

# Model OT-PLC604POE

## 4-Port PoE Extender

### Product User Manual



**OT-PLC604POE 4-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 Receiver unit and Transmitter unit. By PoE power equipment, it can directly supply power for the remote device, supporting point to point and point to multi-point. It can greatly simplify the project cabling, apply to expand network system and transmit long distances of PoE device signals.

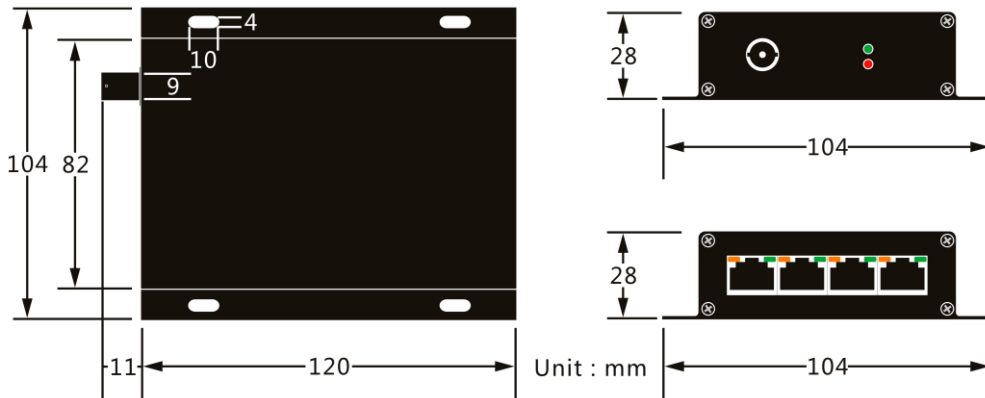
## Features

- ◆ Max Transmission PoE distance can reach 500m
- ◆ Full duplex 10/100Mbps
- ◆ Support PoE power supply and Power over cable technology
- ◆ Plug and play, transparent transmission, no adjustment and no need to change the upper software
- ◆ Communication channel dynamic adjustment and high performance error correction coding technology

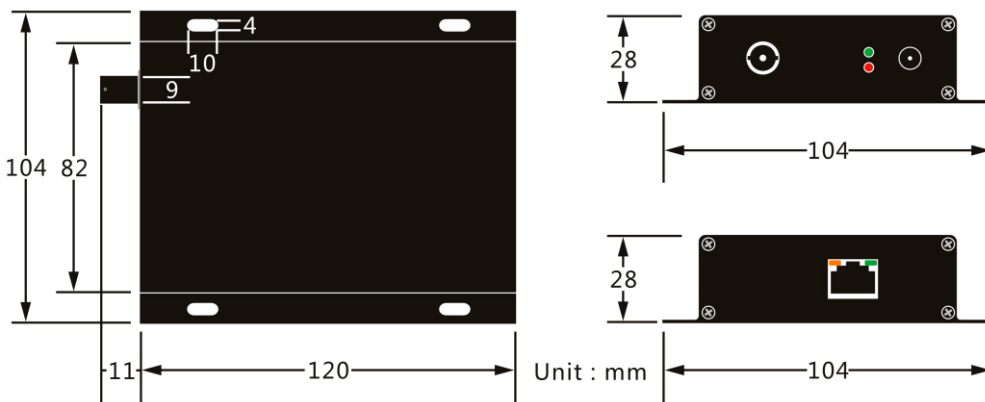
## Technical Parameter

Category		Description
<b>Power Input (Receiver)</b>	RJ45 / PoE Input	Standard 48 ~ 56VDC; IEEE802.3af/at/bt
	DC Input	48 ~ 56VDC
	Power Consumption	≤3W / PC
<b>Power Output (Transmitter)</b>	RJ45/PoE output	Standard 48VDC; IEEE802.3af/at
<b>Ethernet</b>	IEEE 802.3, IEEE802. 3u	Full duplex 10/100Mbps
<b>Physical Characteristic</b>	Dimension (L x W x H)	120mm × 104mm × 28mm
	Material	Aluminum
	Net Weight	Receiver: 246g/PC, Transmitter: 276g/PC
<b>Operating Environment</b>	Working Temperature	-20°C ~ 60°C
	Working Humidity	<95% (Non-condensation)

## Dimension



**Transmitter**



**Receiver**

**Note: Dimension error value  $\pm 1$  mm**

## Installation Instructions

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

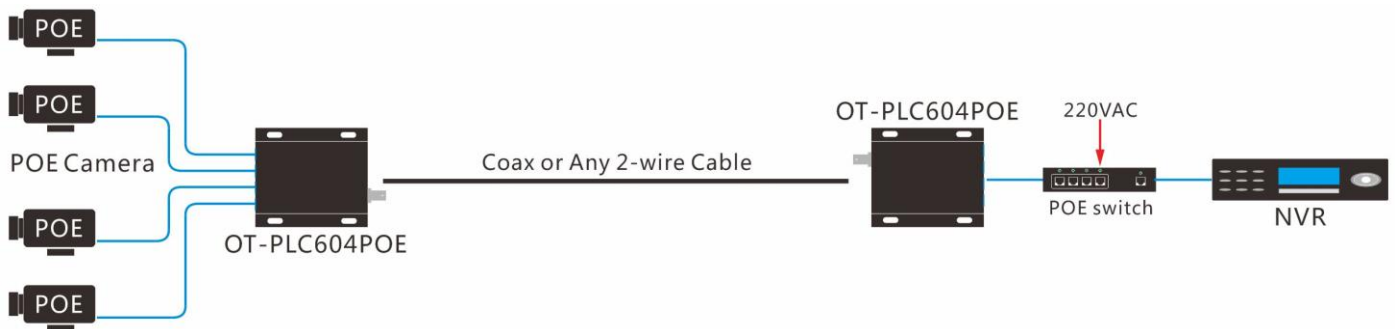
**Receiver & Transmitter:** Ethernet Extender Unit connected to the computer is Receiver by default. Ethernet Extender Unit connected to the camera is Transmitter by default.

**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	Connect Cat5 of PoE power supply equipment to RJ45 terminal (1) of receiver unit	8	BNC terminal (8) of coax cable transmission
2	BNC terminal (2) of coax cable transmission	9	Connect Cat5 of PoE PD equipment to RJ45 terminal (9) of transmitter unit
3	External power adapter terminal (3)	10	Power indicator is on (10)
4	Power indicator is on (4)	11	Line indicator is on (11)
5	Line indicator is on (5)	12	Network data indicator (12)
6	Network data indicator (6)	13	PoE detection indicator (this indicator is on when there is PoE output; the indicator is off when there is no PoE output) (13)
7	PoE detection indicator (this indicator is on when there is PoE output) (7)		

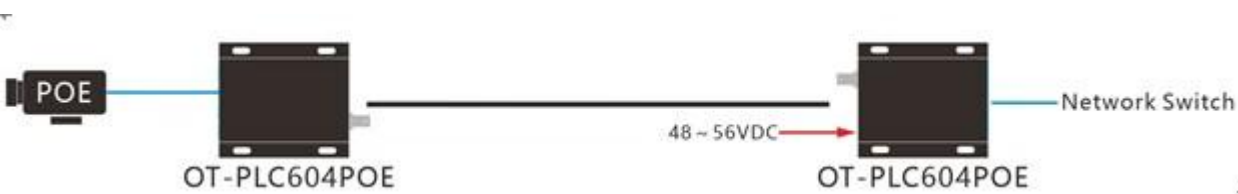
**Tips:** PoE Ethernet Extender signal belongs to high frequency radio frequency signal. Considering the cable loss, please choose better quality connectors.

### Installation Diagram



### Power Supply Tips

1. When the Receiver unit is powered by 48 ~ 56VDC, the transmitter unit and PoE devices can be powered without external power supply. Non-PoE devices need the external power supply.



2. When the Receiver unit is powered by PoE switch, the transmitter unit and PoE devices can be powered without external power supply. Non-PoE devices need the external power supply.



**Tips:**

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

**B. The power consumption of each port support IEEE802.3af/at standard. However, due to the difference of line loss and transmission distance, it may not be able to simultaneously meet four PoE PTZ cameras power supply with high power of IEEE802.3at standard.**

## 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) When multiple Ethernet Extenders are used together, they need to be grouped and paired to avoid the delay caused by signal crosstalk.

**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-PLC604POE, 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 **(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.



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