

# IEEE 802.3at Gigabit High Power over Ethernet Splitter



In last few years, Planet technology announced complete IEEE 802.3af Power over Ethernet Splitter solution that can co-work with Planet IEEE 802.3af Power over Ethernet Injector solution to fill demand from various Ethernet environments that hard to find power outlet and transform non-PoE equipment to IEEE 802.3af PoE application. Now, PLANET release next generation of Power over Ethernet Splitter product –**POE-161S**, with brand-new **IEEE 802.3at High Power over Ethernet pre-standard**. The following Key features of POE-161S:

- IEEE 802.3at Power over Ethernet pre-standard compliant
- 5V/12V DC power output through DIP switch
- Passive 10/100/1000Mbps duplex mode support

The POE-161S is an **IEEE 802.3at High Power over Ethernet Splitter** split the 56V DC over the Ethernet cable into selectable **5V** or **12V** DC power output. It is designed specifically to fill the demand of growing higher power required network equipments such as **PTZ (Pan, Tilt & Zoom)** network cameras, **PTZ Speed Dome**, color touch- screen / Video and Voice over IP (VoIP) telephones, multi- channel (11a / b / g / n) wireless LAN access points and other Network devices that need higher power to work normally and can't be satisfied by IEEE 802.3af PoE. The **POE-161S High Power Splitter** is an ideal solution that enables network device with high power demand can be powered directly via the RJ-45 Port interface without the need to install power outlets and electrical cabling.

#### IEEE 802.3at Power over Ethernet Pre-Standard Compliant

The IEEE 802.3 Power over Ethernet was defined by the IEEE® 802.3 committee, within which the IEEE 802.3 PoE standard was announced in 2003, defining the PoE equipments support of maximum 15.4 Watts input power to per device. The purpose of IEEE 802.3 Power over Ethernet standard is to provide enough power to VoIP Telephony systems, WiFi Networking, Wireless AP environment that hard to find power outlet.

Till today, the IEEE 802.3af Power over Ethernet Standard has become popular yet the PoE demand still grows for increasing network-powered applications. With many critical applications appears, the IEEE 802.3af PoE standard may not afford the trend of higher power demand. Hence, the IEEE 802.3at Power over Ethernet pre-standard is defined to allow delivery of maximum up to 30 Watts input power to per PoE device. The IEEE 802.3at Power over Ethernet pre-standard is an ideal solution to fulfill the high power requirements directly via the RJ-45 Port interface. Possessing stronger power capability than the existing Power over Ethernet Splitters, the POE-161S also supports passive 10/100/1000Mbps Ethernet connection ability. The POE-161S also compatible with IEEE 802.3af Power over Ethernet Injector equipments, such as single port PoE Injector and PoE switches, like PLANET POE-151 / POE-152 and SGSW-24040P.

#### Quick and Easy High Power PoE Network Deployment

The POE-161S is an IEEE 802.3at Gigabit Power over Ethernet device which split the 56V DC over the Ethernet cable into 5V/12V DC power output. Work with the IEEE 802.3at power source equipment (PSE), the POE-161S frees the device deployment from restrictions due to power outlet locations, which eliminates the costs for additional AC wiring and reduces the installation time.

The IEEE 802.3at Gigabit Power over Ethernet Injector- POE-161 inserts DC Voltage into Cat.5/5e/6 cable, it allowing the cable between the Injector (POE-161) and Splitter (POE-161S) to transfer data and power simultaneously. The maximum distance between the Injector (POE-161) and Splitter (POE-161S) is 100 meters. With POE-161 being installed, it combines the Ethernet digital data with power over the twisted pair cables as an IEEE 802.3at Gigabit Power over Ethernet Injector. And the IEEE 802.3at Gigabit Power over Ethernet splitter-POE-161S shall separate the digital data and the power into 5V/12V DC power outputs.

### Cost effective and easy Cabling installation

With IEEE 802.3at Gigabit High Power over Ethernet devices installed, the system administrator can use only one single RJ-45 Ethernet cable to carry both power and data to each device. Besides, by connecting POE-161 and POE-161S, you could also have benefits of cost saving, easy for networking planning and higher reliability. Upon IEEE 802.3at compliant devices installation, the POE-161 work together with POE-161S can keep the connection while migrating or splitting the power and the Ethernet digital packets. It thus reduces cables, eliminates the need for dedicated electrical outlets on the wall, ceiling or any unreachable place, and most of all, reduces installation time. The high Power over Ethernet solution frees the Security IP Camera and wireless AP deployment from restrictions of power outlet locations.



## **KEY FEATURES**

#### INTERFACE

- 2-Port RJ-45 interfaces
  - 1-Port PoE Power+ Data input
  - 1-Port Data output
- 1 DC out plug connector

## POE

- Complies with IEEE 802.3at Power over Ethernet pre-standard, PD
- Splits the 56V DC power over RJ-45 Ethernet cable into DC 5V/12V output
- Up to 1 non-IEEE 802.3at devices powered
- Auto-detect of PoE IEEE 802.3at equipment, protect devices from being damaged by incorrect installation
- Adjustable two different output voltage options (5V/ 4.5A, 12V/ 2A) to fit various devices

- Distance up to 100 meters
- IEEE 802.3af Injector devices compatible

#### HARDWARE

- Plastic case
- 5V / 12V DIP switch
- LED indicators power input indication

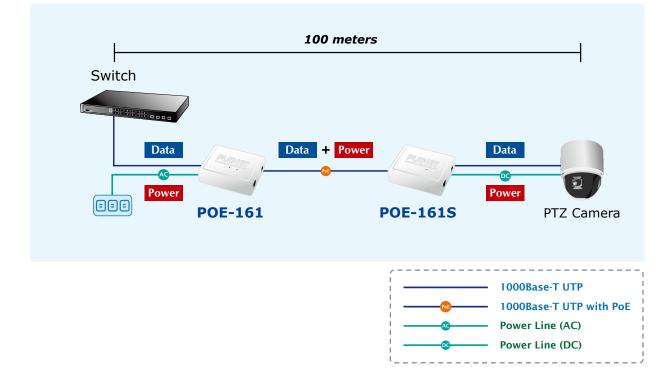
## STANDARD COMPLIANCE

- IEEE 802.3 10Base-T
- IEEE 802.3u 100Base-TX
- IEEE 802.3ab 1000Base-T
- IEEE 802.3at Power over Ethernet pre-standard
- FCC Part 15 Class A, CE

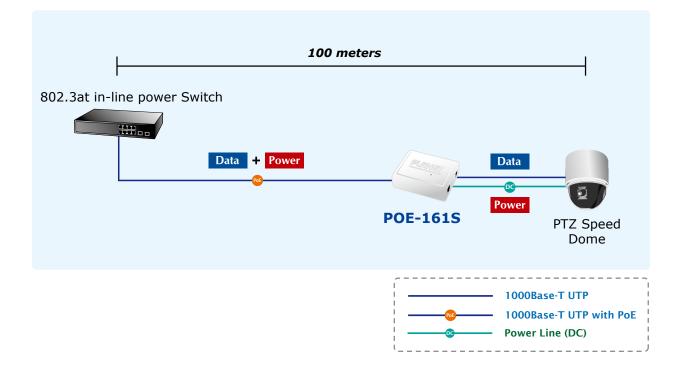
## **APPLICATIONS**

## The IEEE 802.3at Injector and Splitter installation:

Because of the capability of IEEE 802.3at Power over Ethernet pre-standard, the POE-161S only can be installed and co-work with the POE-161, the IEEE 802.3at Gigabit Power over Ethernet injector, and transform non-PoE equipment to IEEE 802.3at PoE application. For a place which is hard to find the power inlet, the POE-161 and POE-161S operate as a pair to provide the easiest way to power your Ethernet devices which need high power input, such as PTZ (Pan, Tilt & Zoom) network cameras, PTZ Speed Dome, color touch- screen Voice over IP (VoIP) telephones, and multi-channel wireless LAN access points installed on the top of the building or used in enterprise office or home.







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#### SPECIFICATION

Product		IEEE 802.3at Gigabit High Power over Ethernet Injector (Mid-Span)
Model		POE-161S
Hardware	Specification	
Interface	"Data" Out Port	1 x RJ-45 STP
	"PoE (Power + Data)" Input Port	1 x RJ-45 STP
	DC Out Plug Connector	1
LED Indicator		System: PoE In x 1 (Green)
Network Cable		10Base-T: 2-Pair UTP Cat. 3, 4, 5, up to 100m (328ft) 100Base-TX: 2-Pair UTP Cat. 3, 4, 5, up to 100m (328ft) 1000Base-T: 2-Pair UTP Cat. 5, 5e, 6 up to 100m (328ft) EIA/TIA- 568 100-ohm STP (100m)
Data Rate		10/100/1000Mbps (vary on Ethernet device attached)
DIP Switch		5V DC / 12V DC output voltage
Dimension (W x D x H)		95 x 70 x 25 mm
Weight		111g
Number of device can be powered		1
Operating Temperature		0 ~ 50 Degree C
Storage Temperature		-10 ~ 70 Degree C
Humidity		5 ~ 95% (Non-condensing)
Power over Ethernet		
PoE Standard		IEEE 802.3at Gigabit Power over Ethernet pre-standard / PD
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 pre-standard
Regulation Compliance		FCC Part 15 Class A, CE

# ORDERING INFORMATION

POE-161S

IEEE 802.3at Gigabit High Power over Ethernet Splitter with 5V/12VDC output (10/100/1000Mbps)

# **RELATED PRODUCT**

POE-161

IEEE 802.3at Gigabit High Power over Ethernet Injector (10/100/1000Mbps, Mid-Span, 30 Watts)

**Data Sheet** 

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