



Model PLC601POE-2P Single Port PoE Ethernet Extender

Description

PLC601POE-2P Single Port PoE Ethernet Extender is a high-speed Ethernet transmission device. It can transmit Ethernet and Power signals together for PoE devices. It transmits data network signal up to 1,000 meters over any pair of 2-wire such as Cat5, coaxial cable, telephone line and power line, etc. The maximum physical bandwidth can reach 200Mbps. It supports PoC and PoE functions.



It consists of the master unit and slave unit. By PoE power equipment, it can directly supply power for the remote unit, supporting point to point and point to multi-point. It can greatly simplify the project cabling, applied to expand network system and transmit long distances of PoE device signals.

Application



IP Video Surveillance



Network Smart Home



Elevator IP Surveillance



Intelligent Network Industry

Features

- ◆ Max Transmission distance reach 1,000m (RVS 2×1mm²)
- ◆ Max physical bandwidth reach 200Mbps
- ◆ Support power supply over cable technology
- ◆ Transparent transmission, low power consumption and no adjustment
- ◆ Dip switch for power output: 12VDC/2A or PoE
- ◆ Built-in ESD protection circuit, in case of static damage

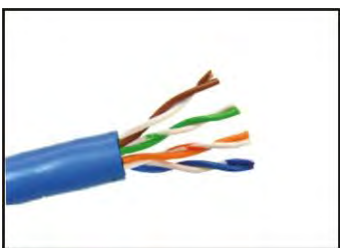
Cable Tips



Telephone line: Cat3 or above



Power line: RVV/ RVS/ RVVP/ RVB 2×0.5mm² above

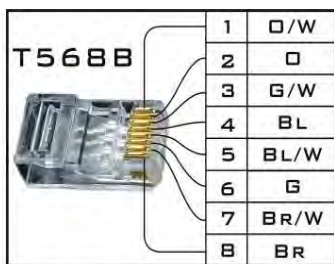


Twisted pair: Cat5 or above



Coaxial cable: RG59 or above

Accessories Spec

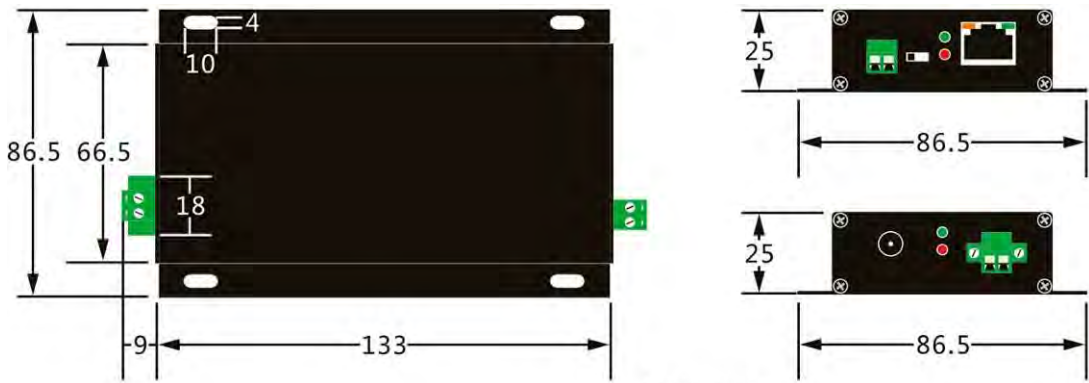


RJ45 port by EIA/ TIA568B



Power Adapter by 48 or 56 VDC
5mm female power port (Optional)

Dimension



Unit:mm

Terminals



Technical Parameter

Power Input	DC Input		12VDC, 48 ~ 57VDC
	Power Consumption		≤3.5W / PC
Power Output	Dip Switch	RJ45/PoE output	Standard 48VDC; IEEE802.3af/at
		2P DC output	12VDC 2A (overload protection)
Transmission / Rate	Standard Compliance		IEEE802.3u
	Up Down Agreement		CSMA/CA
	Physical Speed		200Mbps
	Encryption Way		128-bit AES Encryption
Reliability	MTBF		> 30000 hours
Physical Characteristic	Dimension (L × W × H)		133mm × 86.5mm × 25mm
	Material		Aluminum
	Net Weight		220g/PC
Operating Environment	Working Temperature		-20°C ~ 60°C
	Working Humidity		<95% (Non-condensation)

Rate and Power Loss

PoE Ethernet Extender supports enhanced high speed network data transmission. The data differs from the cables types. Moreover, the longer distance of cable, the lower the transmission rate accordingly. The following testing details are for your reference:

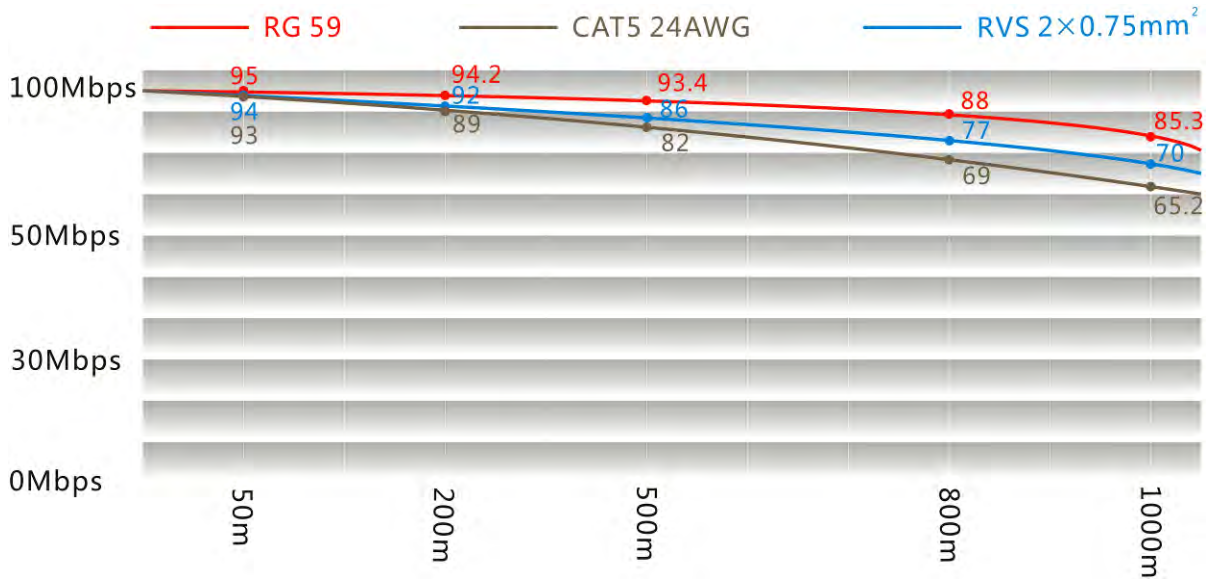


Figure (1)

The above data is one-way network parameters. Testing is made under the condition of the cable not fully expanded. They may be differences compared with practical application of the data. Rate is only used as reference in project application.

Network & Power can be transmitted over 2-wire. But it is worth to point out that the output power consumption of PSE must the requirements of PD. On a certain distance, PoE Ethernet Extender can support one PoE module network to supply power for multiple PD. But you must consider the power redundancy.

Power loss and attenuation differs from the cable types. The following PoE power supply testing tables are just for your reference.

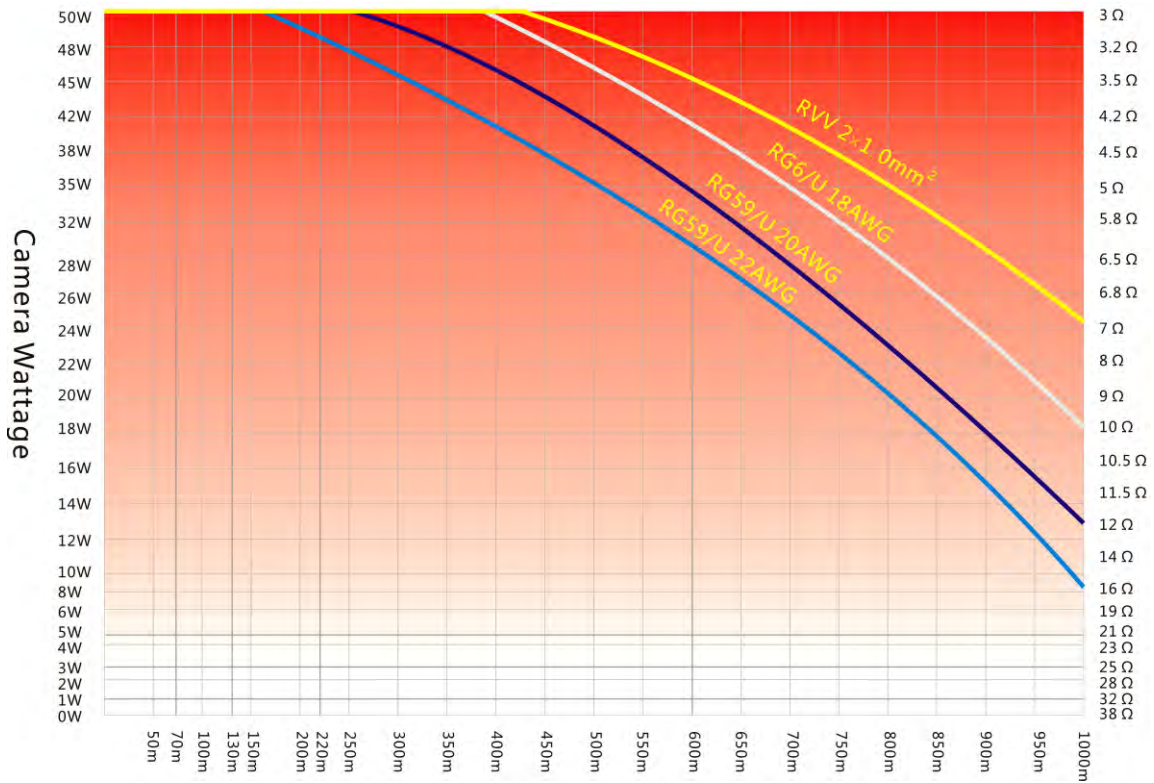
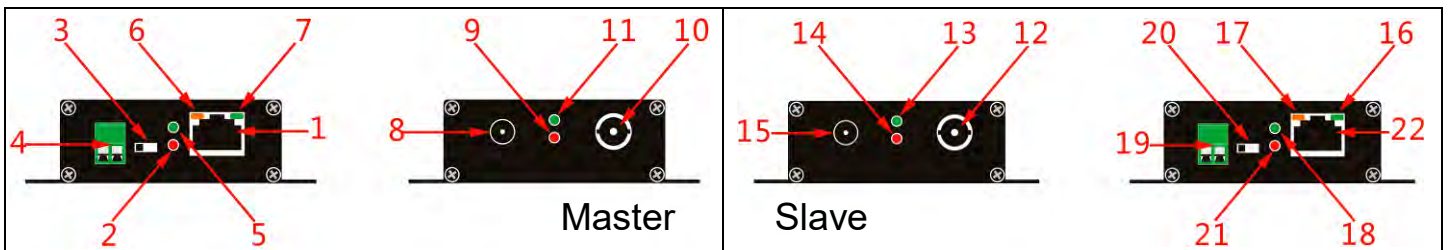


Figure (2)

Tips: In the above figure, the left vertical coordinate is PoE power output, the below horizontal coordinate is PoE transmission distance, should simultaneously contrast the horizontal and vertical coordinate to get accurate corresponding power output.

Installation Instructions



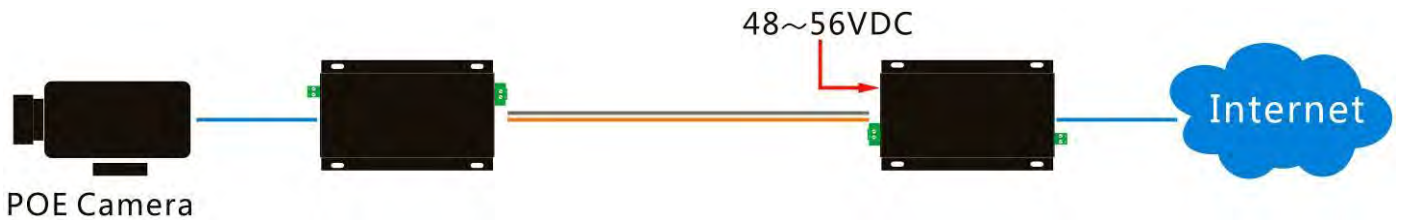
Step	Installation Instruction	Step	Installation Instruction
1	Connect Cat5 cable to RJ45 port(1)of master unit	12	Coaxial cable connection terminal(12)
2	DC power output indicator(2)	13	Ethernet transmission indicator(13)
3	Power output mode dip switch(3)	14	Power indicator(14)
4	Lower voltage 12VDC power output terminal(4)	15	DC power output indicator(15)
5	PoE power output indicator(5)	16	Ethernet transmission indicator(16)
6	Line status indicator(6)	17	Line status indicator(17)
7	Ethernet transmission indicator(7)	18	PoE power output indicator(18)
8	DC power input terminal(8)	19	Lower voltage 12VDC power output terminal(19)
9	Power indicator(9)	20	Power output mode dip switch(20)
10	Coaxial cable connection terminal(10)	21	DC power output indicator(21)
11	Ethernet transmission indicator(11)	22	Connect Cat5 cable to RJ45 port of slave unit(22)

Installation Diagram

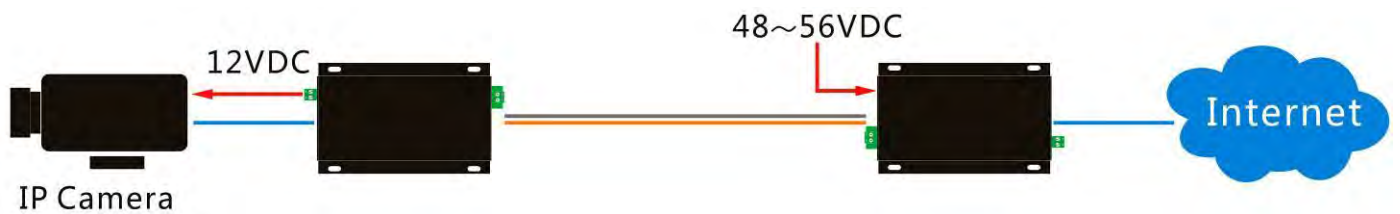


Power Supply Tips

1. Provide PoE Power Supply for front-end PoE device(The device only supports PoE Output, don't support PoE Input)



2. Provide low voltage 12VDC for front-end device



3. When transmission distance is long, to avoid output voltage dropping too much, also provide 48~56VDC power supply for slave unit, at the same time master unit also get power from it.



4. When connect 12VDC power supply for master unit, because long distance causes output voltage to drop too much, it can't satisfy slave unit power requirement, also provide 12VDC power supply for slave unit as supplement.



Tips: The power consumption supports PoE / Non-PoE equipment power supply standard, due to the difference of line loss and transmission distance, it may not be able to meet simultaneously two kinds of power supply requirement, only through dip switch setting to choose one kind of power output mode.

Use Tips

When you use PLC601PoE-2P, please follow the below tips as a reference, in order to reduce the fault in the process of using and the inspection work.

1. The device supports auto-negotiation allocation master and slave. It also can be set master-slave side and grouped by the software. Each group (one point to multi-point communications group) only allows one Master, others are Slaves. Otherwise, the network data won't be able to transmit.
2. Signal transmission cable must be the copper cable. Other material cables will cause the decrease of signal transmission quality and distance.
3. Long-distance cable connections must be by standard connection method, such as welding or using connectors.
4. Make sure the electrode of transmission cable is consistent, otherwise, it is easy to cause the power failure.
5. Please choose matching power adaptor **(12VDC or 48~56VDC)**.
6. There is no waterproof design for this product, please make sure that it is used in dry environment.
7. If device fails, do not disassemble or repair it by yourself. Please contact us timely.

Attentions: Specifications are subject to change without notice.