

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



Planet IPOE-162 is a Single-Port, Mid-Span Industrial IEEE 802.3at High Power over Ethernet Injector providing maximum up to 30 watts of power output over Ethernet cables. It is specifically designed to fulfill the growing demand of higher power network equipment 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 stably.

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

The IPOE-162 can deliver 30-watt 56V DC power over Cat.5/5e/6 Ethernet cables which allow data and power to transmit simultaneously through the cable between the Injector (IPOE-162) and PoE PD (Powered Device) or PoE Splitter (IPOE-162S / POE-162S). The maximum distance between the Injector and Splitter is 100 meters. The IPOE-162 is also compatible with IEEE 802.3af PoE PD or PoE Splitter and provides a maximum of up to 15.4-watt power output, like the POE-151S and POE-152S do. With Industrial 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. It would make the network deployment easier and more reliably.

#### Interface

- · 2-port RJ-45 interfaces
  - 1-port Data + Power output
  - 1-port Data input
  - One terminal block for master and slave power input.
     (Power Range: 24 ~ 48V DC / 24V AC redundant power)

## PoE

- · Gigabit High Power over Ethernet Mid-Span PSE
- · IEEE 802.3at / 802.3af PoE compliant
- IEEE 802.3at / 802.3af splitter devices compatible
- · Supports PoE Power up to 30 watts for each PoE port
- Provides DC 56V power over RJ-45 Ethernet cable to device with Ethernet port
- Auto-detects IEEE 802.3at equipment and protects devices from being damaged by incorrect installation
- Remote power feeding up to 100m

#### Hardware

- · IP30 slim type metal case
- LED indicators for Power LED and PoE In-Use

#### Industrial Case / Installation

- · DIN rail and wall mount design
- · Supports EFT 6000 V DC protection for power line
- Supports 6000 V DC Ethernet ESD protection
- · -40 to 75 degrees C operating temperature

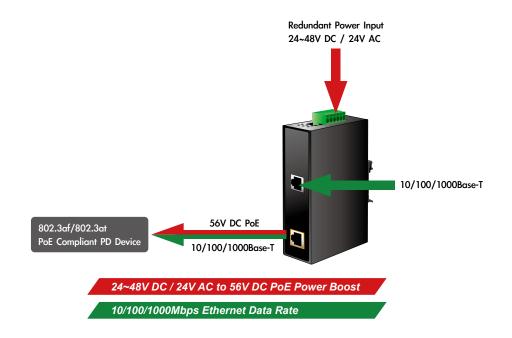
## Standard Compliance

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



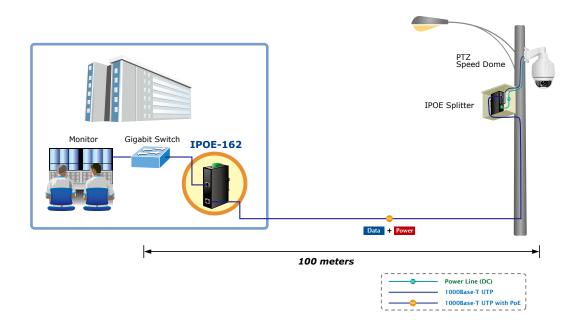
### Convenient and Reliable Power System

To facilitate the 802.3at High Power PoE usage with commonly used 24V DC / 48V DC power input or 24V AC power input for transportation and industrial-level applications, the IPOE-162 adopts 24 / 48V DC to 56V power boost technology to solve power source issue but does not require special power supplies. The IPOE-162 provides an integrated power solution with a wide range of voltages (24V / 48V DC) for worldwide operability. It also provides dual-redundant, reversible polarity 24V / 48V DC power or 24V AC power supply inputs for high availability applications.



## Stable Operating Performance under Difficult Environments

Today, the PoE demand expands from commercial applications to many critical networks in the harsh environment. The IPOE-162 will be one of the ideal solutions that provide a high level of immunity against electromagnetic interference and heavy electrical surges typical of environments found on plant floors or in curb side traffic control cabinets. The IPOE-162 can operate stably under temperature range from -40 to 75 degrees C which enables the users to conveniently apply the device in almost any location of the network. The IPOE-162 is also equipped with a compact IP30 standard metal case that allows either DIN rail or wall mounting for efficient use of cabinet space.

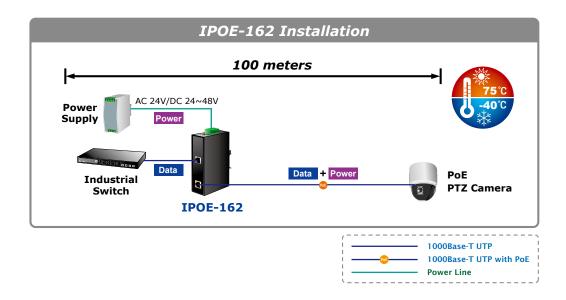




## **Applications**

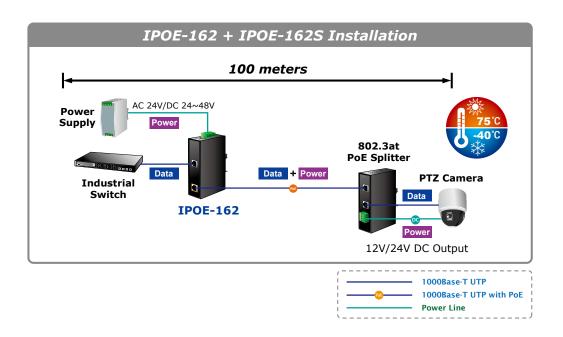
## Connecting to IEEE 802.3at Compliant Devices

Having the capability of IEEE 802.3at Power over Ethernet standard, the IPOE-162 can directly connect and inject power via RJ-45 Ethernet cable to 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.



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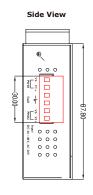
## Specifications

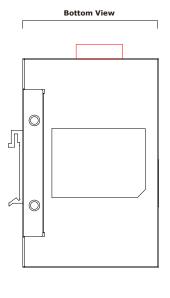
Model	IPOE-162
Camera	IF OL-102
Carriera	"Data" Input Port: 1 x RJ-45 STP
Interface	"PoE (Data+Power)" Output Port: 1 x RJ-45 STP Input power terminal block: 1
LED Indicator	System: Power 1, Power 2, Fault (Green) PoE Port: PoE in Use x 1 (Green)
Network Cable	10Base-T: UTP Cat. 3, 4, 5, up to 100m (328ft) 100Base-TX: UTP Cat. 3, 4, 5, up to 100m (328ft) 1000Base-T: UTP Cat. 5, 5e, 6 up to 100m (328ft) EIA/TIA- 568 100-ohm STP (100m)
Data Rate	10/100/1000Mbps
Dimensions (W x D x H)	135 x 87.8 x 32 mm
Weight	473g
Unit Input Voltage	24 ~ 48V DC 24V AC
Power Consumption	30 watts max.
Number of device can be powered	1
Installation	DIN rail kit and wall mount ear
Alarm	Provides one relay output for power failure, Alarm relay current carry ability: 3A @ DC 30V
Enclosure	IP30 slim type metal case
Power over Ethernet	
PoE Standard	IEEE 802.3at High Power over Ethernet / 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 802.3af Power over Ethernet IEEE 802.3at Power over Ethernet enhancement standard
FCC	FCC Part 15B Class A
CE	EMI: ■ EN 55022 ■ EN 61000-3-2 ■ EN 61000-3-3  EMS:
	■ EN 61000-4-2 (ESD) ■ EN 61000-4-3 (RS) ■ EN 61000-4-4 (EFT) ■ EN 61000-4-5 (Surge) ■ EN 61000-4-6 (CS) ■ EN 61000-4-8 (PFMF)
Stability Testing	IEC60068-2-32(Free Fall) IEC60068-2-27(Shock) IEC60068-2-6(Vibration)
Environment	
Operating Temperature	-40 ~ 75 degrees C
Storage Temperature	-40 ~ 85 degrees C
Humidity	5 ~ 95% (non-condensing)



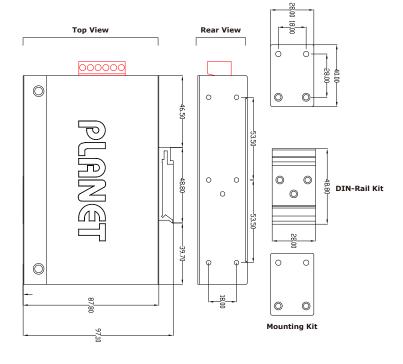
## **Dimensions**

IPoE162:









Dimensions ( unit = mm )

Mounting Kit

## **Ordering Information**

IPOE-162 Industrial IEEE 802.3at Gigabit High Power over Ethernet Injector (Mid-Span, 30 watts)

## **Related Products**

IPOE-162S	Industrial IEEE 802.3at Gigabit High Power over Ethernet Splitter
POE-E201	IEEE 802.3at Power over Gigabit Ethernet Extender

## **PLANET Technology Corporation**

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**C-IPOE-162**