



Model OT-PLC602POE-2P

Single Port PoE Extender

Product User Manual



www.ourten.com

OT-PLC602POE-2P Single Port PoE Extender is a high-speed Ethernet transmission device. It can transmit Ethernet and Power signals together for PoE devices. It transmits Ethernet and PoE signal up to 500m over any pair of 2-wire such as Cat5, coaxial cable and power line, etc. It supports PoC and PoE functions.

It consists of the transmitter unit and receiver 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.

Features

- ◆ Max Transmission PoE distance can reach 500m
- ◆ Full duplex 10/100Mbps
- ◆ Support power 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

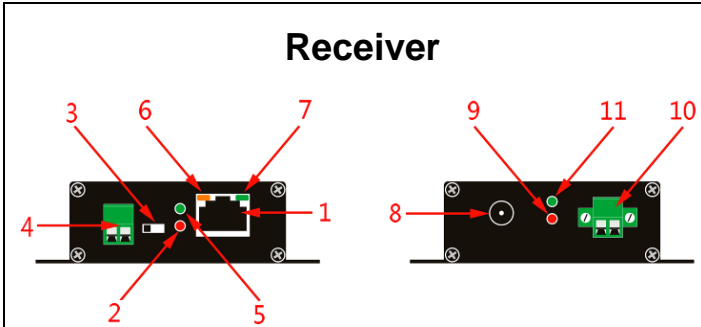
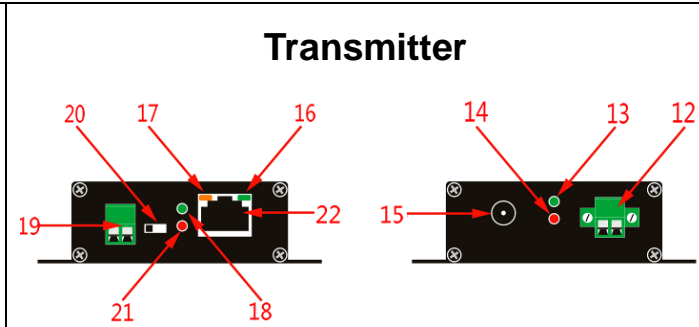
Technical Parameter

Category		Description	
Power Input	DC Input	12VDC, 48 ~ 56VDC	
	Power Consumption	≤3W / 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	
	Bandwidth	Full duplex 10/100Mbps	
	Encryption Way	128-bit AES Encryption	
Physical Characteristic	Dimension (L x W x H)	133mm × 86.5mm × 25mm	
	Material	Aluminum	
	Net Weight	220g / PC	
Operating Environment	Working Temperature	-20°C ~ 60°C	
	Working Humidity	<95% (Non-condensation)	

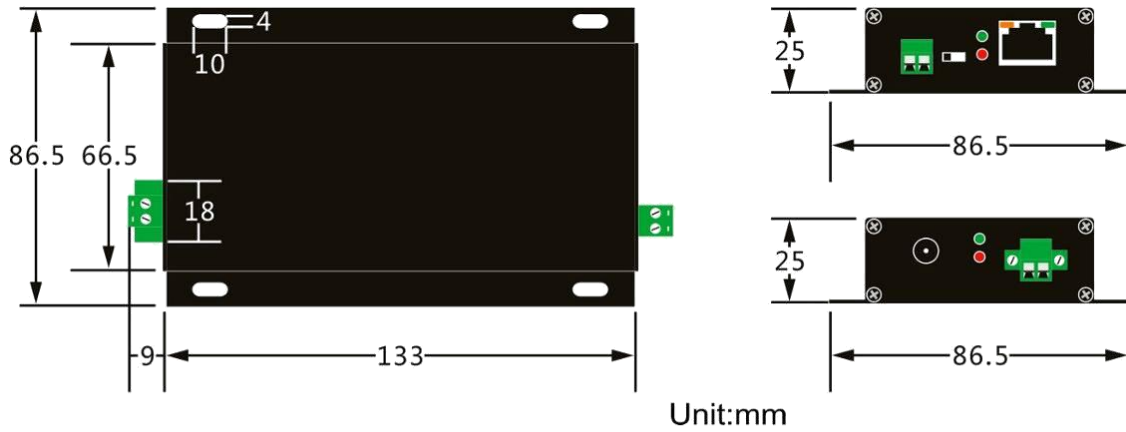
Installation Instructions

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	Connect Cat5 cable to RJ45 terminal (1) of receiver unit	12	2-wire cable connection terminal (12)
2	DC power output indicator (2)	13	Line indicator is flashing after successful connection (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	Network port detection indicator (16)
6	Network data indicator quickly blinks when data transmission is normal(6)	17	Network data indicator quickly blinks when data transmission is normal (17)
7	Network port detection 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	2-wire cable connection terminal (10)	21	DC power output indicator (21)
11	Line indicator is always on (11)	22	Connect Cat5 cable to RJ45 port of transmitter unit (22)

Dimension



Note: Dimension error value ± 1 mm

Installation Diagram

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 transmitter unit, at the same time receiver unit also get power from it.



Tips:

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

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-PLC602POE-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. Signal transmission cable must be the copper cable. Other material cables will cause the decrease of signal transmission quality and distance.

2. Long-distance cable connections must be by standard connection method, such as welding or using connectors.

3. Make sure the electrode of transmission cable is consistent, otherwise, it is easy to cause the power failure.
4. Please choose matching power adaptor **(12VDC or 48~56VDC)**.
5. There is no waterproof design for this product, please make sure that it is used in dry environment.
6. If device fails, do not disassemble or repair it by yourself. Please contact us timely.



Shaoxing Ourten Electronics Co., Ltd.

#1 Liando U Valley, No. 1999 Wuxing West Road, Shangyu, Zhejiang, China

Tel: +86-21-5888 9980 (+86-575-8213 7256); Fax: +86-575-8212 7256

Email: sales@ourten.com

www.ourten.com

Thank you for choosing Ourten!