

IEEE 802.3at Gigabit High Power over Ethernet Injector (Mid-Span)



In last few years, Planet technology announced complete IEEE 802.3af Power over Ethernet Injector solution to fill demand from various Ethernet environments that hard to find power outlet. Now, PLANET release next generation of Power over Ethernet Injector product – **POE-161**, with brand-new **IEEE 802.3at High Power over Ethernet**. The following Key features of POE-161:

- IEEE 802.3at Power over Ethernet pre-standard compliant
- Maximum 30W output power support
- 10/100/1000Mbps duplex mode support

The POE-161 is a **Single-Port, Mid-Span IEEE 802.3at High Power over Ethernet Injector** with maximum up to 30 Watts of power output over Ethernet cables. 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. The **POE-161 High Power Injector** 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 802.3af 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 802.3af 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 Injectors, the POE-161 provides 10/100/1000Mbps Ethernet connection ability, and also compatible with IEEE 802.3af Power over Ethernet Splitters to provide maximum up to 15.4 Watts power output, like PLANET POE-151S and POE-152S.

Quick and Easy High Power PoE Network Deployment

The POE-161 is a **Mid-Span IEEE 802.3at Gigabit High Power over Ethernet Injector** which provides DC 56V over Ethernet cables. The POE-161 inserts DC Voltage into Cat.5/5e/6 cable, 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 High Power over Ethernet Injector. And the IEEE 802.3at Gigabit High Power over Ethernet splitter shall separate the digital data and the power into two selectable DC outputs(**5V DC / 12V DC**).

Cost effective and easy Cabling installation

With IEEE 802.3at Gigabit High Power over Ethernet devices installed, the system administrator only has to use one single RJ-45 Ethernet cable to carry both power and data to each device. Besides, to connect through POE-161 and POE-161S, you could also have benefits which includes 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 make the connection while migrating or splitting the power and the Ethernet digital packets and reduce cables and eliminate the need for dedicated electrical outlets on the wall, ceiling or any unreachable place and reducing installation time. It frees the Security IP Camera and wireless AP deployment from restrictions due to power outlet locations.

KEY FEATURES

INTERFACE

- 2-Port RJ-45 interfaces
 - 1-Port Data + Power output
 - 1-Port Data input
- 1 DC 56V input power socket

POE

- Gigabit High Power over Ethernet Mid-Span PSE
- Pre-IEEE 802.3at compliant
- IEEE 802.3af devices compatible
- Support PoE Power up to 30 Watts for PoE port
- Up to 1 IEEE 802.3at devices powered
- Provides DC 56V power over RJ-45 Ethernet cable to device with Ethernet port
- Auto-detect of POE IEEE 802.3at equipment and devices from being damaged by incorrect installation

- Remote power feeding up to 100m
- **IEEE 802.3af Splitter devices compatible**

HARDWARE

- Plastic case
- LED indicators for Power LED and PoE In-use

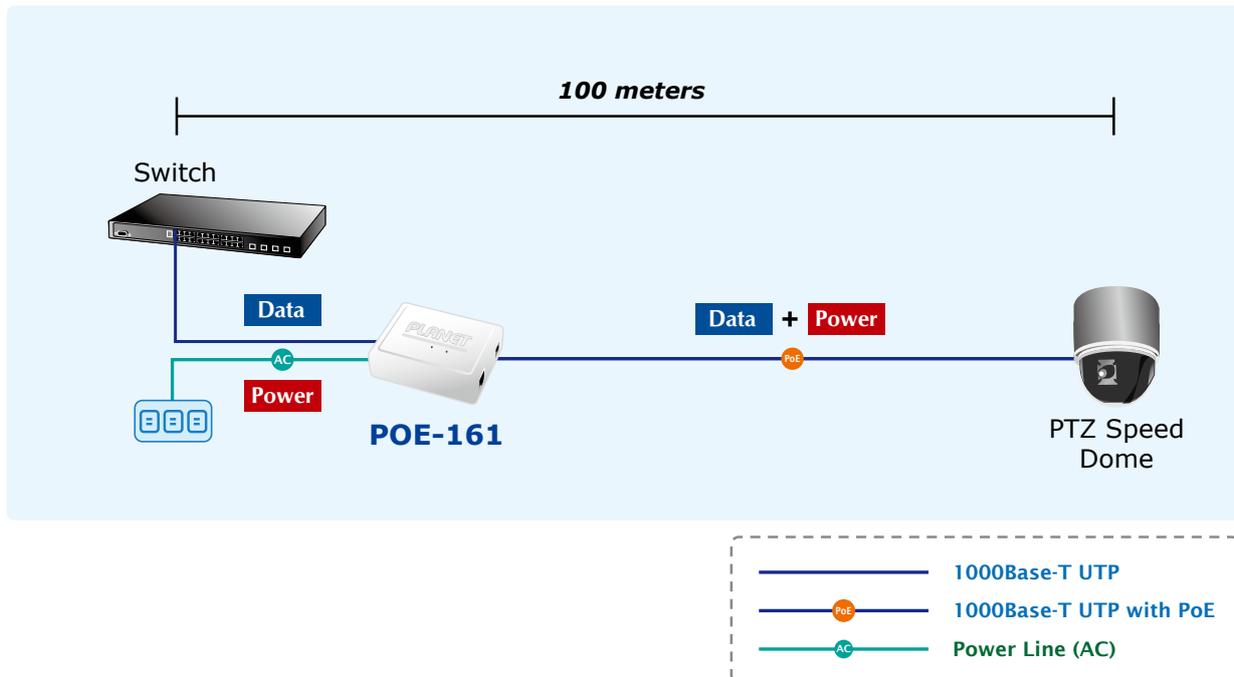
STANDARD COMPLIANCE

- 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

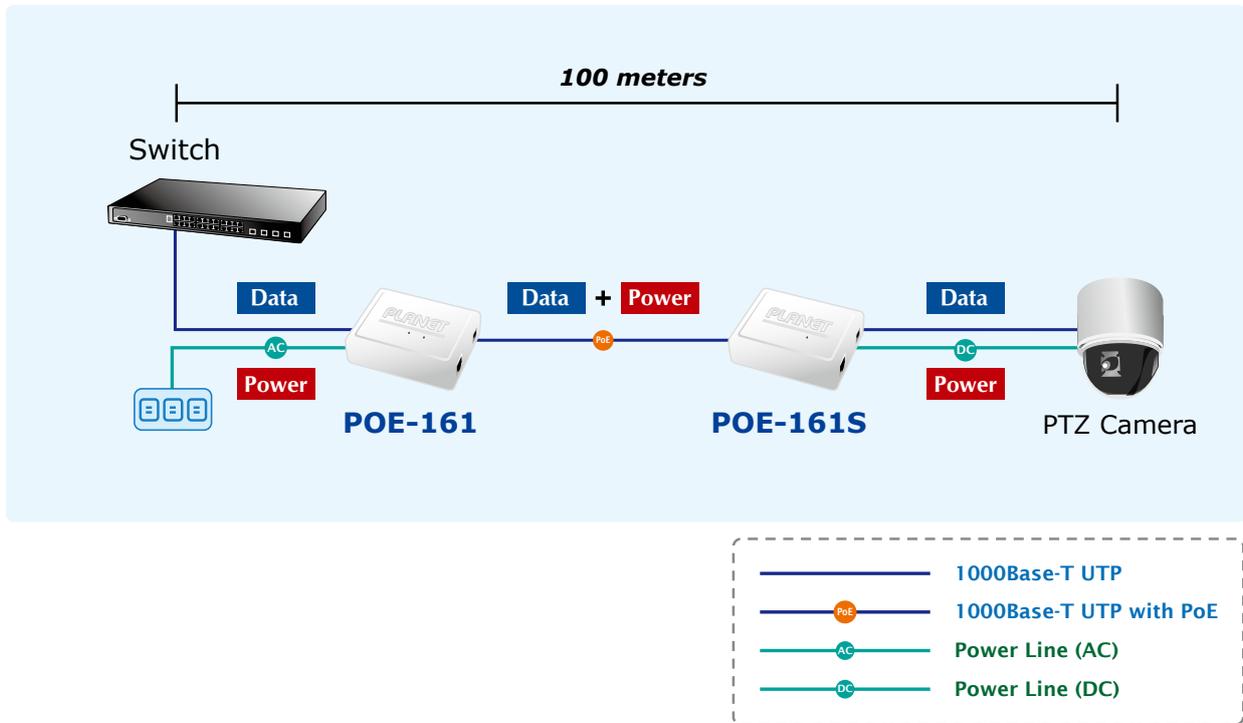
Connect to IEEE 802.3at compliant devices

Because of having the capability of IEEE 802.3at **Power over Ethernet pre-standard**, the POE-161 can directly connect with any IEEE 802.3at end-nodes like PTZ (Pan, Tilt & Zoom) network cameras, PTZ Speed Dome, color touch- screen Voice over IP (VoIP) telephones, multi- channel wireless LAN access points and other Network devices which supports IEEE 802.3at Power over Ethernet **pre-standard**.



The IEEE 802.3at Injector and Splitter installation:

For a place which is hard to find the power inlet, the POE-161 and POE-161S operate as a pair, it provide most easiest way to power your Ethernet devices needs high power input, such as PTZ (Pan, Tilt & Zoom) network cameras, PTZ Speed Dome, color touch- screen Voice over IP (VoIP) telephones, multi- channel wireless LAN access points which is installed on the top of the building or used in enterprise office or home.



SPECIFICATION

Product	IEEE 802.3at Gigabit High Power over Ethernet Injector (Mid-Span)	
Model	POE-161	
Hardware Specification		
Interface	"Data" Input Port	1 x RJ-45 STP
	"PoE (Data+Power)" Output Port	1 x RJ-45 STP
	DC 56V Input power socket	1
LED Indicator	System: Power x 1 (Green) PoE Port: PoE in Use 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	
Dimension (W x D x H)	95 x 70 x 25 mm	
Weight	83g	
Unit Input Voltage	DC 56V, 0.53A	
Power Requirement	100-240V AC, 50/60Hz	
Power Consumption	30 Watts max.	
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 / Mid-Span PSE	
PoE Power Output	DC 56V / 30 Watts	
PoE Power supply Type	Mid-Span	
Power Pin Assignment	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 pre-standard	
Regulation Compliance	FCC Part 15 Class A, CE	

ORDERING INFORMATION

POE-161	IEEE 802.3at Gigabit High Power over Ethernet Injector (10/100/1000Mbps, Mid-Span, 30 Watts)
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RELATED PRODUCT

POE-161S	IEEE 802.3at Gigabit High Power over Ethernet Splitter with 5V/12VDC output (10/100/1000Mbps)
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