1. Package Contents

Thank you for purchasing PLANET Industrial 802.3bt PoE++ Splitter, IPOE-173S. "PoE Splitter" mentioned in this manual refers to the IPOE-173S.

Open the box of the PoE Splitter and carefully unpack it. The box should contain the following items:

PoE Splitter x 1	User's Manual x 1	RJ45 Dust Cap x 2
DIN-rail Bracket w/Screws kit x 1	Wall-mount Plate w/Screws kit x 1	

If any of these are missing or damaged, please contact your dealer immediately.

2. Hardware Introduction

2.1 Front Panel and LED Indicators

The front panels of the Industrial PoE+ Injector Hubs consist of Ethernet interfaces and LED indicators.

Figure 2-1:
Front View of IPOE-173S

■ PoE input indicators

LED	Color	Function
30W	Green	Lights to indicate the PoE Splitter is working in 802.3at PoE mode.
60W	Green	Lights to indicate the PoE Splitter is working in 802.3bt type 3 PoE mode.
90W	Green	Lights to indicate the PoE Splitter is working in 802.3bt type 4 PoE mode.

■ DC output voltage indicators

LED	Color	Function
12V	Amber	Lights to indicate the PoE Splitter's output is in 12V DC mode
24V	Green	Lights to indicate the PoE Splitter's output is in 24V DC mode

2.2 4-pin Power Output Terminal Block

If there is no power socket in your network environment, PLANET IPOE-173S provides DC power for this Ethernet device conveniently. The IPOE-173S splits the transmission of the power and data.

From top to down, there are Negative (V-), Negative (V-), Positive (V+) and Positive (V+), and two sets of DC power output contact.
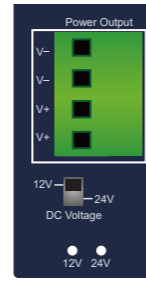
Figure 2-2: Terminal Block of IPOE-173S
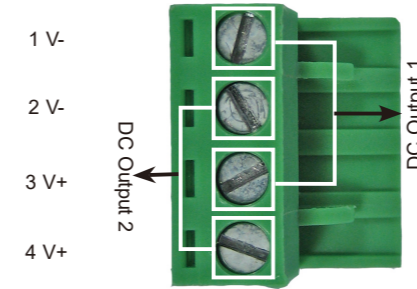
> **Note**
> It comes with two DC outputs --12V, 5.8A or 24V, 2.9A, **totaling 70 watts of DC output power**, which means that DC1 + DC2 cannot be over the 70-watt DC output power limit. Otherwise, it might cause the power output to malfunction or damage.

2.3 DC Voltage DIP Switch

It provides two kinds of DC power output through its DIP switch and its voltage and current are shown below:
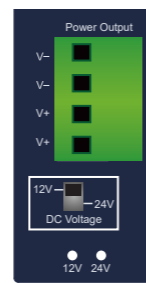
Figure 2-3: DIP Switch of IPOE-173S

> **Caution**
> 1. Please check the power requirements of the device carefully that is going to get the power from the IPOE-173S.
> 2. If the power requirement is higher than the IPOE-173S can supply, current overload might shut down the IPOE-173S itself. Thus, it will also shut down your device as well.
> 3. Please ensure the output voltage is correct for remote device. Otherwise, it will damage your remote device.

> **Caution**
> Do not switch on/off the Power DIP during operation. Otherwise, it will damage your IPOE-173S and remote device. If you want to switch from one output voltage to another via DIP switch, plug out the **"PoE In"** cable and wait for 3 seconds until the PoE Input LEDs are completely OFF.

3. Installation

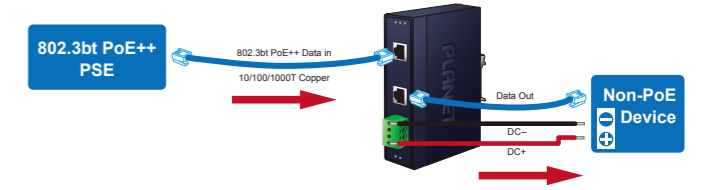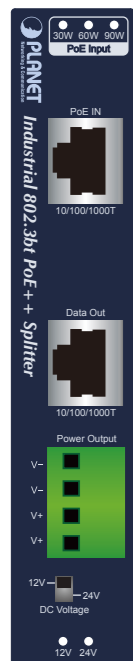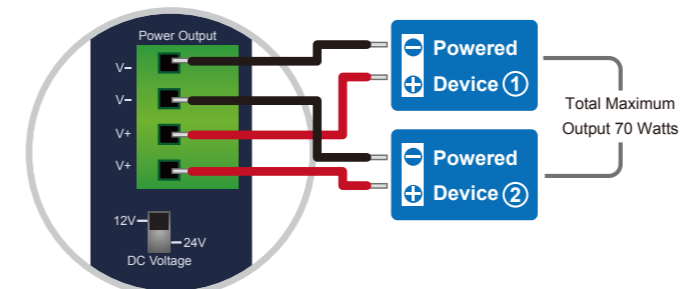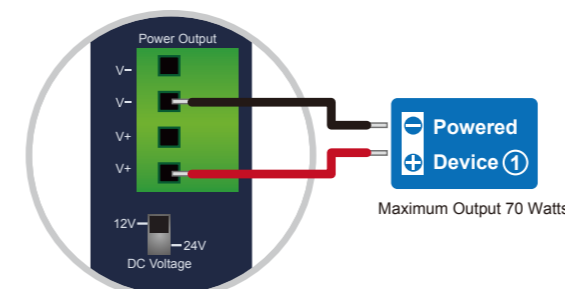### ■ Wiring the Power Outputs

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:

1 V-
2 V-
3 V+
4 V+

DC Output 2 | DC Output 1

> **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 end of DC power wires to the power devices. Tighten the wire-clamp screws for preventing the wires from loosening.

Maximum Output 70 Watts

Total Maximum Output 70 Watts

Step 4: Install the terminal block on PLANET IPOE-173S Splitter.

Step 5: Connect the network copper cable (RJ45) from an 802.3bt PoE++ PSE to the IPOE-173S Splitter where the power and data are separately transmitted to a PD as shown in the figure below:

> **Caution**
> Make sure the IPOE-173S output voltage (DC 12V/24V) is correct before applying power to a remote device.

4. Product Specifications

Product		IPOE-173S
Hardware Specifications		
Interface	PoE Input Port	1 10/100/1000 BASE-T RJ45
	Data Output Port	1 10/100/1000 BASE-T RJ45
	DC Out Plug Connector	1 removable 4-pin terminal block
	DIP Switch	12V/24V DC output
LED Indicators		PoE Input: 30W (Green) 60W (Green) 90W (Green) DC Voltage: 12V (Amber) 24V (Green)
Data Rate		10/100/1000Mbps
Dimensions (W x D x H)		32 x 87.8 x 135 mm
Weight		445g
Installation		DIN-rail/wall mountable
Enclosure		IP30 metal case
Power Requirements		802.3bt PoE++ or 4-pair 802.3at PoE+ PoE DC 48 ~ 56V

Power Consumption	System on with PoE input	5.4 watts
	Full loading with maximum 12V DC, 5.8A output	81.6 watts
Power Output	802.3 bt type 3 PoE++ input	12V DC, 4.5A (max.) 24V DC, 2.2A (max.)
	802.3 bt type 4 PoE++ input	12V DC, 5.8A (max.) 24V DC, 2.9A (max.)
Network Cable	802.3 bt PoE++ input (60W+)	4-pair UTP Cat. 5e, 6, up to 100m (328ft)
	802.3at PoE+ input (30W)	2-pair UTP Cat. 5, 5e, 6, up to 100m (328ft)

Power over Ethernet	
PoE Standard	802.3 bt PoE++ 4-pair 802.3at PoE+
Power Output	DC 12V/24V by DIP switch control
PoE Power Supply Type	End-span + Mid-span End-span Mid-span
Power Pin Assignment	1/2 (+), 3/6 (-); 4/5 (+), 7/8 (-) or 1/2 (-), 3/6 (+); 4/5 (+), 7/8 (-)

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 IEEE 802.3bt 4-pair Power over Ethernet Type 4
Regulatory Compliance	FCC Part 15 Class A, CE
Environment	
Operating Temperature	-40~ 75 degrees C
Storage Temperature	-40~ 85 degrees C
Humidity	5 ~ 95% (non-condensing)

5. Physical Dimensions

Dimensions (W x D x H): 32 x 87.8 x 135 mm

Unit: mm
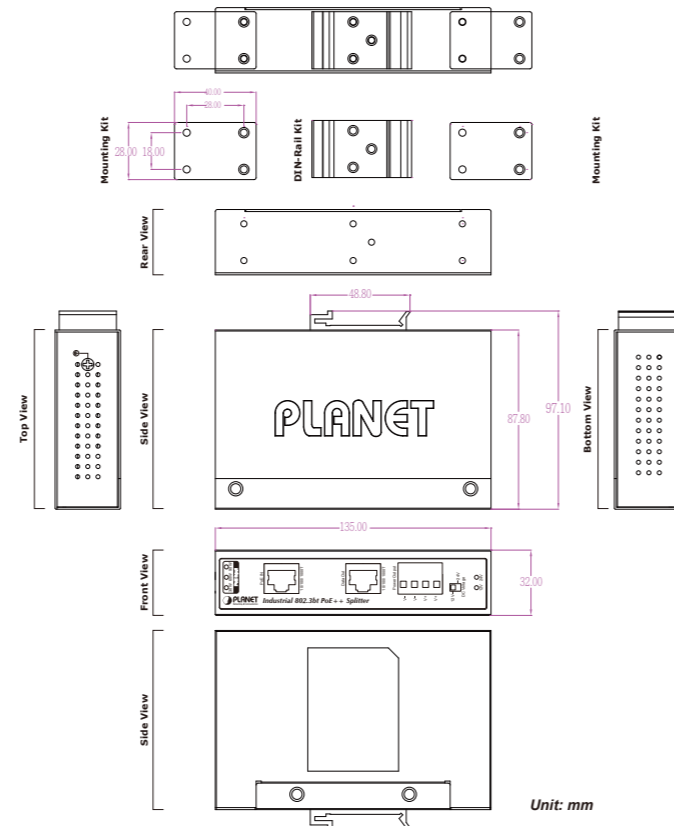
6. Customer Support

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

PLANET online FAQs:
https://www.planet.com.tw/en/support/faq?method=category&c1=2

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

User's Manual

Industrial 802.3bt PoE++ Splitter

▶ IPOE-173S

www.PLANET.com.tw

FCC Warning

This device has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the Instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

CE Mark Warning

This is a Class A product. In a domestic environment, this product may cause radio interference, in which case the user may be required to take adequate measures.

WEEE Warning

To avoid the potential effects on the environment and human health as a result of the presence of hazardous substances in electrical and electronic equipment, end users of electrical and electronic equipment should understand the meaning of the crossed-out wheeled bin symbol. Do not dispose of WEEE as unsorted municipal waste and have to collect such WEEE separately.

EC Declaration of Conformity

For the following equipment:

*Type of Product : Industrial Single-Port 10/100/1000Mbps 802.3bt PoE++ Splitter
*Model Number : IPOE-173S

* Produced by:
Manufacturer's Name : **Planet Technology Corp.**
Manufacturer's Address : 10F., No.96, Minquan Rd., Xindian Dist., New Taipei City 231, Taiwan

is herewith confirmed to comply with the requirements set out in the Council Directive on the Approximation of the Laws of the Member States relating to Electromagnetic Compatibility Directive on 2014/30/EU.

For the evaluation regarding the EMC, the following standards were applied:

EN 55032	2015+AC:2016, Class A
EN 55024	2010+A1:2015
EN 55035	2017

Responsible for marking this declaration if the:
☒ Manufacturer ☐ Authorized representative established within the EU

Authorized representative established within the EU (if applicable):
Company Name: Planet Technology Corp.
Company Address: 10F., No.96, Minquan Rd., Xindian Dist., New Taipei City 231, Taiwan
Person responsible for making this declaration
Name, Surname : **Jonas Yang**
Position / Title : **Director**

Taiwan	15th Nov., 2019	
Place	Date	Legal Signature