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

The 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 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 stably.
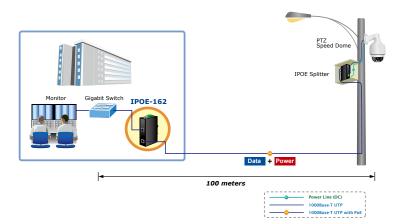
Quick and Easy High Power PoE Network Deployment

The IPOE-162 can deliver 30 Watts 56V DC power over Cat.5/5e/6 Ethernet cables which allowing data and power transmitted 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 maximum up to 15.4 Watts power output, like 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 more easily and reliably.

Convenient and Reliable Power System

To facilitate the 802.3at High Power PoE usage with common used **24V DC / 48V DC** power input or **24V AC** power input in transportation and industrial-level applications, the IPOE-162 adopts 24 / 48V DC to 56V power boost technology to solve power source issue but 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.

Redundant Power Input
24~48V DC / 24V AC

10/100/1000Base-T

802.3af/802.3at
PoE Compliant PD Device

56V DC PoE

10/100/1000Base-T

24~48V DC / 24V AC to 56V DC PoE Power Boost

10/100/1000Mbps Ethernet Data Rate

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 the one of ideal solution that provides a high level of immunity to 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 Degree C** which enables the users to conveniently apply the device in almost any location of the network. The IPOE-162 also equips with compact IP30 standard metal case that allows either DIN rail or Wall mounting for efficient use of cabinet space.

Monitor Gigabit Switch **IPOE-162**

PTZ Speed Dome

IPOE Splitter

Data + Power

100 meters

Power Line (DC)
1000Base-T UTP
1000Base-T UTP with PoE

Data Sheet

KEY FEATURES

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
- Provides DC 56V power over RJ-45 Ethernet cable to device with Ethernet port
- Auto-detect of IEEE 802.3at equipments and protects devices from being damaged by incorrect installation
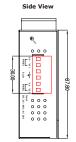- Remote power feeding up to 100m

HARDWARE

- IP30 Slim Type Metal Case
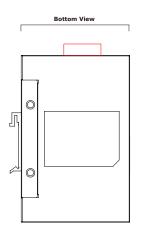- LED indicators for Power LED and PoE In-use
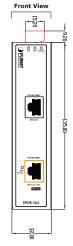
INDUSTRIAL CASE / INSTALLATION

- DIN Rail and Wall Mount Design
- Supports EFT protection 6000 VDC for power line
- Supports 6000 VDC Ethernet ESD protection
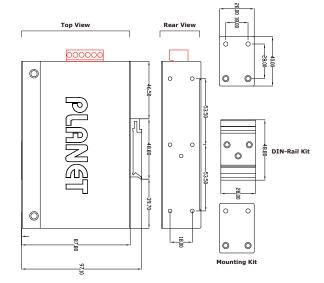- -40 to 75 Degree C operation temperature

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
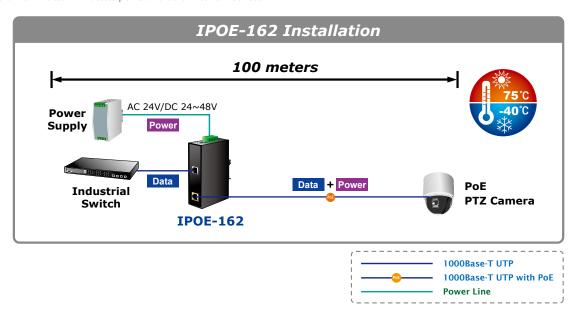- FCC Part 15 Class A, CE

Side View

Bottom View **Front View** **Top View** **Rear View** **Mounting Kit**

DIN-Rail Kit

Mounting Kit

Dimensions (unit = mm)

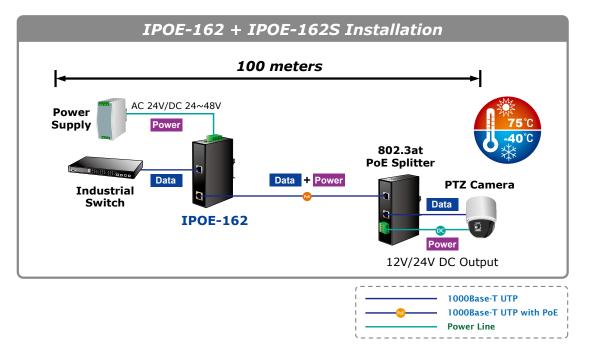Data Sheet

APPLICATIONS

Connect 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.

IPOE-162 Installation

100 meters

75℃ -40℃

Power Supply — AC 24V/DC 24~48V — Power

Data

Industrial Switch

IPOE-162

Data + Power

PoE

PoE PTZ Camera

1000Base-T UTP
1000Base-T UTP with PoE
Power Line

The IEEE 802.3at Injector and Splitter Installation

For a place which is hard to find the power inlet, **the IPOE-162 and IPOE-162S can 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 in enterprise office or home.

IPOE-162 + IPOE-162S Installation

100 meters

75℃ -40℃

Power Supply — AC 24V/DC 24~48V — Power

Data

Industrial Switch

IPOE-162

Data + Power

PoE

802.3at PoE Splitter

Data

DC

Power

PTZ Camera

12V/24V DC Output

1000Base-T UTP
1000Base-T UTP with PoE
Power Line

SPECIFICATION

Product	Industrial IEEE 802.3at Gigabit High Power over Ethernet Injector
Model	IPOE-162
Hardware Specification	
Interface — "Data" Input Port	1 x RJ-45 STP
Interface — "PoE (Data+Power)" Output Port	1 x RJ-45 STP
Interface — 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
Dimension (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 fail, 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
Regulation Compliance	FCC Part 15 Class A, CE
Environment	
Operating Temperature	-40 ~ 75 Degree C
Storage Temperature	-40 ~ 85 Degree C
Humidity	5 ~ 95% (Non-condensing)

ORDERING INFORMATION

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

RELATED PRODUCT

IPOE-162S	Industrial IEEE 802.3at High Power over Ethernet Splitter(12V & 24V)
POE-E201	IEEE 802.3at Power over Gigabit Ethernet Extender
PWR-40-24	40W 24V DC Single Output Industrial DIN Rail Power Supply
PWR-75-24	75W 24V DC Single Output Industrial DIN Rail Power Supply
PWR-120-48	120W 48V DC Single Output Industrial DIN Rail Power Supply
PWR-240-48	240W 48V DC Single Output Industrial DIN Rail Power Supply