TP-LINK®

User Guide

TL-POE150S

PoE Injector

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FCC STATEMENT

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

> ➢ Reorient or relocate the receiving antenna.
> ➢ Increase the separation between the equipment and receiver.
> ➢ Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
> ➢ Consult the dealer or an experienced radio/ TV technician for help.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

1) This device may not cause harmful interference.
2) This device must accept any interference received, including interference that may cause undesired operation.

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

CE Mark Warning

$$C\:E$$

This is a class B product. In a domestic environment, this product may cause radio interference, in which case the user may be required to take adequate measures.

Продукт сертифіковано згідно с правилами системи УкрСЕПРО на відповідність вимогам нормативних документів та вимогам, що передбачені чинними законодавчими актами України.

SAFETY NOTICES

➢ Do not use this product near water, for example, in a wet basement or near a swimming pool.

➢ Avoid using this product during an electrical storm. There may be a remote risk of electric shock from lightning.

CONTENTS

Package Contents

The following items should be found in your package.

- ➢ TL-POE150S PoE Injector
- ➢ One Power Adapter
- ➢ One Ethernet (CAT5 UTP) Cable
- ➢ This User Guide

☞ **Note:**

Make sure that the package contains the above items. If any of the listed items are damaged or missing, please contact your distributor.

Chapter 1   Introduction

1.1   Overview of the Product

Thank you for choosing the **TL-POE150S PoE Injector**. The Power over Ethernet (PoE*) Injector is able to supply steady power to Powered Device (PD*) or PoE Splitter over the Ethernet cable. The Ethernet equipment can work as a Power Sourcing Equipment (PSE*) with the help of the TL-POE150S connection.

PoE technology allows the existing Ethernet infrastructure to transmit electrical power, along with data, to remote IP endpoints over the Ethernet cables, which can greatly save the cost of the external power cables. Your network can benefit from PoE technology for it will ensure the normal working status of your network while keep the existing Ethernet infrastructure secure.

*PoE: This technology describes a system to transmit electrical power, along with data, to remote devices over standard twisted-pair cable in an Ethernet network.
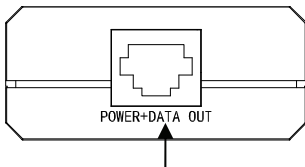
*PD: A device powered by a PSE and thus consumes energy. Examples include powering IP telephones, wireless LAN access points, network cameras, network hubs, embedded computers etc.

*PSE: A device (switch or hub for instance) that will provide power in a PoE setup.

1.2 Features

➢ Complies with IEEE 802.3, IEEE 802.3u, IEEE 802.3ab, IEEE 802.3af standards

➢ Compatible with PoE compliant PDs and PoE Splitters

➢ Transmits electrical power along with data in one single cable

➢ External 48V DC power supply

➢ Supports Plug-and-Play for the devices, without any configuration

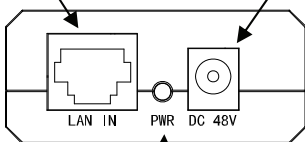➢ Elegant appearance with space-saving mini size

Chapter 2   Identifying External Components

POWER+DATA OUT

POWER+DATA OUT: Connect to the PD or PoE Splitter with a CAT5 UTP cable.

LAN IN: Connect to a network device (such as a Switch or Router) with CAT5 UTP cable.

DC 48V: Connect to the provided power adapter which can supply steady power of 48V DC.

PWR: Power LED. A steady blend color of red and yellow indicates that the power adapter is working properly. A steady green light indicates that the PoE system has detected the PD or PoE Splitter and the PoE Injector is supplying power normally. A flashing light indicates abnormal power supply.

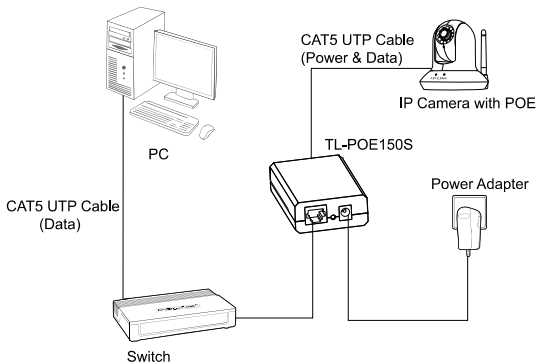## Chapter 3   Connecting the PoE Injector

You can use TL-POE150S PoE Injector with PD or PoE Splitter to expand your network to where there are no power lines or outlets, where you wish to fix devices such as APs, IP Cameras or IP Phones, etc. The following steps will tell you how to connect the PoE Injector correctly.

1. Use a CAT5 UTP cable to connect port of Ethernet device (such as a switch, hub or router) to the **LAN IN** port.
2. Please connect the power adapter properly to a power socket with provided power cable, and then connect the other end of the power adapter to the **DC 48V** port of the TL-POE150S.
3. Connect the **POWER+DATA OUT** port of the TL-POE150S to a PD or a PoE Splitter with CAT 5 UTP cable.

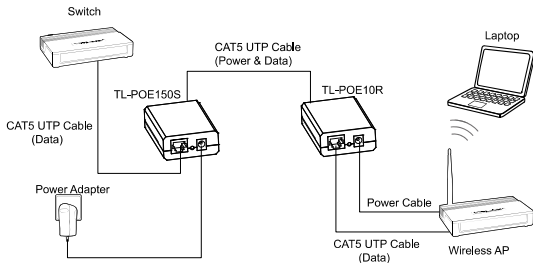Now, the device can work normally with data and power.

There are two schemes to realize the PoE.

1. If the device supports PoE (take an IP camera with PoE for example), following topology will work:

Scheme 1

2. If the device does not support PoE, it is necessary to have a PoE Splitter to separate the power and data, transmitting them detached in one UTP cable and one power cable. Here we take TP-LINK TL-POE10R Splitter for example. You can use following topology.

Scheme 2

☞ Note:

➢ Do not mistake the power port of the TL-POE150S and TL-POE10R when choosing the Scheme 2, or else it will cause serious damage to your network device.

➢ If you want to know more details about TL-POE10R Splitter, please refer to "TL-POE10R User Guide" on our website http://www.tp-link.com.

Appendix: Specifications

Normal	
Standards	IEEE 802.3, IEEE 802.3u, IEEE 802.3ab, IEEE 802.3af
Ports	1 10/100/1000Mbps Auto-Negotiation RJ45 LAN port 1 10/100/1000Mbps Auto-Negotiation RJ45 PoE port 1 48V DC Power Input Port
Cabling Type	RJ45 CAT5 UTP cable
LED	PWR
Safety & Emissions	FCC, CE

Environmental and Physical	
Operating Temp	0℃~40℃ (32℉~104℉)
Storage Temp	-40℃~70℃ (-40℉~158℉)
Operating Humidity	10%~90% RH, Non-condensing
Storage Humidity	5%~90% RH, Non-condensing
Dimensions (W*D*H)	80.8*54*24 mm