◀ OLC-8001T-PoE

**Ethernet and Power Extender over Network Cable**

OLC-8001R ▶

## Features

**Single Channel Ethernet and Power Extender over Network Cable**

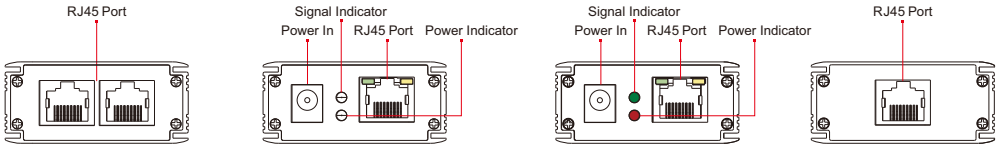
- Support cascade mode; maximum four transmitters can be cascaded
- Ethernet transmission distance max up to 600 meters
- Power transmission distance max up to 600 meters with max 12W output power
- Meet standards of IEEE802.3 10BASE-T, IEEE802.3u 100BASE-TX
- Support IEEE802.3af/at/bt standard; automatically detect and recognize standard PD equipment and provide power to PD equipment, max 60 watts of output
- High speed modem technology, the physical bandwidth reaches up to 100Mbps (bidirectional)
- Multi-stage strong surge and lightning protection design
- Low power consumption, automatic error-correction coding technology
- Easy to install, plug-and-play mode, fast network connection

## Overview

Ethernet and power extender over network cable with max 60 watts of output. The OLC-8001T-PoE is used with OLC-8001R, which is an ideal solution for reconstruction of old projects without any change of existing Cat5e/6 or above. Both of Ethernet and power transmission distance max up to 600meters. The OLC-8001T-PoE is able to provide power to PoE cameras over network cable.

With high speed modem technology, the physical bandwidth reaches up to 100Mbps (bidirectional). The OLC-8001T-PoE & OLC-8001R has a built-in multi-stage surge and lightning protection to protect video equipment against damaging voltage spikes and provide noise immunity to ensure quality signals without disturbing "hum-bars". The OLC-8001T-PoE & OLC-8001R is widely applied to the fields such as network expanding system, network security system, network information distribution system, network upgrading & expanding system, railway and urban transportation, metallurgy and mining, field operations, etc.

## Interface Detail




OLC-8001T-PoE　　OLC-8001R

CE FC RoHS



## Quick Setup Guide

**Package Cantents**

1) OLC-8001T-PoE 1PC　2) OLC-8001R 1PC　3) Power Adator 53V/1.85A 1PC
4) Brackets 2SETS　5) Power Wire 1PC　6) Screw 8 PCS

Step 1: Begin with all input/output devices turned off and power cables are removed.

Step 2: Connect  of OLC-8001T-PoE with  of PoE cameras over one cat5e/6 cable.

Step 3: Connect  of OLC-8001T-PoE with  of OLC-8001R over one Cat5e/6 or above.

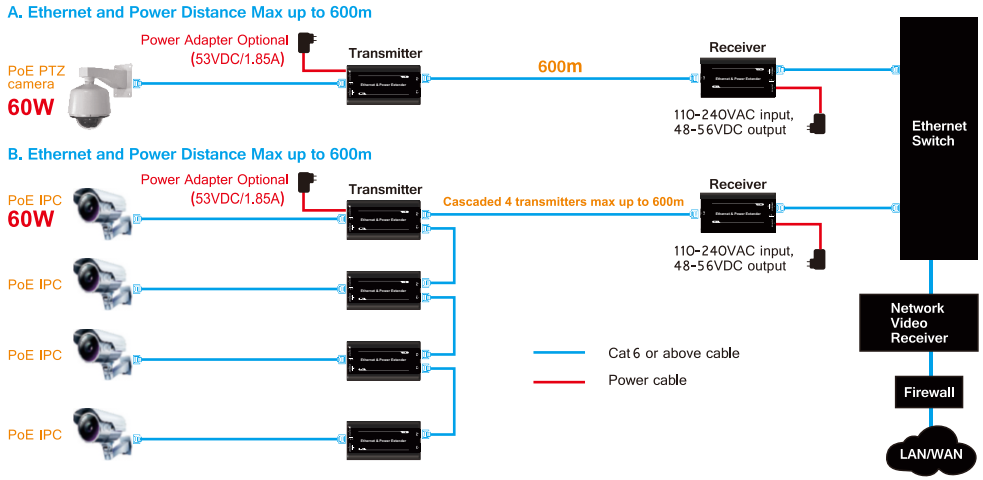
Step 4: Connect  of OLC-8001R with  of switch or NVR over one cat5e/6 cable.

Step 5: Connect 53VDC/1.25A power adaptor into  of OLC-8001R.

Step 6: Make sure above connection is properly finished, then turn on the power.

When Green indicator is on, which indicates Ethernet signal works.
When Red indicator is on, which indicates power works.


## Application Diagram




**Notes**

1. Max four transmitters can be cascaded.
2. Ethernet and power signals reach up to 600 meters when transmitter is used with receiver in pairs.
3. The distance between the farthest transmitter and receiver is not more than 600 meters when the transmitters are cascaded.
4. Additional power will be required if power of PoE IP camera exceeds 12W within distance of 600 meters.

## Mechanical/Technical Specifications

| Model | | OLC-8001T-PoE | | OLC-8001R |
|---|---|---|---|---|
| Product Name | | Single Channel Ethernet and Power Extender over Network Cable | | |
| Power Supply | Power | Input:53VDC/1.85A (Optional) | | Input:100-240VAC Output: 53VDC/1.85A |
| | No-Load Power | 1.5W(max) | | |
| Ethernet Interface | Ethernet Interface | RJ45 Interface | | |
| | Transmission Distance | 100m (max) over cat5e/6 | | |
| | Standards | IEEE802.3 10BASE-T, IEEE802.3u 100BASE-TX, IEEE 802.3af/at/bt | | |
| | Physical speed | 100Mbps (bidirectional) | | |
| P1/P2 Interface | Impedance | 100Ω | | |
| | Maximum Distance | 600m (Cat6 or above) | | |
| Transmission Parameters | Distance | Bandwidth | Power(with power adapter at TX over Cat5e cable) | Power(without power adapter at RX over Cat5e cable) |
| | 30m | 100Mbps | 60W | 43.5W |
| | 100m | 100Mbps | 57W | 41W |
| | 200m | 100Mbps | 54W | 38W |
| | 300m | 100Mbps | 50W | 35W |
| | 400m | 90Mbps | 46W | 31W |
| | 500m | 80Mbps | 42W | 27W |
| | 600m | 60Mbps | 38W | 23W |
| LED Indicators | Green Light | Cat5e/6 or above connecting indicator | | |
| | Red Light | Power indicator | | |
| Lightning Protection Grade | Network Port | Differential Mode:2KV Common Mode:4KV<br>Executive Standard: IEC61000-4-5 | | |
| | Device | contact discharge: 3 grade air discharge: 3 Grade<br>Executive Standard: IEC61000-4-5 | | |
| Mechanical | Dimensions(L*W*H) | 123*54*24mm | | |
| | Housing | Aluminum | | |
| | Body Color | Black | | |
| | Weight | 129g | | 122g |
| Environmental | Operating Temperature | 0~55℃ | | |
| | Storing Temperature | -25℃~85℃ | | |
| | Relative Humidity | 0~95% (non-condensing) | | |

## Trouble shooting

Remove possible faults with following instructions.

1) Check if devices installed in proper way instructed by the supplier.
2) Check if coaxial cable well connected and line sequence at sending & receiving unit in correspondence.
3) Check if actual transmission distance exceeds Max. distance permitted under this video format.
4) Check if OLC-8001T-PoE and OLC-8001R with normal power supply.
5) Replace the defective one with a proper unit, and check if end devices ( NVR, IP camera etc.) damaged.
6) Contact the supplier if faults can't be removed after operations mentioned above.

## After-sales Service

For breakdown caused by product quality, we guarantee products return within 15 days, exchange within 30 days, free warranty within 1 year. Guarantee period counts from date of purchasing.

1) Damages caused by man-made factors, such as application or storage under improper working environment or not in accordance with user manual.
2) Disassembling, repairing by user or testing, maintaining by maintenance point not designated by Opternet.
3) Damage caused by force majeure factors such as accident natural disasters (fires, lightning strike, earthquake) etc.
4) Other damages caused by improper operation and application.

## Warning!

**Important Product Warnings:**

1. Always test for proper operation of the unit before permanently securing to final location.
2. Connect all cables before providing power to the unit.

**Safety Instructions**
**Please be sure to follow there instructions for safe operation or your unit.**

1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this apparatus near water.
6. Clean only with dry cloth.
7. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9. Only sue attachments/accessories specified by the manufacturer.
10. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.