Single-Port Multigigabit 802.3at PoE+ Injector (30 Watts)

Advanced Multi-Gigabit and 802.3at PoE+ Network Solution

PLANET POE-165 is a Single-Port, 802.3at Power over Ethernet Injector with a maximum of up to 30 watts of power output over Ethernet cables. It is also equipped with two **10M/100M/1G/2.5G/5GBASE-T RJ45 copper interfaces** to handle extremely large amounts of data transmission.

The POE-165 delivers the Ethernet digital data with DC power over the twisted-pair cables as a 30-watt Power over Ethernet Injector, and the connected ultra Power over Ethernet splitter, the POE-161S/162S, will separate the digital data and the power into three optional outputs (5V/12V/24V DC) with distance up to 100 meters.

PoE with High Power, Security, Stability and Easy Installation Features

As PoE applications have expanded to home users from the IT industry, PLANET has developed a new Single-port PoE+ Injector which meets the requirements of both the IT industry and home users for high wattage output and easy installation, respectively.

The POE-165 is a wall-mountable, single-port **Gigabit 802.3at PoE+** injector with internal power supply in compact housing. Carrying both Ethernet data and power simultaneously, the POE-165 helps users to utilize just one Ethernet cable to easily install and deploy IP camera, wireless AP or VoIP phone networking in environments where power outlet is hard to find.

Interface

- 2 RJ45 interfaces
  - 1-port **Data + Power** output
  - 1-port **Data input**
- 1 AC 100-240V input power socket

Power over Ethernet

- Power over Ethernet Mid-span PSE
- IEEE 802.3at PoE Plus compliant
- Backward compatible with IEEE 802.3af PD device
- Supports PoE Power up to 30 watts for PoE+ port
- Auto-detects PoE IEEE 802.3at/802.3af equipment and devices for preventing damage from incorrect installation
- Remote power feeding up to 100m

Hardware

- All-in-one compact size design
- Plastic case
- LED indicators for Power LED and Active LED (PoE ready-in-use)

Standard Compliance

- IEEE 802.3 10BASE-T
- IEEE 802.3u 100BASE-TX
- IEEE 802.3ab 1000BASE-T
- IEEE 802.3bz 2.5Gbps/5GbpsBASE-T
- IEEE 802.3af Power over Ethernet (802.3at Type 1)
- IEEE 802.3at Power over Ethernet (802.3at Type 2)
- FCC Part 15 Class B, CE

System Integrators & SMBs	Home and SOHO Users
▶ IEEE 802.3at / 802.3af Power over Ethernet Plus Compliant	
▶ Reduced installation costs	
▶ 30-watt Power Output	▶ Compact size, internal power supply
▶ 10/100/1G/2.5G/5GBASE-T Data Rate	▶ Plug and Play, easy installation
▶ Extends distance with PoE Extender	

It offers an affordable, safe and reliable power solution for cost-conscious business and home users deploying Power over Ethernet networks.

30-watt Power over Ethernet Capability

The PoE in-line power following the **IEEE 802.3at/af Power over Ethernet Plus standard** makes the POE-165 able to deliver Gigabit speed Ethernet data and up to **30 watts** of power to remote PoE compliant powered devices (PDs) over one Cat.5E/6 Ethernet cable. The POE-165 provides more flexibility in power requirement for all kinds of PDs at affordable installation costs. Designed especially for higher power required network equipment such as PTZ (pan, tilt, zoom) speed-dome camera, high power outdoor AP can be powered and work normally just through a single UTP cable with the POE-165 power injector.

All-in-One and Compact Size Design

With concepts of "Easy to install", **"Plug and Play"** and **"Simple troubleshooting"** for business and home users, the POE-165 is an all-in-one, single-port PoE+ injector with internal power supply. In the compact size housing, the POE-165 provides one 100-240V AC input socket on its front panel, two LEDs (System POWER and PoE ACTIVE) on the top side and two RJ45 ports (POE port and LAN port) on the rear panel. Simply plug in the Ethernet cables and power cord, and the POE-165 is ready to provide high-speed network communication and high power PoE+ injector functions simultaneously with no need of software configuration.

Compact Size, Plug & Play

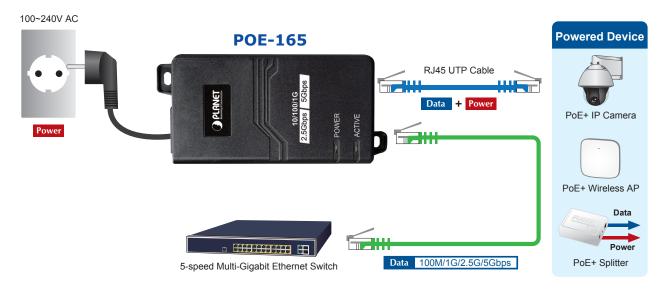
Power Side

Top Side for LEDs

LAN Connector Side

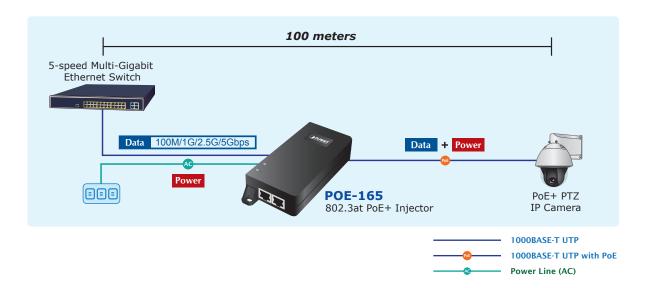*Quick and Easy Cabling Installation for PoE Network Deployment*

Complying with both 802.3af and 802.3at PoE+ standards, the POE-165 allows users to flexibly deploy standard and high powered devices to transfer data and power simultaneously through one Ethernet cable for up to 100 meters. The POE-165 frees the security IP camera and wireless AP deployment from restrictions of power outlet locations and the additional AC wiring. It thus reduces cables and eliminates the need for electrical outlets on the wall, ceiling or any unreachable place, and most of all, it reduces installation time.

Applications

Connecting to IEEE 802.3at/af Compliant Devices

With IEEE 802.3at/802.3af Power over Ethernet, the POE-165 can directly be connected to any IEEE 802.3at/802.3af end-nodes such as PTZ network cameras, PTZ speed-dome cameras, color touch-screen Voice over IP (VoIP) telephones and multi-channel wireless LAN access points where the IEEE 802.3at/802.3af In-line Power over Ethernet port is supported.
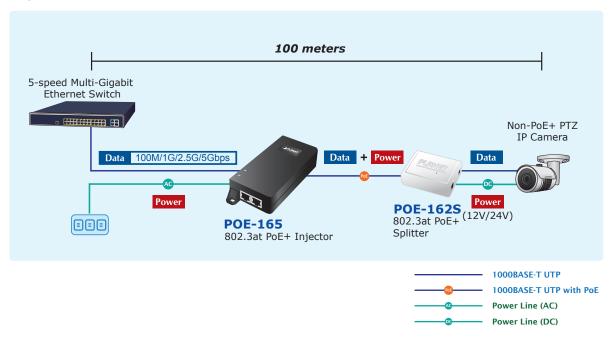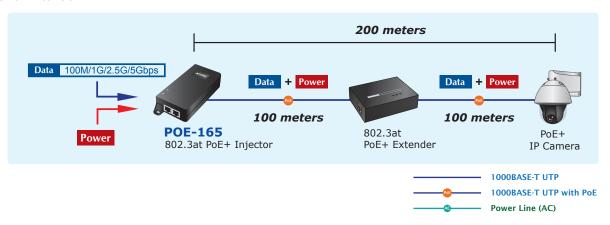
Installation of IEEE 802.3at Injector and Splitter

For remote non-PoE compliant Ethernet devices to enjoy the convenience of Power over Ethernet, the POE-165 and PoE Splitter operate as a pair to provide the easiest way to power your Ethernet devices which need high power input. For example, the POE-165 delivers the Ethernet digital data with power over the twisted-pair cable. When connected to PLANET POE-162S (IEEE 802.3at PoE+ splitter), the POE-162S will divide the digital data and the power into two selectable DC outputs (**12V DC** and **24V DC**) to non-PoE Ethernet device. Or the POE-165 can co-work with the POE-161S (IEEE 802.3at PoE splitter) to get **5V DC**/**12V DC** output.

Extended Installation of the IEEE 802.3at Injector and PoE

Is a 100-meter cable long enough for a wide range of IP Surveillance deployments? The answer is certainly not. To achieve the benefits of IP surveillance and also the long-distance IP camera distribution, the POE-165 and PLANET PoE Extender -- POE-E201 -- can be a quick and cost-effective option. In the simplest application, the PoE Extender enables a PoE IP camera to be installed up to 200 meters away from the POE-165. The POE-165 delivers PoE power over the first 100 meters to the PoE Extender over UTP cable, and then the PoE Extender forwards the Ethernet data and remaining POE power to the remote PoE IP camera.

Specifications

Product		POE-165
Hardware Specifications		
Interface	"Data" Input Port	1 x RJ45 STP
	"PoE (Data + Power)" Output Port	1 x RJ45 STP
	AC Input Power Socket	1
LED Indicators		System: Power x 1 (Green)
		PoE Port: Active, PoE ready / 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)
		2.5Gbps/5Gbps BASE-T: 2-pair UTP Cat. 5e, 6, 7 up to 100m (328ft)
		EIA/TIA- 568 100-ohm STP (100m)
Data Rate		10/100/1000Mbps/2.5Gbps/5Gbps
Dimensions (W x D x H)		115 x 62.5 x 31 mm
Weight		204g
Unit Output Voltage		DC 50-54V, 0.6A
Power Requirements		100-240V AC, 50/60Hz, 0.75A
Power Consumption		30 watts max.
Number of devices that can be powered		1
Operating Temperature		0 ~ 50 degrees C
Storage Temperature		-10 ~ 70 degrees C
Operating Humidity		5 ~ 95%, relative humidity, non-condensing
Storage Humidity		5 ~ 95%, relative humidity, non-condensing
Power over Ethernet		
PoE Standard		IEEE 802.3at Power over Ethernet Plus / Mid-span PSE
PoE Power Output		DC 50-54V/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 802.3bz 2.5Gbps/5Gbps BASE-T Gigabit Ethernet
		IEEE 802.3af Power over Ethernet (802.3at Type 1)
		IEEE 802.3at Power over Ethernet (802.3at Type 2)
Regulatory Compliance		FCC Part 15 Class B, CE

Ordering Information

POE-165	Single-port Multigigabit 802.3at PoE+ Injector (30 Watts)

Related Products

POE-161	IEEE 802.3at Gigabit High Power over Ethernet Injector (Mid-span)
POE-163	IEEE 802.3at Gigabit High Power over Ethernet Injector (Mid-span)
POE-161S	IEEE 802.3at Gigabit Power over Ethernet Plus Splitter with 5V/12V DC output
POE-162S	IEEE 802.3at Gigabit Power over Ethernet Plus Splitterr with 12V/24V DC output

POE-165