

Model OT-PLC302POE

Mini PoE Extender

Product User Manual



OT-PLC302POE Mini PoE Extender is a high-speed Ethernet transmission device. It can transmit Power and Ethernet signals together over any pair of 2-wire such as Cat5, coaxial cable and power line, etc.

It contains one transmitter unit and one Receiver unit. The Receiver can directly supply power for the transmit unit and PoE device. It can be installed in a small space with its compact size. It can transmit IP & PoE over 2-wire such as Cat5, coaxial cable and power line which greatly simplify the project cabling, applied to transmit middle & short distances of PoE device signals.

Features

- ◆ Max PoE distance can reach 500m
- ◆ Full duplex 10/100Mbps
- ◆ Support power over cable technology (12VDC or 48~56VDC)
- ◆ Support PoE output (48~56VDC power input)
- ◆ Built-in ESD protection circuit, in case of static damage

Technical Parameter

Category		Description
Power	Available Voltage Range	12VDC or 48~56VDC
	Power Consumption	≤3W / PC
	PoE Power Output	Standard 48VDC; IEEE802.3af/at
Transmission / Rate	Standard Compliance	IEEE1901, IEEE802.3
	Up Down Agreement	CSMA/CA
	Bandwidth	Full duplex 10/100Mbps
Physical Characteristic	Dimensions (L × W × H)	123mm×26mm×26mm
	Material	Aluminum
	Net Weight	105g / PC
Operating Environment	Working Temperature	-20°C~60°C
	Working Humidity	<95% (Non-condensation)

Dimension



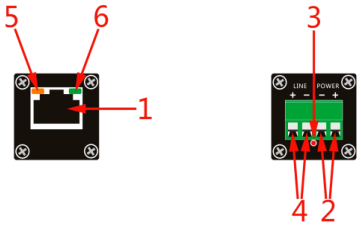
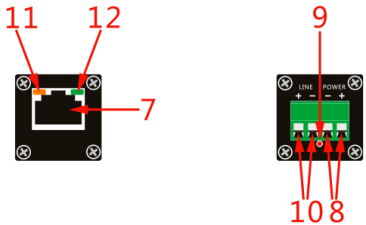
Note: Dimension error value ± 1 mm

Installation Instructions

Definition of Receiver & Transmitter; Terminal device & Remote device:

Receiver & Transmitter: Ethernet Extender Unit connected to the computer is Receiver by default. Ethernet Extender Unit connected to the camera is Transmitter by default.

Terminal device / Remote device: Terminal device generally refers to the direction of computer / machine room, and remote device generally refers to the direction of camera.

Receiver		Transmitter	
			
Step	Installation Instruction	Step	Installation Instruction
1	Network equipment is connected to RJ45 port of receiver unit (1)	7	Network equipment is connected to RJ45 port of transmitter unit (7)
2	Positive and negative terminals of the low voltage power (2)	8	Positive and negative terminals of the low voltage power (8)
3	Power indicator is always on (3)	9	Power indicator is always on (9)
4	Positive and negative connection terminal of 2-wire cable (4)	10	Positive and negative connection terminal of 2-wire cable (10)
5	Network data indicator quickly blinks when data is normal (5)	11	Network data indicator quickly blinks when data is normal (11)
6	Line indicator is flashing after successful connection (6)	12	Line indicator is flashing after successful connection (12)

Installation Diagram

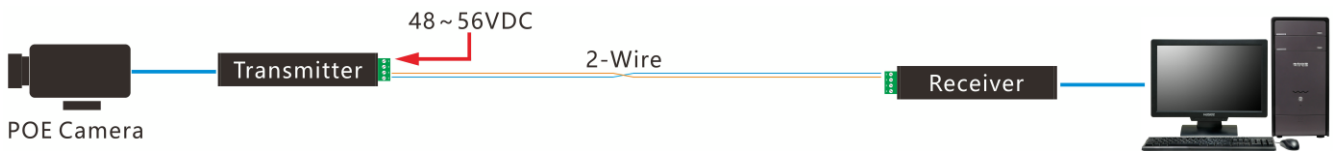


Power Supply Tips

1. Provide 48~56VDC for the Receiver unit, Transmitter unit and PoE powered device no need extra power supply



2. Provide 48~56VDC for the Transmitter unit, Receiver unit and PoE powered device no need extra power supply



Tips:

A. Please pay more attention to the Positive and Negative pole when you connect the 2-wire transmission cable.

B. This device can't support PoE modules power supply, including PoE switch, PoE recorder, etc. It only supports 48-56VDC power input.

Troubleshooting Method

1. When direct connection by network cable is normal, the lag time is large after connecting Ethernet Extender.

(1) Check 2-wire connection is correct or wrong. In the case of the wrong connection, the signal can be transmitted but the lag is very large.

2. After a period of using Ethernet Extender, the Ethernet signal has packet loss or disconnection.

(1) Check the power adaptor status, if find they are aged or damaged, please replace it.

(2) Check all the cable connections, if find any loose cable or short circuit, please solve it.

3. The screen is frozen, and the Ping packet is normal.

(1) Ethernet Extender is transparent transmission. Check whether the version and setting of IP Camera are correct or not.

(2) Check whether the throughput of network switch is enough or not. Please directly connect the computer to check the status.

(3) Confirm if all the IP surveillance devices belong to the same brand or not, whether they support onvif, and then check their compatibility, do the test of reducing video stream.

(4) If working environment temperature of Ethernet Extender is too high, firstly cut off the power supply. If confirm the devices are overheated, please adopt temperature decrease measures.

4. When multiple receiver units are placed together for use, they can't communicate or have significant network latency.

(1) Install the receivers with a distance of at least 2 meters or place them separately in metal equipment boxes to avoid signal crosstalk.

(2) Do the grouping for Ethernet Extenders by software. The grouping software is provided by us, please contact us timely.

Use Tips

When you use OT-PLC302POE, please follow the below tips as a reference, in order to reduce the fault in the process of using and the inspection work.

1. Every unit device consists of Receiver and Transmitter. Please notice the positive and negative terminal of signal cable when transmit PoE power.

2. Please pay attention to the polarity of the power when the power signal cable is connected to the terminals. Metal wire should be hidden lest happen short circuit to burn out equipments.
3. Signal transmission cable must be the copper cable. Other material cables will cause the decrease of signal transmission quality and distance.
4. Long-distance cable connections must be by standard connection method, such as welding or using connectors.
5. The coaxial cable, twisted pair cable, telephone line, power line can be sued to transmit the network data signal. Please notice that it may cause the decrease of signal transmission quality if connect kinds of cables at random.
6. Please choose matching power adaptor (**12VDC/1A or 48~56VDC/0.8~1.2A**).
7. There is no waterproof design for this product, please make sure that it is used in dry environment.
8. If device fails, do not disassemble or repair it by yourself. Please contact us timely.



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