1. Package Contents

Thank you for purchasing PLANET Industrial IEEE 802.3at Gigabit 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 **802.3at PoE+ Splitter** and carefully unpack it. The box should contain the following items:

Industrial PoE+ Splitter x 1	User's Manual x 1

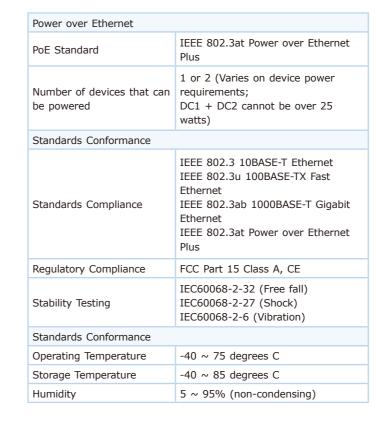| Wall-mount Kit x 1	DIN-rail Kit x 1	RJ45 Dust Caps x 2

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.

- 1 -

2. Product Features

➢ Interface
- 2 RJ45 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 Plus, PD
- Splits the 48~56V DC power over RJ45 Ethernet cable into 12/24V DC output
- Auto-detects PoE IEEE 802.3at power sourcing 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

➢ Industrial Case and Installation
- IP30 metal case
- DIN-rail or wall mounting
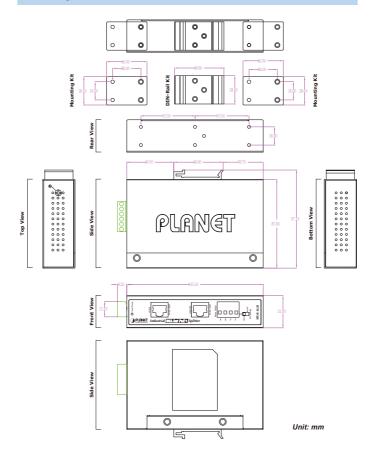- Supports EFT protection of 6000 VDC for power line
- Supports 6000 VDC Ethernet ESD protection
- -40 to 75 degrees C operating temperature

- 2 -

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.

PDs (powered devices), such as IP phones, network cameras, wireless access points, etc., are PoE-enabled terminals powered by a PSE.

- 3 -

3. Product Specifications

Product		IPOE-162S
Hardware Specifications		
Interface	"PoE (Power + Data)" Input Port	1 x RJ45 10/100/1000BASE-T
	"Data" Out Port	1 x RJ45 10/100/1000BASE-T
	DC Out Plug Connector	1 removable 4-pin terminal block
Data Rate		10/100/1000Mbps (varies 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)		32 x 87.8 x 135 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)

- 4 -

Power over Ethernet	
PoE Standard	IEEE 802.3at Power over Ethernet Plus
Number of devices that 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 Power over Ethernet Plus
Regulatory 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 -

4. Physical Dimensions

Unit: mm

- 6 -

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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.

- 7 -

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:
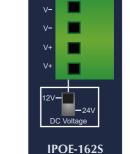

- 12V DC/2A
- 24V DC/1A

Figure 2: DIP Switch Outlook

- 8 -

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.
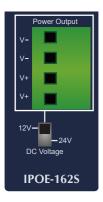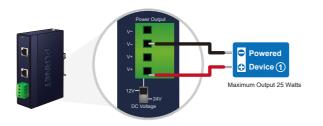

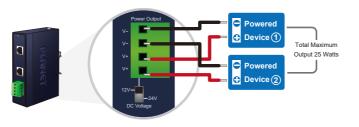**Figure 3:** DC Power Output Terminal Block Outlook

| Note | 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. |

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:

| Note | 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.

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 Devices

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

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Industrial 802.3at Power over Ethernet Splitter
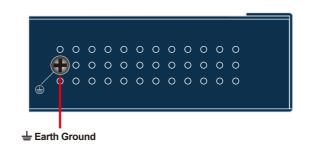
▶ IPOE-162S

UK CA CE EHL ♻

Step 5: Connect the network copper cable (RJ45) from the PoE+ 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 as shown in the figure below:

6-4 Wiring the Power Outputs

Users **MUST** complete grounding wired with the device; otherwise, a sudden lightning could cause fatal damage to the device.

⏚ **Earth Ground**

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 FAQs:
https://www.planet.com.tw/en/support/faq

Switch support team mail address:
support@planet.com.tw