

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



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

The applications of Power over Ethernet 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-163 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-163 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.

| System Integrator /SMB                                      | 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 |
| ▶ 10/100/1000Mbps 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-163 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-163 provides more flexibility in power requirement for all kinds of PDs with affordable installation costs. Designed especially for higher power required network equipment such as PTZ (Pan, Tilt & Zoom) speed dome, high power outdoor AP can be powered and work normally just through a single UTP cable with PoE power injector, the POE-163.

### Interface

- 2-port RJ-45 interfaces
  - 1-port Data + Power output
  - 1-port Data input
- 1 AC 100-240V input power socket

### Power over Ethernet

- 1-port Gigabit High Power over Ethernet Mid-Span PSE
- IEEE 802.3at Power over Ethernet Plus compliant
- Backward compatible with IEEE 802.3af Power over Ethernet
- Supports PoE Power up to 30 watts for PoE port
- Up to 1 IEEE 802.3at device powered
- Provides DC 53V power over RJ-45 Ethernet cable to device with Ethernet port
- Auto-detection of PoE IEEE 802.3at/af equipment and devices from being damaged by incorrect installation
- Remote power feeding up to 100m

### Hardware

- All-in-one design with internal power supply
- Compact size plastic case
- LED indicators for Power LED and Active LED (PoE ready/In-use)

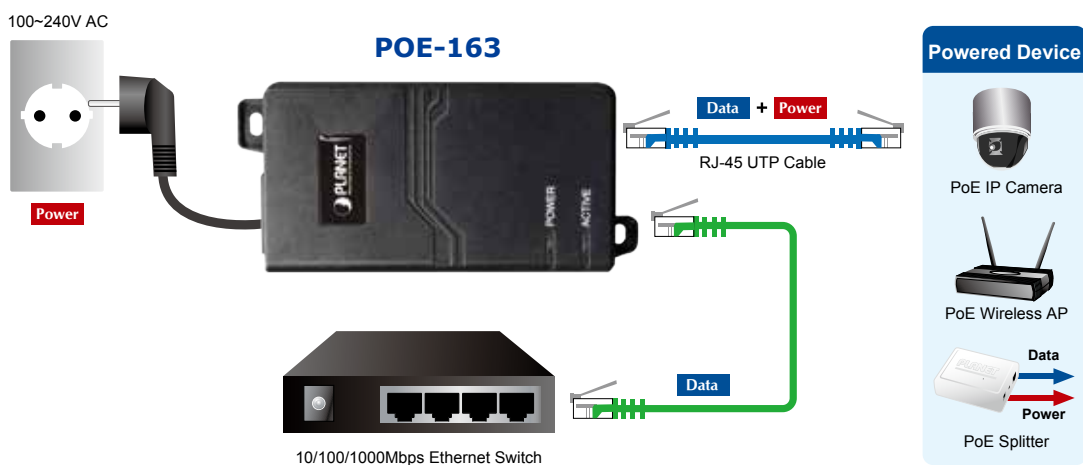
*All-in-One and Compact Size Design*

With concepts of "Easy to install", "Plug and Play" and "Simple troubleshooting" for business and home users, the POE-163 is an all-in-one designed single-port PoE+ injector with internal power supply. In the compact size housing, the POE-163 provides one 100-240V AC input socket on its front panel, two LEDs (System POWER and PoE ACTIVE ) at top side and two RJ-45 ports (POE port and LAN port) at rear panel. Simply plug in the Ethernet cables and power cord, and the POE-163 is ready to provide high speed network communication and high power PoE+ injector functions simultaneously with no need of software configuration.



*Quick and Easy Cabling Installation for PoE Network Deployment*

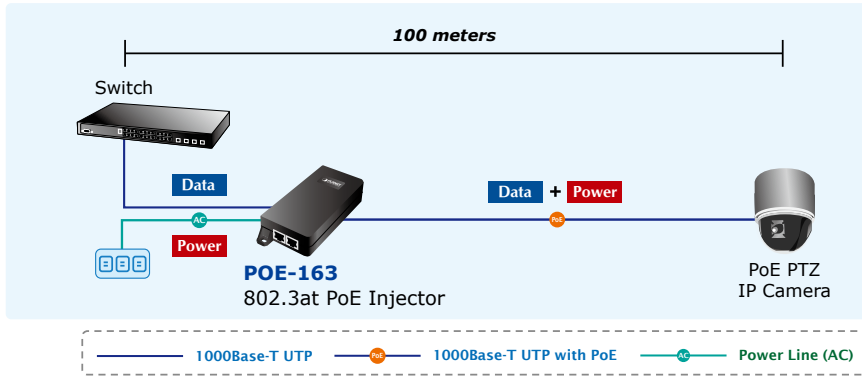
Complying with both 802.3af and 802.3at PoE standards, the POE-163 allows users to flexibly deploy standard and high powered devices to transfer data and power simultaneously through one Ethernet cable for up to 100 meters. The POE-163 frees the Security IP Camera and wireless AP deployment from restrictions of power outlet locations and the additional AC wiring. It thus reduces cables, eliminates the need for dedicated electrical outlets on the wall, ceiling or any unreachable place, and most of all, it reduces installation time.



## Application

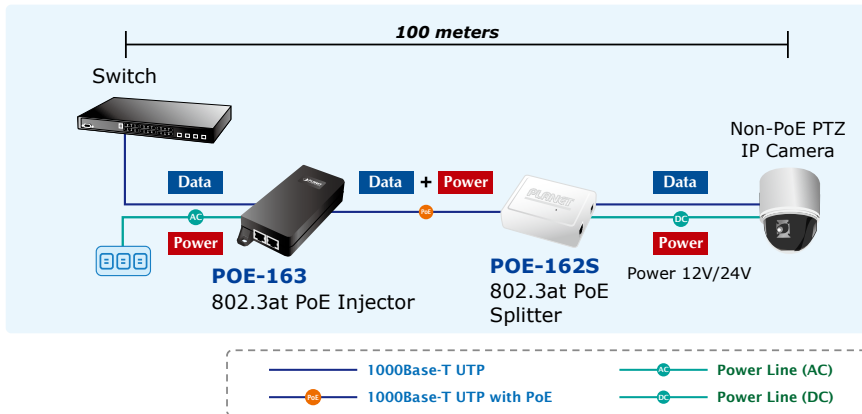
### Connecting to IEEE 802.3at/af Compliant Devices

Because of having the capability of IEEE 802.3at/802.3af Power over Ethernet, the POE-163 can directly be connected to any IEEE 802.3at/802.3af end-nodes 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 where the IEEE 802.3at/802.3af In-line Power over Ethernet port is supported.



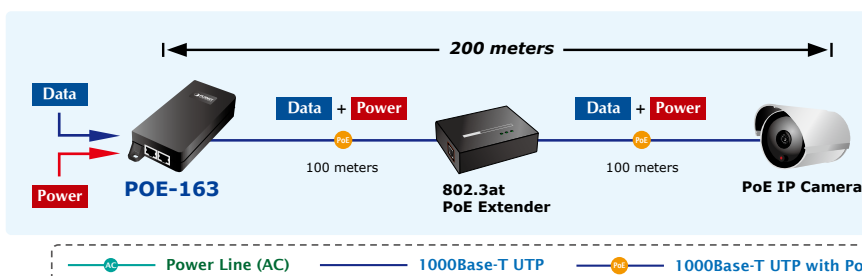
### The IEEE 802.3at Injector and Splitter Installation

For remote non-PoE compliant Ethernet devices to enjoy convenience of Power over Ethernet, the POE-163 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-163 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/24V DC) to non-PoE Ethernet device. Or the POE-163 can co-work with the POE-152S (IEEE 802.3af PoE splitter) to get 5V DC/12V DC output.



### The IEEE 802.3at Injector and PoE Extended Installation

Is 100 meters 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-163 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-163. The POE-163 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.



## Product Specifications

|                                       |  |               |
|---------------------------------------|--|---------------|
| Model                                 | POE-163  |               |
| <b>Hardware Specification</b>         |  |               |
| Interface                             | "Data" Input Port  | 1 x RJ-45 STP |
|                                       | "PoE (Data + Power)" Output Port   | 1 x RJ-45 STP |
|                                       | AC Input power socket  | 1             |
| LED Indicator                         | System: Power x 1 (Green)<br>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)<br>100Base-TX: 2-Pair UTP Cat. 3, 4, 5, up to 100M (328ft)<br>1000Base-T: 2-Pair UTP Cat. 5, 5e, 6 up to 100M (328ft)<br>EIA/TIA- 568 100-ohm STP (100m) |               |
| Data Rate                             | 10/100/1000Mbps  |               |
| Dimensions (W x D x H)                | 115 x 62.5 x 31 mm   |               |
| Weight                                | 177g   |               |
| Unit Output Voltage                   | DC 53V, 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   |               |
| <b>Power over Ethernet</b>            |  |               |
| PoE Standard                          | IEEE 802.3at Power over Ethernet Plus / PSE  |               |
| PoE Power Output                      | DC 53V/30 watts  |               |
| PoE Power supply Type                 | Mid-Span   |               |
| Power Pin Assignment                  | 4/5(+), 7/8(-)   |               |
| <b>Standards Conformance</b>          |  |               |
| Standards Compliance                  | IEEE 802.3 10Base-T Ethernet<br>IEEE 802.3u 100Base-TX Fast Ethernet<br>IEEE 802.3ab 1000Base-T Gigabit Ethernet<br>IEEE 802.3at High Power over Ethernet<br>IEEE 802.3af Power over Ethernet                  |               |
| Regulation Compliance                 | FCC Part 15 Class B, CE  |               |

## Ordering Information

|         |  |
|---------|--|
| POE-163 | IEEE 802.3at Gigabit High Power over Ethernet Injector (10/100/1000Mbps, Mid-Span, 30 watts) |
|---------|--|

## Related Products

|          |   |
|----------|---|
| POE-151S | IEEE 802.3af Power Over Ethernet Splitter with 5V/12V DC output (10/100Mbps)                    |
| POE-152S | IEEE 802.3af Power over Ethernet Splitter with 5V DC/12V DC output (10/100/1000Mbps)            |
| POE-162S | IEEE 802.3at Gigabit High Power over Ethernet Splitter with 12V/24V DC output (10/100/1000Mbps) |
| POE-E201 | IEEE 802.3at Power over Gigabit Ethernet Extender (10/100/1000Mbps)                             |
| POE-E101 | IEEE 802.3af Power over Ethernet Extender (10/100Mbps)  |