

Power over Ethernet Injector

 **BLACK BOX[®]**

User Guide

LP1001AE-R2

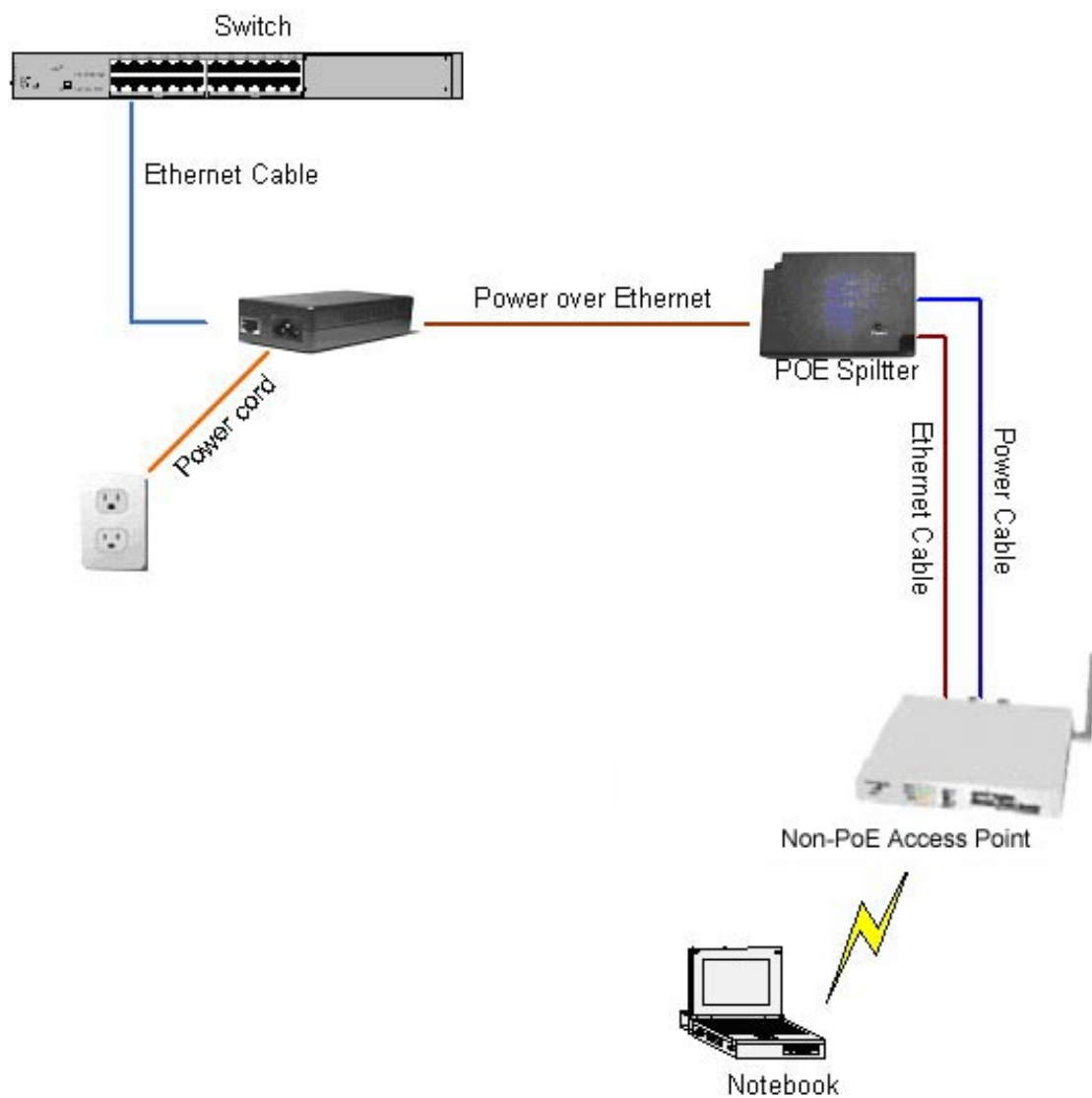


Content

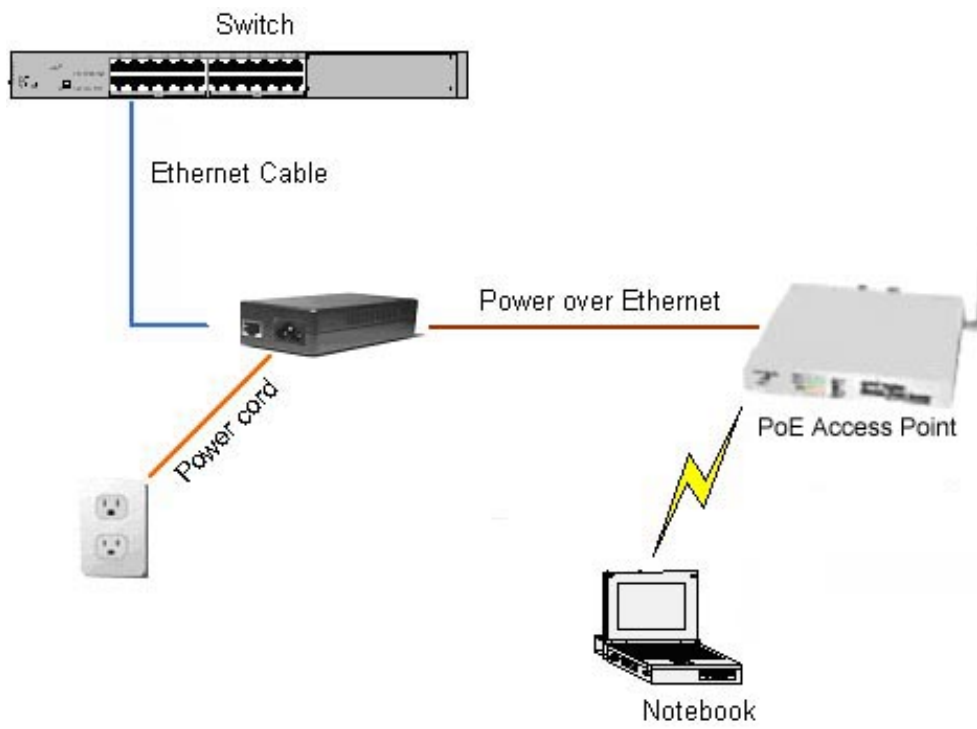
OVERVIEW	1
FEATURES	3
HARDWARE DESCRIPTION	3
PACKAGE CONTENTS	4
INSTALLATION	4

Overview

The Power over Ethernet Injector provides data and AC power through the Ethernet cable to PoE-equipped device, such as AP, PoE splitter or other equipment support IEEE 802.3af standard. The injector supports IEEE 802.3af standard that can detect the connected device, which support the IEEE 802.3af and then provide the power to the device. If the injector detect the connected device does not support the IEEE 802.3af then the injector will not provide the power to the connected device. The injector is typically installed near the Ethernet hub. The following figures show the how Power over Ethernet Injector application.



Power over Ethernet Injection Application for non-PoE device



Power over Ethernet Injection Application for PoE device

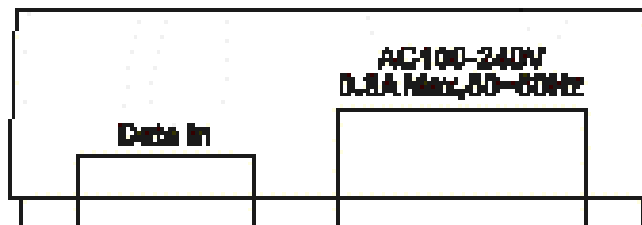
Features

- Power Over Ethernet Injector
- Remote power feeding application
- Short circuit protection
- Mix Ethernet and power into RJ-45 port
- Deliver power up to 100 meters
- Light weight and compact size
- Compatible with IEEE802.3af
- Plug-and-Play

Hardware Description

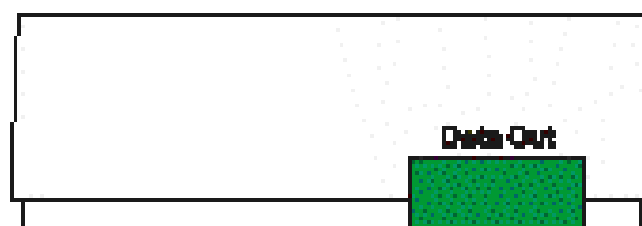
The Power over Ethernet Injector has three connection ports and one LED indicator. We will describe each in following.

- **Data In port:** It is a RJ-45 Ethernet interface port for data transmit into the PoE Injector. It is for connecting with the switch.



The Data In and Power in port figure

- **Power In port:** The Power In port is for supplying the power into the Injector.
- **Data Out port:** It is a RJ-45 Ethernet port to connect with PoE Splitter, or PD.



Data Out port figure

Package Contents

- One Power over Ethernet Injector
- User Manual
- Power cord x 1, 1830mm



The Power over Ethernet Injector



User Guide

Figure 1-1. Package Contents

Compare the contents of your Power over Ethernet Injector package with the standard checklist above. IF any item is missing or damaged, please contact your local dealer for service.

Installation

To install the Power over Ethernet Injector, please follow the steps below.

1. Using RJ-45 cable that is **Data in** port on the Power over Ethernet Injector to connect with the Switch/HUB.
2. Using RJ-45 cable that is on the **Data out** port in Power over Ethernet Injector to connect with the PoE Splitter, PD (Such as Router, Access Point...etc.) or PoE Hub.
3. Plug in the power cord of the Power over Ethernet Injector to the wall power plug.
4. Before starting, make sure all connections are correct.
 - The Power over Ethernet Injector connects to the Splitter, POE Hub or PD is in **Data Out** port.
 - The Power over Ethernet Injector connects to the switch with **Data In** port.
 - The **Power In** port is to get the power supply to Power over Ethernet Injector from wall power plug.

Technical Specification

The following table provides the technical specification of the Power over Ethernet Injector.

Standard	IEEE802.3 10BASE-T IEEE802.3u 100BASE-TX IEEE802.3af
Connector	RJ-45 Data in/out: Data/signal pairs pin 1,2,3,6 RJ-45 Power out: power over spare wire pairs pin: 4,5(V+) , 7,8(V-)
Network Cable	10BASE-T: 2-pair UTP/STP Cat.3, 4,5 cable EIA/TIA-568 100-ohm (100m) 100BASE-TX: 2-pair UTP/STP Cat.5 cable EIA/TIA-568 100-ohm (100m)
LED	System: power (green)
Input Power	Power supply: AC 100~240V, 50~60Hz, 0.3A
Output Power	DC 48V, 0.3A
Operating Temperature	0°C~45°C
Operating Humidity	10%~90% Humidity (non-condensing)
Storage Temperature	-40°C~70°C
Dimension	117mm x 60mm x 35mm (W x D x H)
EMI & Safety	FCC Class B, CE, UL, cUL, CE/EN60950