1. Package Content

Thank you for purchasing PLANET Industrial IEEE 802.3at Gigabit High Power over Ethernet Splitter, IPOE-162S. Terms of **"802.3at PoE Splitter"** in following section of this User's Manual means the IPOE-162S.

Upon 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 against to repack the product in case there is a need to return it to us for repair.

2. Product Features

♦ **Interface**

- 2-Port 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 DC 12V / 24V output
- Auto-detect of PoE IEEE 802.3at equipment, protect devices from being damaged by incorrect installation
- Adjustable two different output voltage options (12V / 2A, 24V / 1A) to fit various devices
- Distance up to 100 meters

♦ **Industrial Case / Installation**

- IP30 metal case protection
- DIN Rail and Wall Mount Design
- Supports EFT protection 6000 VDC for power line
- Supports 6000 VDC Ethernet ESD protection
- -40 to 75 Degree C operating temperature

Note

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.

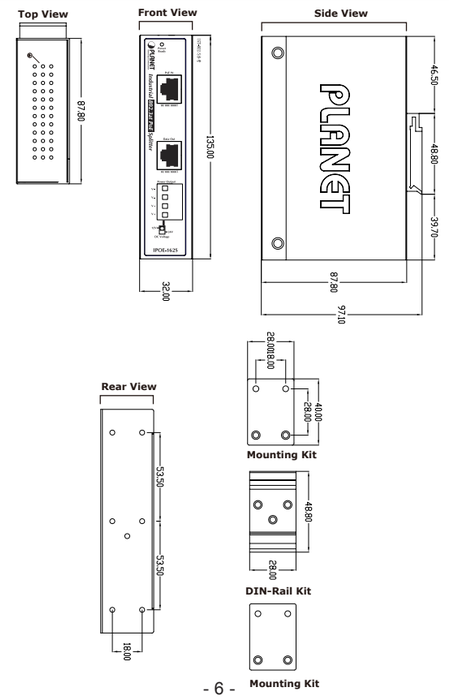
PD (Powered Device) is a PoE-enabled terminal by PSE and thus consumes energy, such as IP Phones, network cameras and Wireless access points and etc.

3. Product Specification

Product		IPOE-162S
Hardware Specification		
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)
Dimension (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

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 (Vary on Devices Power Requirement, DC1 + DC2 can not over the 25Watts)
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 Degree C
Storage Temperature	-40 ~ 85 Degree C
Humidity	5 ~ 95% (Non-condensing)

4. Physical Dimension



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

6. Hardware Installation

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

6-1 Before Installation

If your network environment is very difficult to find a power socket for your AC to DC Adapter of networked device, 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 kind of DC power output through its DIP switch and its voltage and current shown as below:

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

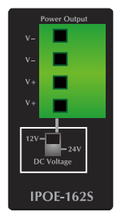


Figure 2: DIP Switch Outlook

Hint

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

1. If the power requirement is higher than IPOE-162S can supply, current overload might shutdown the IPOE-162S itself. Thus, it will also shutdown 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 the Power DIP during operation. Otherwise, it will damage your IPOE-162S and remote device. If want to switch the output Voltage DIP, please Plug-OFF the "POE In" cable and wait 3 seconds until the POE LED (Power) is completely OFF.

6-2 4-Pin Power Output Terminal Block Explanation

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

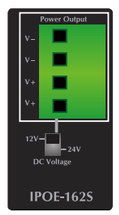


Figure 3: DC Power Output Terminal Block Outlook

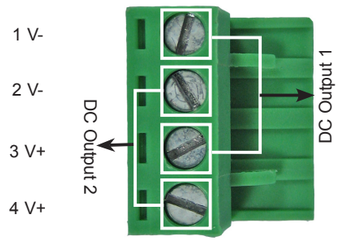
Note

Two DC outputs are sharing the 12V 2A or 24V 1A, total 25Watts PoE output power. Means that DC1 + DC2 can not over the 25Watts PoE output power. Otherwise, it might cause the Power output malfunction or damage.

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 which is shown as below:

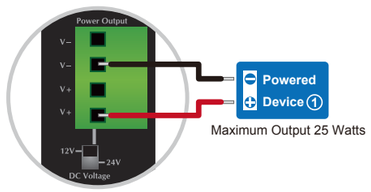


Note

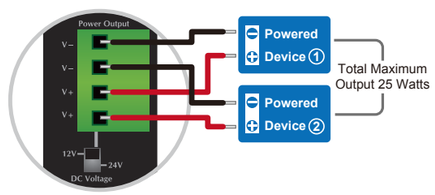
The wire gauge for the terminal block should be in the range between 12 ~ 24 AWG.

Step 2: Insert the Negative / Postive DC wires into the V– / V+ terminals-terminals 1 and 3 for POWER 1, terminals 2 and 4 for POWER 2.

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



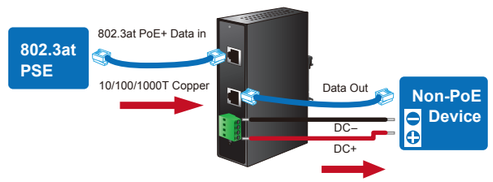
One Powered Device



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 PD (power devices). Please look the Figure below:



PLANET Networking & Communication

IEEE 802.3at
IPOE-162S

Industrial High Power over Ethernet Splitter

Advanced Gigabit High PoE Power Scheme

www.planet.com.tw

Industrial Ethernet

User's Manual

PLANET Networking & Communication
PLANET Technology Corp.
2350-AF0350-000

75°C -40°C | PoE Splitter | 12/24V DC Power Output | 10M/100M 1000M | IP Code 30 | DIN Rail

Customer Support

Thank you for purchase PLANET products. You can browse our online FAQ resource at the PLANET Web site first to check if it could solve you 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