

## 1. Package Contents

Thank you for purchasing PLANET Industrial IEEE 802.3at Gigabit High Power over Ethernet Splitter, IPOE-162S. The term "**802.3at PoE Splitter**" used in this user's manual refers to the IPOE-162S.

Open the box of the Industrial IEEE 802.3at Gigabit High Power over Ethernet Splitter and carefully unpack it. The box should contain the following items:

- Industrial IEEE 802.3at Gigabit High Power over Ethernet Splitter x 1
- User's Manual x 1
- DIN Rail Kit x 1
- Wall Mount Kit x 1

If any of these are missing or damaged, please contact your dealer immediately; if possible, retain the carton including the original packing material, and use them again to repack the product in case there is a need to return it to us for repair.

## ◆ Industrial Case / Installation

- IP30 metal case protection
- DIN Rail and Wall-mount type
- Supports EFT protection of 6000 VDC for power line
- Supports 6000 VDC Ethernet ESD protection
- -40 to 75 degrees C operating temperature



**PSE (Power Sourcing Equipment)** is a device (switch or hub for instance) that will provide power in a PoE setup. Maximum allowed continuous output power per such device in IEEE 802.3af is 15.4W and in IEEE 802.3at is 25W.

**PDs (Powered Devices)**, such as IP phones, network cameras, wireless access points, etc., are PoE-enabled terminals powered by a PSE and thus consumes energy.

Network Cable	10/100/1000Base-T: 4-Pair UTP Cat. 5, 5e, 6 distance up to 100m (328ft) EIA/TIA-568 100-ohm STP (100m)
Power over Ethernet	
PoE Standard	IEEE 802.3at High Power over Ethernet
Number of device can be powered	1 or 2 (Varies on device power requirements; DC1 + DC2 cannot be over 25 watts)
Standards Conformance	
Standards Compliance	IEEE 802.3 10Base-T Ethernet IEEE 802.3u 100Base-TX Fast Ethernet IEEE 802.3ab 1000Base-T Gigabit Ethernet IEEE 802.3at High Power over Ethernet
Regulation Compliance	FCC Part 15 Class A, CE
Stability Testing	IEC60068-2-32 (Free fall) IEC60068-2-27 (Shock) IEC60068-2-6 (Vibration)
Standards Conformance	
Operating Temperature	-40 ~ 75 degrees C
Storage Temperature	-40 ~ 85 degrees C
Humidity	5 ~ 95% (non-condensing)

## 5. Product Outlook



Figure 1: Front panel of IPOE-162S

### LED Indicators

LED	Color	Function
Power Ready	Green	Lights to indicate the port is receiving 48~56V DC in-line power and ready for output

## 2. Product Features

### ◆ Interface

- 2 RJ-45 interfaces
  - 1-port **PoE Power+ Data** input
  - 1-port **Data** output
- 2 DC out (4-pin Terminal Block)

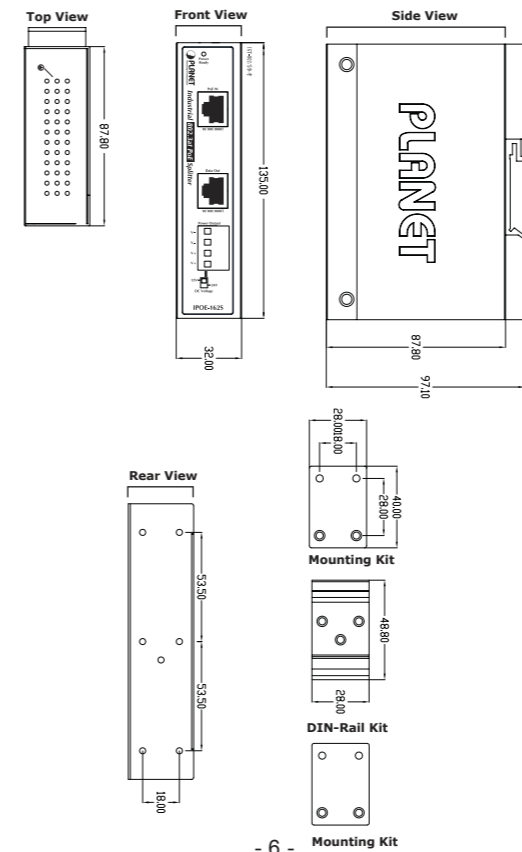
### ◆ Power over Ethernet Splitter

- Complies with IEEE 802.3at Power over Ethernet, PD
- Splits the 48~56V DC power over RJ-45 Ethernet cable into 12 / 24V DC output
- Up to 1 non-IEEE 802.3at PoE device powered
- Auto-detects PoE IEEE 802.3at equipment and protects devices from being damaged with incorrect installation
- Adjustable two different output voltage options (12V / 2A, 24V / 1A) to fit various devices
- Distance up to 100 meters

## 3. Product Specifications

Product	IPOE-162S	
Hardware Specifications		
Interface	"PoE (Power + Data)" Input Port	1 x RJ-45 10/100/1000Base-T
	"Data" Out Port	1 x RJ-45 10/100/1000Base-T
	DC Out Plug Connector	1 removable 4-pin terminal block
Data Rate	10/100/1000Mbps (vary on Ethernet device attached)	
LED Indicator	System: Power Ready x 1 (Green)	
DIP Switch	12V DC / 24V DC output voltage	
Power Input	802.3at PoE 48~56V DC	
Power Output	12V / 24V DC, Max 2A (adjustable)	
Dimensions (W x D x H)	135 x 87.8 x 32 mm	
Weight	421g	
Enclosure	IP30 metal case	
Installation	DIN rail kit and wall mount ear	
ESD Protection	6KV DC	

## 4. Physical Dimensions



## 6. Hardware Installation

The following section describes the hardware features of the IPOE-162S. Before connecting any network device to the IPOE-162S, read this chapter carefully.

### 6-1 Before Installation

If there is no power socket in your network environment, the IPOE-162S provides DC power for this Ethernet Device conveniently and easily. The IPOE-162S will separate the power and data out. It provides two kinds of DC power output through its DIP switch and its voltage and current shown below:

- 12V DC / 2A
- 24V DC / 1A

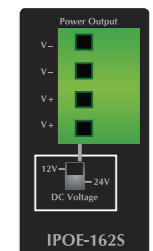


Figure 2: DIP Switch Outlook



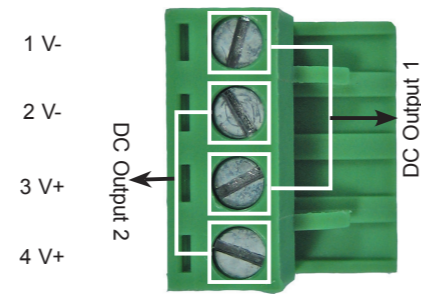
Please check the power requirements of the device carefully, that is going to get the power from IPOE-162S.

1. If the power requirement is higher than the IPOE-162S can supply, current overload might shut down the IPOE-162S itself. Thus, it will also shut down your device as well.
2. Please ensure the output voltage is correct for remote device. Otherwise, it will damage your remote device.
3. Forbid to switch on/off the Power DIP during operation. Otherwise, it will damage your IPOE-162S and remote device. If you want to switch the output Voltage DIP, please Plug OFF the "POE In" cable and wait for 3 seconds until the POE LED (Power) is completely OFF.

### 6-3 Wiring the Power Outputs

Please follow the steps below to insert the power wires.

**Step 1:** Please find one terminal block connector within two DC power outputs shown below:



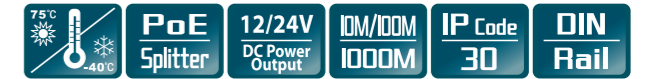
The wire gauge for the terminal block should be in the range of 12 ~ 24 AWG.

**Step 2:** Insert the Negative / Positive DC wires into the V- / V+ terminal; terminals 1 and 3 for Power 1; terminals 2 and 4 for Power 2.

## PoE Injector/Splitter IPOE-162S

[www.PLANET.com.tw](http://www.PLANET.com.tw)

Industrial High Power over Ethernet Splitter



### 6-2 4-pin Power Output Terminal Block

From top to down, there are Negative (V-), Negative (V-), Positive (V+) and Positive (V+), and two sets of DC power output contact.

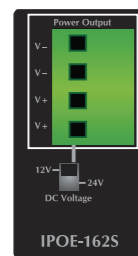
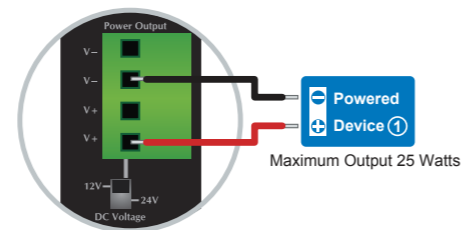


Figure 3: DC Power Output Terminal Block Outlook

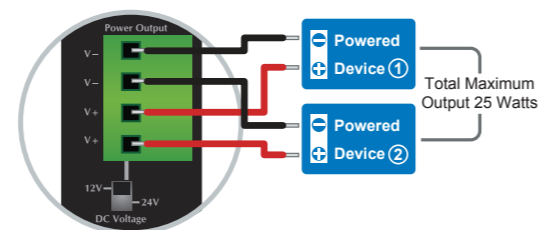


Two DC outputs are sharing 12V 2A or 24V 1A, totaling 25W PoE output power, which means that DC1 + DC2 cannot be over the 25W PoE output power. Otherwise, it might cause the power output to malfunction or damage.

**Step 3:** Connect the other point of DC power wires to the power devices. Tighten the wire-clamp screws for preventing the wires from loosening.



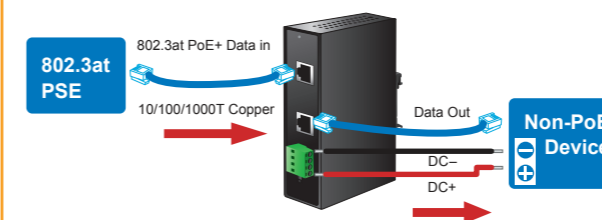
One Powered Device



Two Powered Device

**Step 4:** Install the terminal block on PLANET IPOE-162S Splitter.

**Step 5:** Connect the network copper cable (RJ-45) from the High Power Injector (PSE) and it will provide power to PLANET IPOE-162S Splitter and the IPOE-162S will separate the power and data to the PDs (power devices). Please see the Figure below:



### Customer Support

Thank you for purchasing PLANET products. You can browse our online FAQ resource on PLANET Web site first to check if it could solve your issue. If you need more support information, please contact PLANET switch support team.

PLANET online FAQ :  
<http://www.planet.com.tw/en/support/faq.php?type=2>

Switch support team mail address :  
[support\\_switch@planet.com.tw](mailto:support_switch@planet.com.tw)

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