

TP-Link POE10E

TP-Link POE10E Omada 10/100 Mbps PoE+ Extender User Manual

Model: POE10E

1. INTRODUCTION

The TP-Link POE10E Omada PoE+ Extender is designed to extend the reach of your Power over Ethernet (PoE) network connection. It allows for the deployment of PoE-powered devices (PDs) such as IP cameras or wireless access points beyond the standard 100-meter Ethernet cable limit. This extender supports IEEE 802.3af/at standards, providing both data and power over a single Ethernet cable without requiring an additional power adapter for the extender itself. It is a plug-and-play device, requiring no complex configuration.

Break Through the Boundary of Surveillance Network Deployment

TL-POE10E extends the transmission distance in 10 Mbps mode, making it ideal for remote cabling requirements in surveillance scenarios. Distance will no longer be a barrier to network deployment.



Figure 1: The TP-Link POE10E PoE+ Extender is designed to extend the range of a PoE network connection.

2. PACKAGE CONTENTS

Verify that your package contains the following items:

- TP-Link POE10E Omada PoE+ Extender

3. PRODUCT OVERVIEW

The POE10E is a compact device featuring a PoE+ input port, a PoE+ output port, and a Power (PWR) LED indicator. Its design allows for easy integration into existing network infrastructures.



Figure 2: Front view of the TP-Link POE10E PoE+ Extender, displaying the PWR LED and model identification.

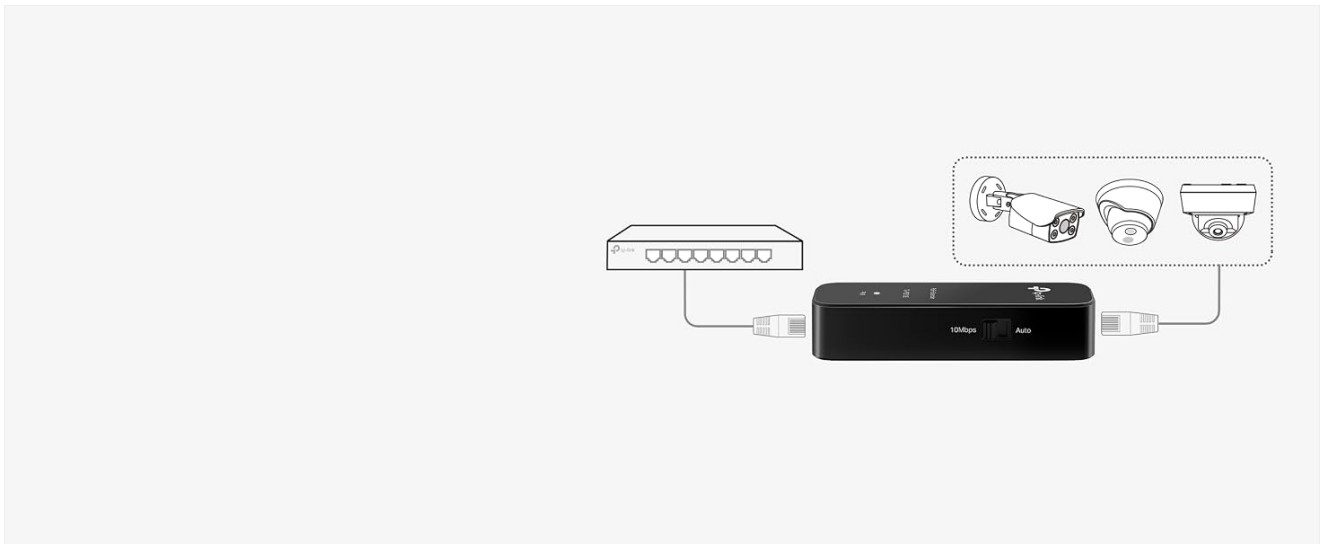


Figure 3: The compact TP-Link POE10E PoE+ Extender shown in a typical office environment.

LED Indicator

- **PWR (Power):** Indicates the power status of the extender.

Ports

- **PoE+ IN:** Connects to a Power Sourcing Equipment (PSE) such as a PoE switch or injector. This port receives both power and data.
- **PoE+ OUT:** Connects to a Power Device (PD) such as an IP camera or wireless access point. This port provides both power and data to the connected device.

4. SETUP

The POE10E is designed for simple plug-and-play installation. Follow these steps to integrate the extender into your network:

1. **Identify your PoE Power Sourcing Equipment (PSE):** This is typically a PoE switch or a PoE injector that provides power and data to your network.
2. **Connect the PoE+ IN port:** Use an Ethernet cable to connect the PoE+ IN port of the POE10E extender to a PoE-enabled port on your PSE.
3. **Connect the PoE+ OUT port:** Use another Ethernet cable to connect the PoE+ OUT port of the POE10E extender to your Power Device (PD), such as an IP camera or wireless access point.
4. **Verify Power:** Once connected, the PWR LED on the POE10E should illuminate, indicating that the extender is receiving power and is operational.

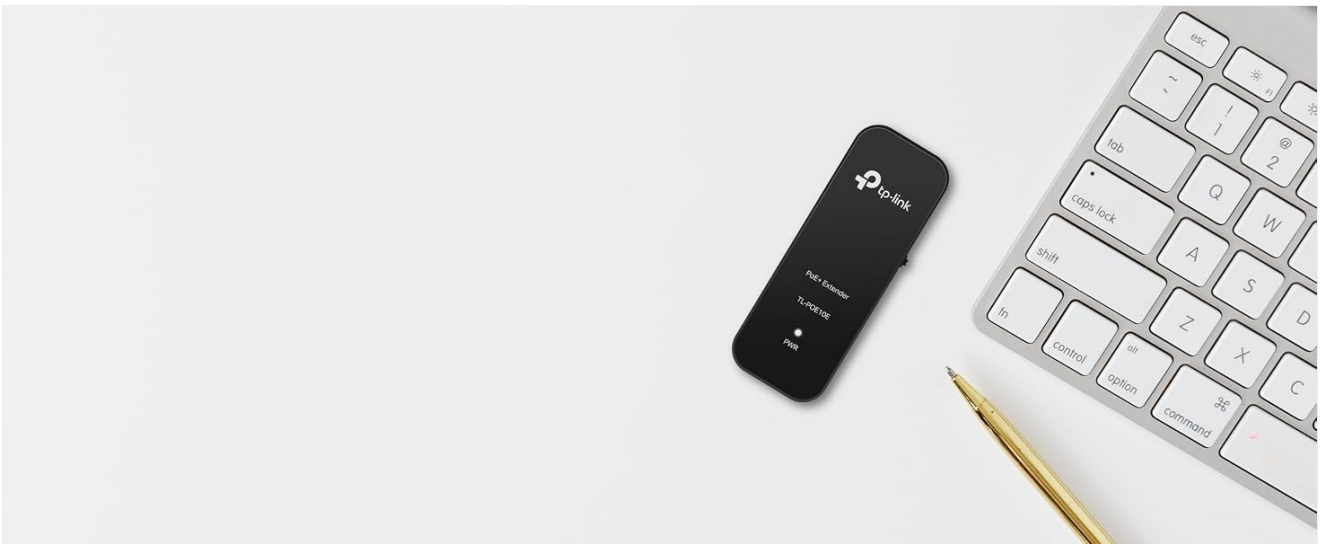


Figure 4: Connecting an Ethernet cable to the PoE+ Extender.

Supports Maximum Output Power up to 20 W

Sufficient power meets the power consumption requirements of more devices, including IP cameras, offering you more possibilities.

Up to **20 W** Power Supply

Figure 5: Typical deployment scenario for the PoE+ Extender in a surveillance network.

5. OPERATING

The POE10E operates automatically once connected. It extends the PoE/PoE+ network connection, allowing for longer cable runs than standard Ethernet. The extender itself is powered by the incoming PoE signal, eliminating the need for a separate power source.

- **Extended Distance:** The extender can extend a PoE/PoE+ network connection an additional 100 meters (328 feet). In 10 Mbps mode, the total extension distance can reach up to 250 meters (820 feet) from the PoE Power Sourcing Equipment (PSE).
- **PoE+ Output:** Depending on the Power Sourcing Equipment (PSE), cable length, and cable type, the extender can provide up to 20 Watts of power to IEEE 802.3af/at compliant devices.



Figure 6: The PoE+ Extender supports up to 20W output power for connected devices.

6. MAINTENANCE

To ensure optimal performance and longevity of your TP-Link POE10E PoE+ Extender, consider the following

maintenance guidelines:

- **Environmental Conditions:** Operate the device within its specified temperature and humidity ranges. Avoid exposing it to direct sunlight, excessive heat, or moisture.
- **Cleaning:** Use a soft, dry cloth to clean the exterior of the device. Do not use liquid or aerosol cleaners.
- **Cable Management:** Ensure all Ethernet cables are securely connected and not excessively bent or strained.
- **Firmware Updates:** While the POE10E is a plug-and-play device, periodically check the TP-Link official website for any available firmware updates that might enhance performance or address specific issues.

7. TROUBLESHOOTING

If you encounter issues with your POE10E, refer to the following common troubleshooting steps:

- **No Power (PWR LED Off):**
 - Ensure the PoE Power Sourcing Equipment (PSE) is functioning correctly and providing power.
 - Check the Ethernet cable connecting the PSE to the POE+ IN port for damage or improper connection.
 - Verify that the PSE is compliant with IEEE 802.3af/at standards and can supply sufficient power.
- **No Data Connection to PD:**
 - Confirm that the Ethernet cable between the POE+ OUT port and the Power Device (PD) is securely connected and undamaged.
 - Ensure the PD is functioning correctly when connected directly to the PSE (without the extender).
 - Check the total cable length. Exceeding the maximum recommended distance (e.g., 250m in 10Mbps mode) can lead to signal degradation.
- **PD Not Receiving Sufficient Power:**
 - Verify the power requirements of your PD. The POE10E can deliver up to 20W. If your PD requires more, it may not function correctly.
 - Ensure the PSE is providing adequate power. A lower-power PSE (e.g., 802.3af) might not supply enough power for a high-power PD through the extender.
 - Longer cable runs can result in power loss. Consider using shorter, higher-quality Ethernet cables.

If the issue persists after following these steps, please contact TP-Link technical support for further assistance.

8. SPECIFICATIONS

Feature	Detail
Model	POE10E
Standards	IEEE 802.3af/at
Ports	1x PoE+ IN, 1x PoE+ OUT
Data Transfer Rate	10/100 Mbps
Max. Extension Distance	Up to 250 m (820 ft) in 10 Mbps mode
Max. Output Power	20 Watts (depending on PSE and cable)

Feature	Detail
Dimensions (L x W x H)	4.88 x 3.11 x 1.54 inches
Item Weight	2.08 ounces
Included Components	POE10E, Installation Guide
Manufacturer	TP-Link

9. WARRANTY AND SUPPORT

TP-Link provides a **2-year warranty** for this product. For detailed warranty information, technical support, and product registration, please visit the official TP-Link website or contact their customer service. You can find the most up-to-date support resources, FAQs, and contact information on their website.

Online Resources: For additional support, including updated drivers, firmware, and user manuals, please visit www.tp-link.com/us/support/.