1. Package Contents

Thank you for purchasing PLANET POE-175-95 Single-port 10/100/1000Mbps 802.3bt PoE++ Injector.

Please unpack the box of the device carefully, and the box should contain the following items:

802.3bt PoE injector x 1	User's manual x 1
	
AC power cord x 1	
	

If any item is found missing or damaged, please contact your local reseller for replacement.

2. Product Features

- **Interface**
  - 2 RJ45 interfaces
    - 1-port **Data input**
    - 1-port **Data + Power** output
  - 1 AC 100-240V input power socket
- **Power over Ethernet**
  - Complies with IEEE 802.3at/bt PoE end-span/mid-span PSE
  - Supports PoE power up to 95 watts for PoE port
  - Auto-detection of PoE IEEE 802.3at/bt devices that may be damaged by incorrect installation
  - Monitor the status of the total PoE usage in real time
  - Remote power feeding up to 100m
- **Hardware**
  - All-in-one compact size design
  - Internal power supply
  - LED indicators for Power LED, PoE Usage LED and PoE-in-Use LED

3. Product Specifications

Product		POE-175-95
Hardware Specifications		
Interface	Input Port	1 x RJ45 STP Data In
	Output Port	1 x RJ45 STP PoE (Data + Power) Out
	AC Socket	1 x AC input socket
Network Cable		Twisted-pair cable up to 100 meters (328ft)* 10BASE-T: 4-pair UTP Cat. 3, 4, 5, 5e, 6 100BASE-TX: 4-pair UTP Cat. 5, 5e, 6 1000BASE-T: 4-pair UTP Cat. 5e, 6
LED Indicators		PWR x 1 (Green) PoE-in-Use x 1 (Green) PoE Usage x 3 (Green)
Data Rate		10/100/1000Mbps
Dimensions (W x D x H)		170 x 100 x 40 mm
Weight		480g
Unit Output Voltage		DC 54V
Power Requirements		AC 100-240V, 1.5A max.
Power Consumption		120 watts max.
No. of devices that can be powered		1
Power over Ethernet		
PoE Standard		IEEE 802.3at/bt PSE

PoE Power Output Budget	DC 54V / 95-watt PoE via 4-pair
PoE Power Output	Max. 90W@1 m cable
PoE Power Supply Type	End-span + Mid-span
Power Pin Assignment	Pair 1 End-span: 1/2 (-), 3/6 (+) Pair 2 Mid-span: 7/8 (-), 4/5 (+)
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 802.3bt 4-pair Power over Ethernet IEEE 802.3at Power over Ethernet Plus
Regulatory Compliance	FCC Part 15 Class A, CE
Environment	
Operating Temperature	0 ~ 50 degrees C
Storage Temperature	-10 ~ 70 degrees C
Operating Humidity	5 ~ 90%, relative humidity, non-condensing
Storage Humidity	5 ~ 90%, relative humidity, non-condensing

Caution

1. As IEEE 802.3bt device provides high power, please use high-quality network cable and RJ45 connector.
2. The max. PoE output power depends on the cable length and the quality of cable.

4. Product Outlook

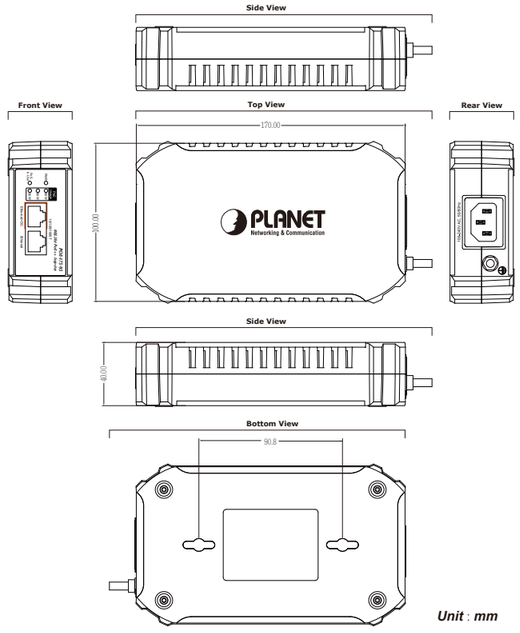

Figure 1: POE-175-95 outlook

LED Indicators:

LED	Color	Function
PWR	Green	Lights to indicate the 802.3bt PoE injector has power.
PoE-in-Use	Green	Lights to indicate the device is providing PoE power. Blinks to indicate that the system is abnormal.
PoE Usage	Green	PoE Usage LED can monitor the status of the power usage. **30W:** 1. Off to indicate the PoE usage is less than 14W. 2. Blinks to indicate that the PoE usage is around 15W to 29W. 3. Lights to indicate the PoE usage is around 30W to 44W. **60W:** 1. Blinks to indicate that the PoE usage is around 45W to 59W. 2. Lights to indicate the PoE usage is around 60W to 74W. **90W:** 1. Blinks to indicate that the PoE usage is around 75W to 89W. 2. Lights to indicate the PoE usage is at the maximum.

5. Hardware Installation

The following section describes the hardware features of the POE-175-95. Before connecting any network device to it, please read this chapter carefully.

5.1 Before Installation

Before your installation, it is recommended to check your network environment. If there is any IEEE 802.3bt device that needs to be powered on and works normally, the POE-175-95 provides you with a way out to supply power to this Ethernet device conveniently and easily.

It is equipped with an AC power cord with AC 100-240V input and injects DC 54V power into the pin of the twisted-pair cable (pair 1/2 [-], 3/6 [+] and pair 4/5 [+], 7/8 [-]).

5.2 POE-175-95 Installation

1. Connect the AC power cord to the **"AC slot"** of the POE-175-95; the **"PWR"** LED will be steadily on.
2. Connect a standard Ethernet cable from an Ethernet switch or PC workstation to the **"Ethernet"** port of the POE-175-95.
3. Connect the long cable to the **"Ethernet+DC"** port.

4. Due to the capability of IEEE 802.3at/bt Power over Ethernet, the POE-175-95 can directly connect with any IEEE 802.3at/bt end-nodes, such as PTZ (Pan, Tilt & Zoom) network cameras, color touch screen Voice over IP (VoIP) telephones and multi-channel wireless LAN access points which support IEEE 802.3at/bt In-line Power over Ethernet port.

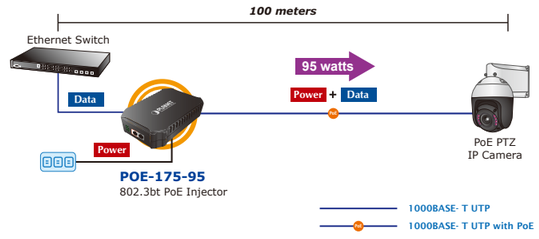

Figure 2: Architecture of connected IEEE 802.3at/bt device

Once POE-175-95 detects the existence of an IEEE 802.3at/bt device, the **PoE-in-Use** LED indicator will be steadily on to show it is providing power.

Note

1. According to IEEE 802.3at/bt Power over Ethernet, the IPOE-175-95 will not inject power to the cable if not connected to IEEE 802.3at/bt device.
2. Depending on the length of cable, the PoE power which PD receives is different.

5.3 POE-175-95 and POE-172S Installation

1. Adjust proper DC power output and connect DC plug from **"DC Out"** of the POE-172S to a remote device.
2. Connect the AC power cord to the **"AC slot"** of the POE-175-95; the **"PWR"** LED will be steadily on.
3. Connect a standard Ethernet cable from an Ethernet switch or PC workstation to the **"Ethernet"** port of the POE-175-95.
4. Connect a standard Ethernet cable from **"Ethernet+DC"** port of the POE-175-95 to the **"PoE In"** port of the POE-172S. The **"30W"** and **"60W+"** LED of the POE-172S and the **"PoE-in-Use"** LED of the POE-175-95 will light up continuously.
5. Connect a standard Ethernet cable from the **"Ethernet"** port of the POE-171S to the remote Ethernet device.
6. The remote device will be turned on and connected.

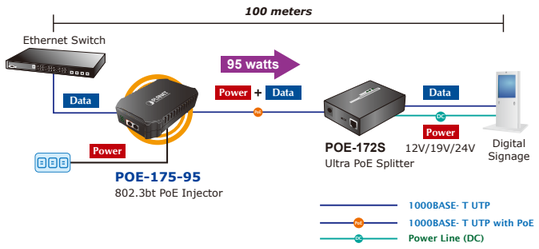

Figure 3: Architecture of connected POE-175-95 and POE-172S

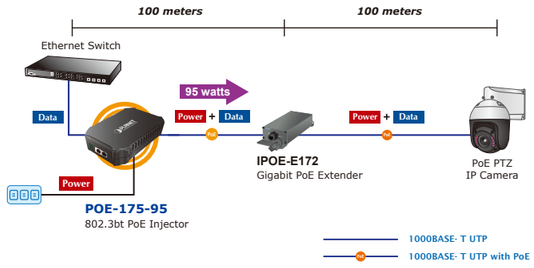

Figure 4: Architecture of connected POE-175-95 and IPOE-E172

Note

Depending on the length of cable, the PoE power which PD receives is different.

Note

Please ensure the POE-172S output voltage is correct before applying power to the remote device.

5.4 POE-175-95 and IPOE-E172 Installation

1. Connect the AC power cord to the **"AC slot"** of the POE-175-95; the **"PWR"** LED will be steadily on.
2. Connect a standard Ethernet cable from an Ethernet switch or PC workstation to the "Ethernet" port of the POE-175-95.
3. Connect a standard Ethernet cable from the **"Ethernet+DC"** port of the POE-175-95 to the **"PoE IN"** port of the IPOE-E172.
4. The POE-175-95 delivers both Ethernet Data and PoE power over UTP cable to the IPOE-E172 and the **"PoE-in-Use"** LED of the POE-175-95 and the **"PWR"** LED of the IPOE-E172 will light up continuously.
5. Connect the additional standard Ethernet cable that will be used for connecting to the remote PD to the **"PoE Out"** port of IPOE-E172.
6. Once the IPOE-E172 detects the existence of an IEEE 802.3af/at/bt device, the **"PoE-in-Use"** LED indicator will be steadily ON to show it is providing power.
7. The **"PoE Out"** port of the IPOE-E172 is then transmitting data and power simultaneously to the PD.

Customer Support

Thank you for purchasing PLANET products. You can browse our online FAQ resource at the 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:
http://www.planet.com.tw/en/support/faq?method=category&c1=2

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

PLANET Networking & Communication

PLANET Networking & Communication

User's Manual

www.PLANET.com.tw

Single-Port 10/100/1000Mbps 802.3bt PoE++ Injector

POE-175-95

PLANET Technology Corp.
10F., No. 96, Minquan Rd., Xindian Dist., New Taipei City 231, Taiwan

2351-AF0650-001

PLANET Networking & Communication

EC Declaration of Conformity

For the following equipment:

*Type of Product : Single-Port 10/100/1000Mbps 802.3bt PoE Injector

*Model Number : POE-175-95

* 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 and Low Voltage Directive 2014/35/EU.
For the evaluation regarding the EMC, the following standards were applied:

EN 55032	2015+AC:2016, CLASS A
EN 61000-3-2	2014
EN 61000-3-3	2013
EN 55024	2010+A1:2015
EN 62368-1	2014

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 *Place* | 8th Jan., 2019 *Date* | *Legal Signature*

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