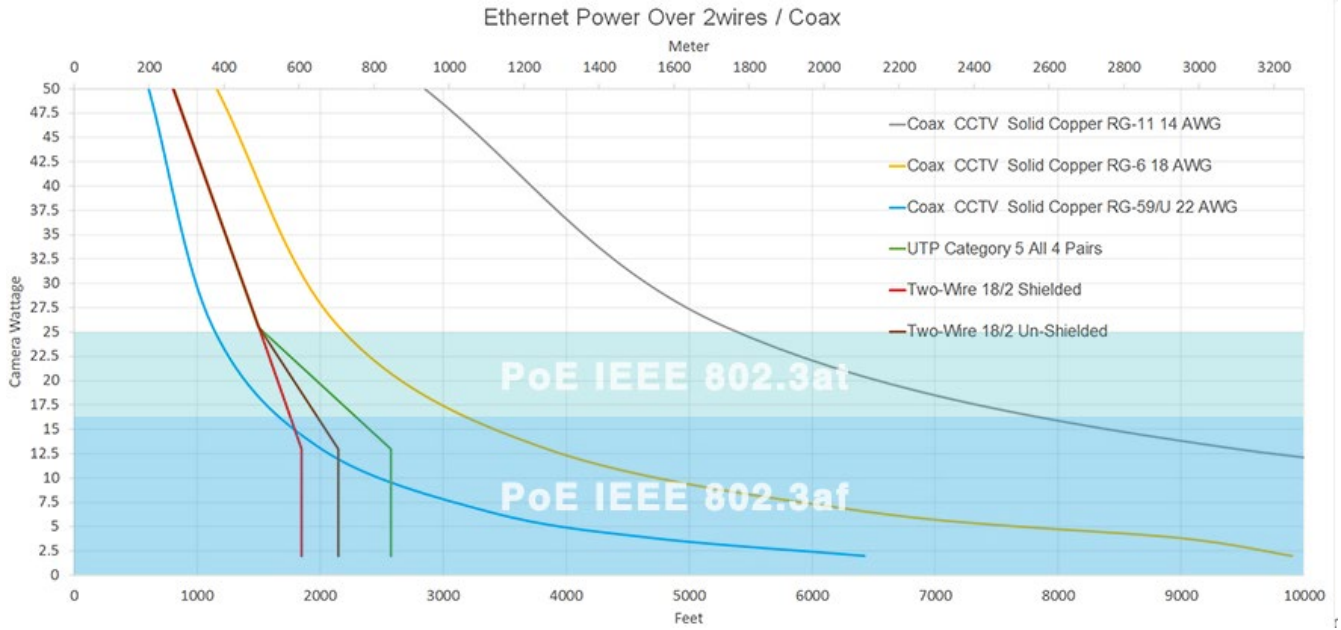
Plug DC48V power adapter to EPOC-131PSJ when the EPOC-131PSJ cannot receive power.



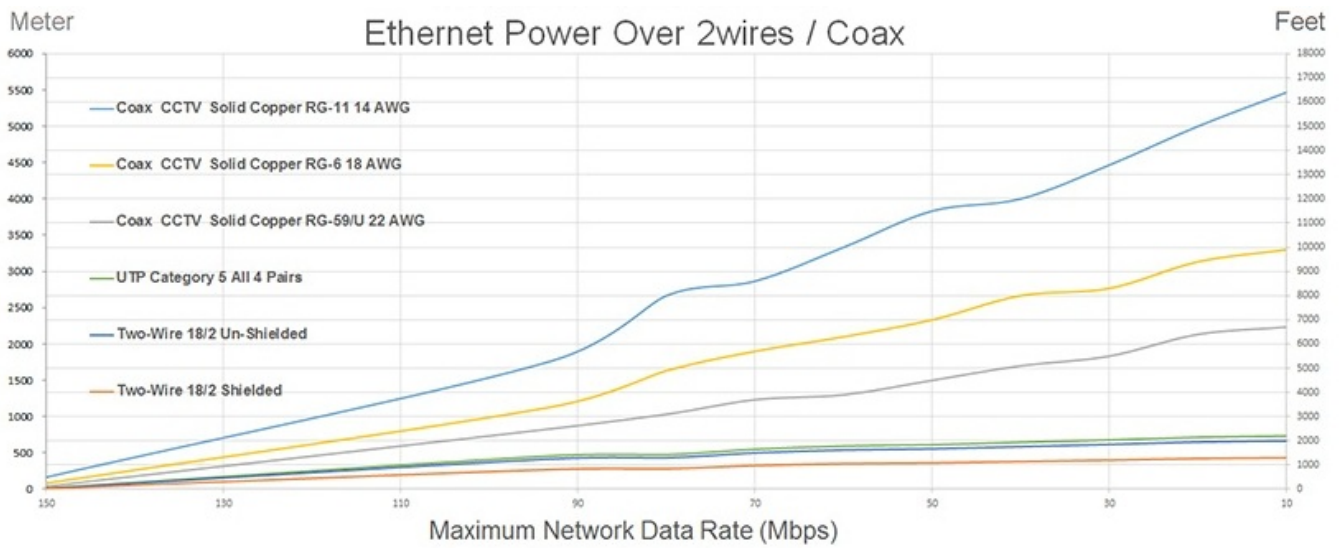
The IP camera and EPOC-131PSJ cannot receive power through the UTP cable. Please do as below:

1. POE+ Hub or plug DC56V power adapter for EPOC-131VAJ.
2. Plug the DC48V power adapter into the EPOC-131PSJ will be needed at this end. Please refer to “Power Wattage VS. Cable Distance” table or visit [www.i-view.com.tw](http://www.i-view.com.tw)

## Power Wattage VS. Cable Distance



## Data Rate VS. Cable distance



## LED Function table

Name	Color	Status	Function
<b>Pwr</b>	Yellow	On	Power is on
		Off	Power is off
<b>Eth</b>	Green	Flashing	Communication is OK with Traffic
		Off	No communication
<b>Link</b>	Green	On	Connection is OK; (It take 10 sec. for LED on)
		Off	No connection
<b>PoE</b>	Green	On	PoE is offering
		Off	No PoE offer

◇Specification:

ITEM \ MODEL	EPOC-131VAJ	EPOC-131PSJ	EPOC-131PSJ-O
<b>Ethernet</b>			
Connector	RJ-45	RJ-45	RJ-45
Connectivity	10/100/1000 Base-T auto-negotiation, auto MDI / MDX crossover		
Wire type	Cat5 or better		
Distance	Up to 328 feet (100m)		
<b>Cable Link</b>			
Connector	RJ-45		
Type	Receiver (Hub Site)	Transmitter (Camera Site)	
Wire type	Cat.5, Cat.5e, Cat.6, Cat.7 UTP Cable		
Distance <sup>1</sup>	Up to 600 Meters (1980 feet)		
Topology	Supports Star, Daisy-Chain, or any combination		
Encryption	128-bit AES		
Latency	3 ms		
Bandwidth <sup>1</sup>	Total network bandwidth 150 Mbps; with dynamic bandwidth allocation		
<b>Power</b>			
Power Source	PoE Hub; DC44~56V	PoE or DC48V	PoE or DC48V
Power Output	PoE (RJ-45 via 4 pairs cable)	25W PoE (RJ45); (50W Option)	
<b>Physical</b>			
Waterproof	None	None	IP 66
Dimensions (mm)	100 x 55 x 34	100 x 55 x 34	128 x 102 x 36
Weight	140g	140g	310g
<b>LEDs</b>			
Status indicators	Cable link Ethernet Power Ethernet link/activity	Cable link Ethernet Power PoE Connection Ethernet link/activity	Cable link Ethernet Power PoE Connection Ethernet link/activity
<b>Environment</b>			
Temperature	<b>Operation:</b> 0°C to 50°C / 14°F to 122°F		
Humidity	20% ~ 85% non-condensing		
Power consumption	≤ 2W		
Transient immunity	20μS x5 3,000A, 6,000V; ESD 20KV, 200pF		

1. Distance and number of devices supported may be lower due to power supply capacity and wire voltage-drop. The bandwidth is dynamically allocated (shared based on traffic), and decreases with wire distance.

**Mail:** [support@i-view.com.tw](mailto:support@i-view.com.tw)