

# Product Specifications

## IEEE 802.3at Gigabit Power over Ethernet Plus Splitter

### POE-161S

Version 2.0

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#### Change History:

Revision:	Date:	Author:	Change List
Version 2.0	2017/7/31	Marc Liao	Initial Release
Version 1.0	2010/5/6	Marc Liao	Initial Release

Author:	Marc Liao	Editor:	Marc Liao
Reviewed By:		Approved By:	Kent Kang

## 1. PRODUCT DESCRIPTION



PLANET IEEE **POE-161S** 802.3at Gigabit Power over Ethernet Plus Splitter complies with **IEEE 802.3at Power over Ethernet Plus** standard that supports a maximum of 25.5 watts of input power. The POE-161S provides the following key features:

- **IEEE 802.3at Power over Ethernet Plus standard compliant**
- **5V/12V DC power output through DIP switch**
- **Passive 10/100/1000BASE-T speed duplex mode**
- **Quick and easy high power PoE Plus network deployment**

The POE-161S can split the 52~56V DC power over the Ethernet cable into selectable **5V** or **12V** DC power output. It is designed specifically to fulfill the demand of higher power required network equipment, such as PTZ (Pan, Tilt & Zoom) network cameras, PTZ speed dome cameras, color touch-screen/Video and Voice over IP (VoIP) telephones, multi-channel (11a/ac/b/g/n) wireless LAN access points and other network devices that need higher power to work normally, indicating the IEEE 802.3af PoE standard is no longer viable. The **POE-161S IEEE 802.3at Gigabit Power over Ethernet Plus Splitter** is an ideal solution that enables network device with high power consumption to be powered directly via the RJ45 interface without the need of power outlets and electrical cabling.

### **IEEE 802.3at PoE Plus Standard**

The POE-161S can work with PLANET IEEE 802.3at Power over Ethernet Plus injector like the POE-161, POE-163 or POE-164, and IEEE 802.3at Power over Ethernet Plus switch to transfer data and power simultaneously to end devices over the twisted-pair cable. Then, the POE-161S splits the digital data and the power into 5V/12V DC power outputs. The maximum distance between the IEEE 802.3at Power over Ethernet Plus injector and the POE-161S splitter is 100 meters. The POE-161S also supports the passive 10/100/1000Mbps Ethernet connectivity.



With IEEE 802.3at Power over Ethernet Plus injectors installed, the system administrator only has to use one single RJ45 Ethernet cable to carry both power and data to each powered device, thus saving costs, making network infrastructures to suit your requirements easier and having higher product reliability.

## 2. PRODUCT FEATURES

### ■ Interface

- 2 RJ45 interfaces
  - 1-port **PoE Power + Data** input
  - 1-port **Data** output
- 1 DC out plug connector

### ■ PoE

- Complies with IEEE 802.3at Power over Ethernet Plus PD
- Splits the 52~56V DC power over RJ45 Ethernet cable into 5V/12V DC output
- Up to 1 non-IEEE 802.3at device powered
- Auto detects IEEE 802.3at PoE compliant equipment and protects devices from being damaged by incorrect installation
- Adjustable two different output voltage options (5V, 4.5A; 12V, 2A) to fit various devices
- Distance up to 100 meters
- IEEE 802.3af PoE injector compliant

### ■ Hardware

- Plastic case
- 5V/12V DIP switch
- LED power input indicators

### ■ Standard Compliance

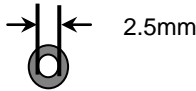
- IEEE 802.3 10BASE-T
- IEEE 802.3u 100BASE-TX
- IEEE 802.3ab 1000BASE-T
- IEEE 802.3at Power over Ethernet Plus standard
- FCC Part 15 Class A, CE

### 3. PRODUCT SPECIFICATIONS

#### 3.1 MAIN COMPONENT

PoE Power IC: **CONFIDENTIAL**

#### 3.2 FUNCTION SPECIFICATIONS

<b>Product</b>		<b>POE-161S</b>
<b>Hardware Specifications</b>		
<b>Hardware Version</b>		2
<b>Interface</b>	<b>“Data” Output Port</b>	1 x RJ45 STP
	<b>“PoE (Data + Power)” Input Port</b>	1 x RJ45 STP
	<b>DC Out Plug Connector</b>	1 
<b>LED Indicator</b>		System: PoE-in-use x 1 (Green)
<b>Network Cable</b>		UTP Cat. 5/5e/6, up to 100m (328ft)
<b>Data Rate</b>		10/100/1000Mbps
<b>Dimensions (W x D x H)</b>		95 x 70 x 25 mm
<b>Weight</b>		108g
<b>Power over Ethernet</b>		
<b>PoE Standard</b>		IEEE 802.3at Power over Ethernet Plus/PD
<b>PoE Power Input</b>		IEEE 802.3at 52~56V DC
<b>DIP Switch</b>		5V DC/12V DC output voltage
<b>Number of devices that can be powered</b>		1
<b>Standards Conformance</b>		
<b>IEEE 802.3 10BASE-T Ethernet</b>		■
<b>IEEE 802.3u 100BASE-TX Fast Ethernet</b>		■
<b>IEEE 802.3ab 1000BASE-T Gigabit Ethernet</b>		■
<b>IEEE 802.3af Power over Ethernet</b>		■
<b>IEEE 802.3at Power over Ethernet Plus</b>		■

### 3.3 PHYSICAL SPECIFICATIONS:

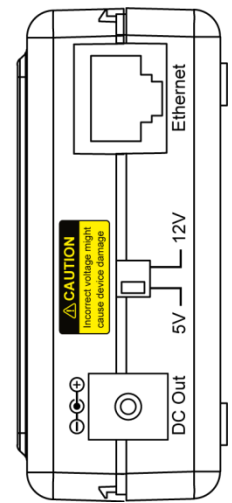
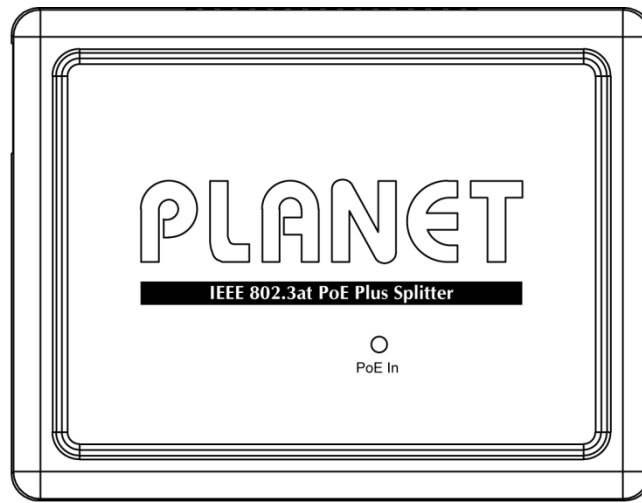
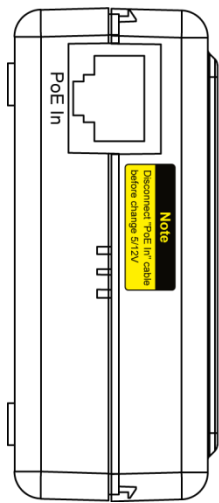
■ **Dimensions:**

95 x 70 x 25 mm (W x D x H)

■ **Weight:**

108g

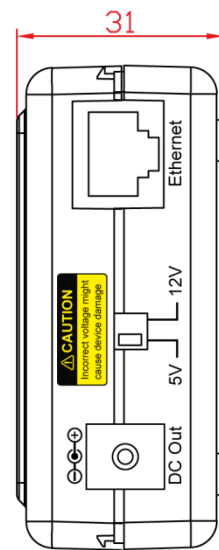
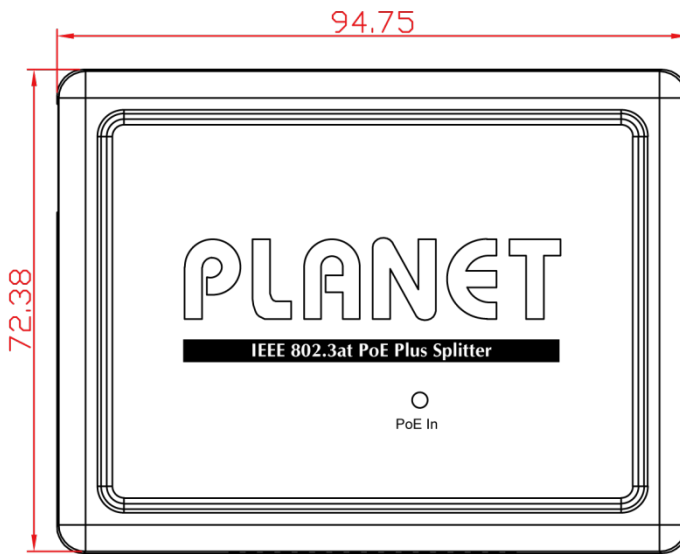
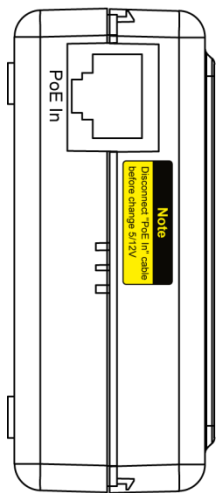
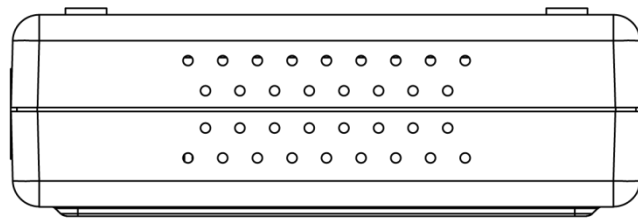
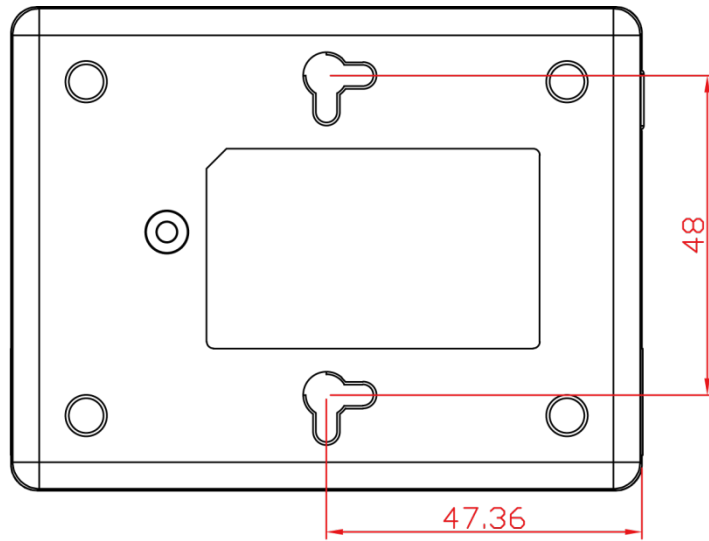
■ **Product Outlook:**



■ **LED Definition:**

LED	Color	Function
PoE In	Green	Lights to indicate the port is connected with IEEE 802.3at PSE device.

■ Diagram



**Dimensions ( unit = mm )**

### 3.4 ENVIRONMENTAL SPECIFICATIONS

**Operating:**

**Temperature:** 0°C ~ 50 degrees C

**Relative Humidity:** 5% ~ 95% (non-condensing)

**Storage:**

**Temperature:** -10°C ~ 70 degrees C

**Relative Humidity:** 5% ~ 95% (non-condensing)

### 3.5 ELECTRICAL SPECIFICATION

**Output Voltage:**

5V DC, 4.5A max

12V DC, 2A max

### 3.6 REGULATORY COMPLIANCE

FCC Part 15 Class A, CE

### 3.7 RELIABILITY

MTBF > 50,000 hrs @ 25 degrees C

### 3.8 BASIC PACKAGING

- ◆ The IEEE 802.3at Gigabit Power over Ethernet Plus Splitter x 1
- ◆ User's Manual x 1
- ◆ 15cm UTP Straight Network Cable x1
- ◆ DC Plug Cable x 2
  - DC Plug Cable 5.5/2.5mm to 5.5/2.5mm x 1
  - DC Plug Cable 5.5/2.5mm to 5.5/2.1mm x 1

### 3.9 PACKING DIMENSIONS

**Dimensions:** 200 (W) x 132 (D) x 68 mm (H)

**Weight:** 293g (gross weight)

**Quantity:** 26pcs in one carton