

Product Specifications

Industrial 2-port 10/100/1000T 802.3at PoE+ Injector Hub

IPOE-260 Series

Version 1.0

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Change History:

Revision:	Date:	Author:	Change List
Version 1.0	2019/12/13	Keithy	Initial Release

Author	Keithy Lin	Editor	Mark Kao
Reviewed by	Jonas Yang	Approved by	Kent Kang

1. PRODUCT DESCRIPTION



Advanced 802.3at PoE+ Network Solution

PLANET IPOE-260 2-Port, Mid-span Industrial IEEE 802.3at Power over Ethernet Plus Injector Hub series provides a maximum of up to 36 watts of power output over Ethernet cables. It 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 or ceiling, and most of all, it reduces installation time.

The IPOE-260 series includes two models: IPOE-260 and IPOE-260-12V.

Model	DC Input	PoE Standard	PoE Budget
IPOE-260	48~56V DC	IEEE 802.3at	72 watts
IPOE-260-12V	12~56V DC	IEEE 802.3at	72 watts

Designed for Space-limited Installation

- 36 Watts Per Port
- 2 Giga PoE Ports
- Compact Size Design
- Redundant Power
- ESD Protection

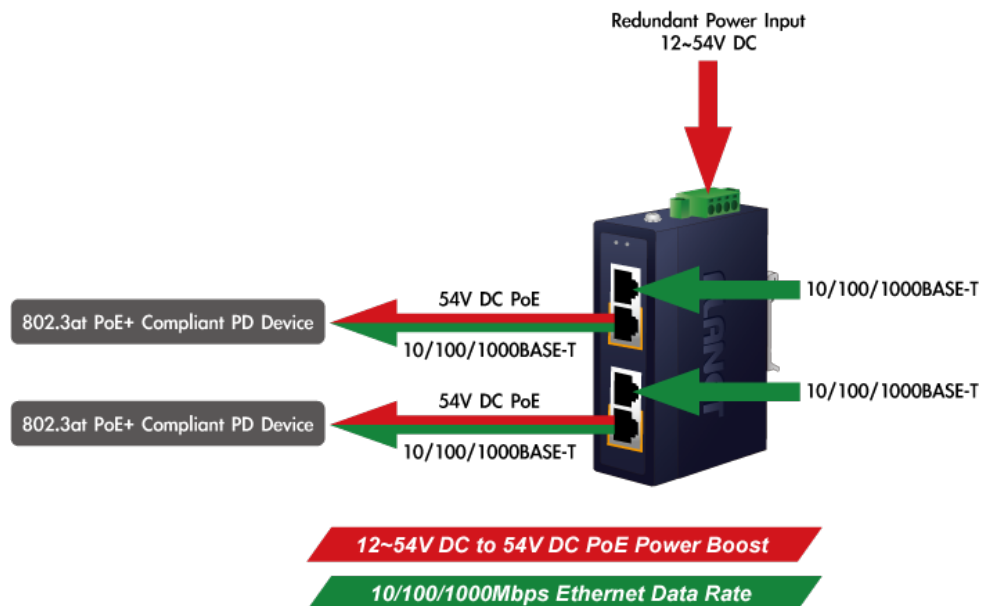
Quick and Easy High Power PoE Network Deployment

The IPOE-260 series can deliver 36-watt 54V DC power over Cat. 5/5e/6 Ethernet cables which allow data and power to transmit simultaneously through the cable between the injector (IPOE-260 series) and PoE PD (powered device) or PoE splitter (IPOE-162S). The maximum distance between the Injector and Splitter is 100 meters. The IPOE-260 series is also compatible with IEEE 802.3af PoE PD or PoE splitter and provides a maximum of up to 15.4-watt power output. With Industrial IEEE 802.3at Power over Ethernet Plus devices installed, the system

administrator only has to use one single RJ45 Ethernet cable to carry both power and data to each device. It would make the network deployment easier and more reliable.

Convenient and Reliable Power System

To facilitate the 802.3at PoE usage with commonly used **12~54V DC** power input for transportation and industrial-level applications, the IPOE-260-12V adopts 12~54V DC to 54V **power boost** technology to solve power source issue but does not require special power supplies. Its wide-ranging voltages design is suitable for worldwide operability with high availability applications requiring dual or backup power inputs.



Environmentally Hardened Design for Industrial PoE Networks

The IPOE-260 series is specifically designed with durable components and strong housing case to operate reliably in electrically harsh and climatically demanding environments like plant floors or curbside traffic control cabinets. The IPOE-260 series is packaged in a compact, IP30 rugged case that allows either DIN-rail or wall mounting to have the efficient use of cabinet space. It is ideal for service providers, campuses and public areas to deploy PoE wireless access points, IP cameras or IP phones in any places easily and efficiently with cost-effectiveness. It can also operate in a wide temperature range of -40 to 75 degrees C, so it can be placed in almost any location.



DIN-rail Mounting



Wall Mounting



**Side Wall Mounting
(Space saving)**

2. PRODUCT FEATURES

➤ **Interface**

- 4 10/100/1000BASE-T RJ45 interfaces
 - 2-port **Data + Power** output
 - 2-port **Data input**
- 1 terminal block for master and slave power input with reverse polarity protection
- Power Range: 48 ~ 56V DC redundant power (IPOE-260)
- Power Range: 12 ~ 56V DC redundant power (IPOE-260-12V)
- LED indicators for power LED and PoE-in-Use

➤ **PoE**

- Gigabit Power over Ethernet Plus mid-span PSE
- IEEE 802.3at PoE+ compliant
- IEEE 802.3at splitter devices compatible
- Supports PoE Power up to 36 watts for PoE port
- Provides DC 54V power over RJ45 Ethernet cable to device
- Auto-detection of PoE IEEE 802.3af/at devices
- Remote power feeding up to 100m

➤ **Industrial Case and Installation**

- IP30 slim metal case
- DIN-rail, wall-mount or side wall-mount design
- Supports 6KV DC Ethernet ESD protection
- -40 to 75 degrees C operating temperature

3. PRODUCT SPECIFICATIONS

3.1 MAIN COMPONENTS

PoE PSE	PD6910ILQTR	x 2
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3.2 FUNCTION SPECIFICATIONS

Model	IPOE-260	IPOE-260-12V
Hardware Specifications		
Copper Ports	2-pair 10/100/1000BASE-T RJ45 auto-MDI/MDI-X ports: <ul style="list-style-type: none"> ● Data input port 1 and PoE output port 1 ● Data input port 2 and PoE output port 2 	
Connector	Removable 4-pin terminal block Pin 1/2 for Power 1; Pin 3/4 for Power 2	
LED Indicators	System: <ul style="list-style-type: none"> Power 1 (Green) Power 2 (Green) PoE Port: <ul style="list-style-type: none"> 802.3at PoE+ x 1 (Green + Orange) 	
Network Cable	Twisted-pair cable up to 100 meters (328ft) 10BASE-T: 4-pair UTP Cat. 3, 4, 5, 5e, 6 100BASE-TX: 4-pair UTP Cat. 5, 5e, 6 1000BASE-T: 4-pair UTP Cat. 5e, 6	
Data Rate	10/100/1000Mbps	
Power Requirements	48~56V DC , redundant power with reverse polarity protection	12~56V DC , redundant power with reverse polarity protection
Power Consumption (Ethernet Full Loading)	Max. 2 watts/6.8 BTU (Power on without any connection) Max. 80 watts/272.9 BTU (Full loading with PoE function)	Max. 4 watts/13.6 BTU (Power on without any connection) Max. 80 watts/272.9 BTU (Full loading with PoE function)
Dimensions (W x D x H)	30 x 70 x 105 mm	
Weight	280g	
Enclosure	IP30 metal case	
Installation	DIN-rail, wall-mount or side wall-mount design	
ESD Protection	6KV	
EFT Protection	6KV	
Power over Ethernet		
PoE Standard	IEEE 802.3at Power over Ethernet Plus / mid-span PSE	
PoE Power Output	48V DC input: Max. 32 watts per PoE port Max. 36 watts per PoE port (56V DC)	Max. 36 watts per port (54V DC)

PoE Power Supply Type	Mid-span	
Power Pin Assignment	4/5 (+), 7/8 (-)	
PoE Power Budget (max.)	72 watts @ 48~56V DC input	60W @ 12~23V DC input 72W @ 24~56V DC input
Number of devices that can be powered	2	
Standards Conformance		
Regulatory Compliance	FCC Part 15 Class A, CE	
Stability Testing	IEC 60068-2-32 (free fall) IEC 60068-2-27 (shock) IEC 60068-2-6 (vibration)	
Standards Compliance	IEEE 802.3 Ethernet IEEE 802.3u Fast Ethernet IEEE 802.3ab Gigabit Ethernet IEEE 802.3af Power over Ethernet IEEE 802.3at Power over Ethernet Plus	
Environment		
Temperature	Operating: -40~75 degrees C Storage: -40~75 degrees C	
Humidity	Operating: 5~90% (non-condensing) Storage: 5~90% (non-condensing)	

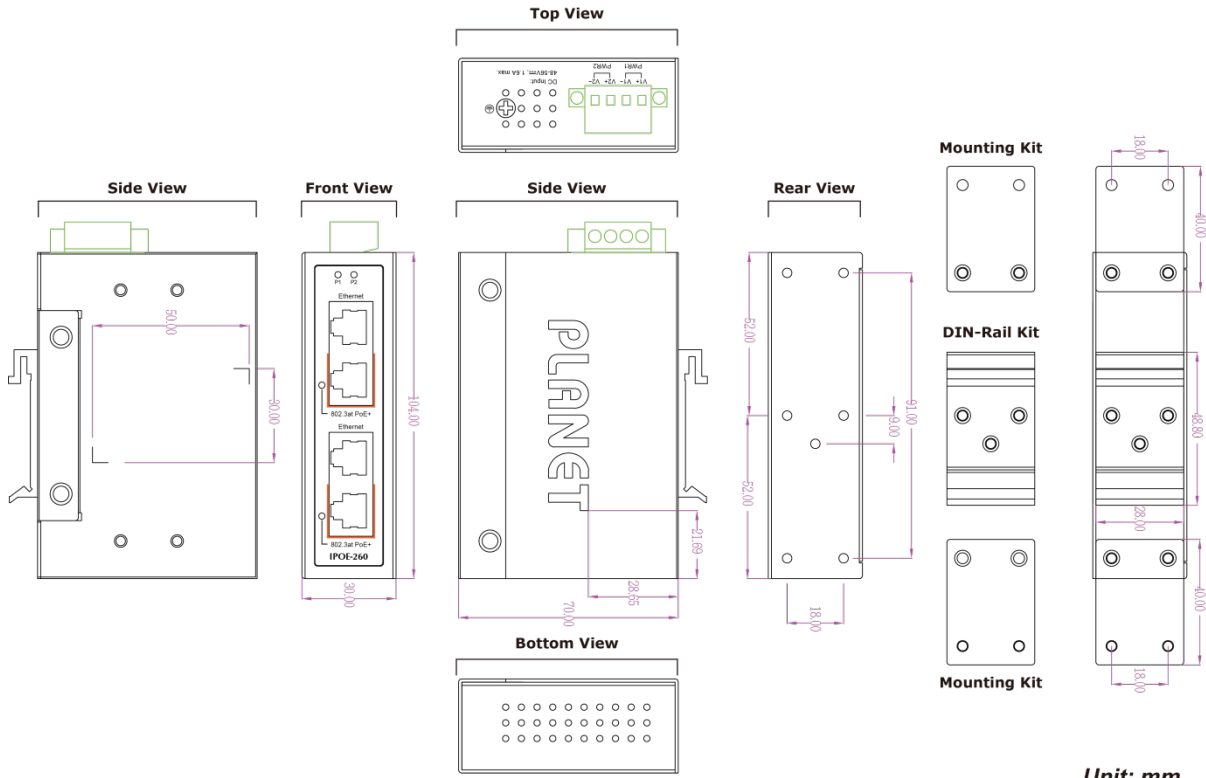
3.3 PHYSICAL SPECIFICATIONS:

- **Dimensions (W x D x H)**
30 x 70 x 105 mm

- **Weight**
280g

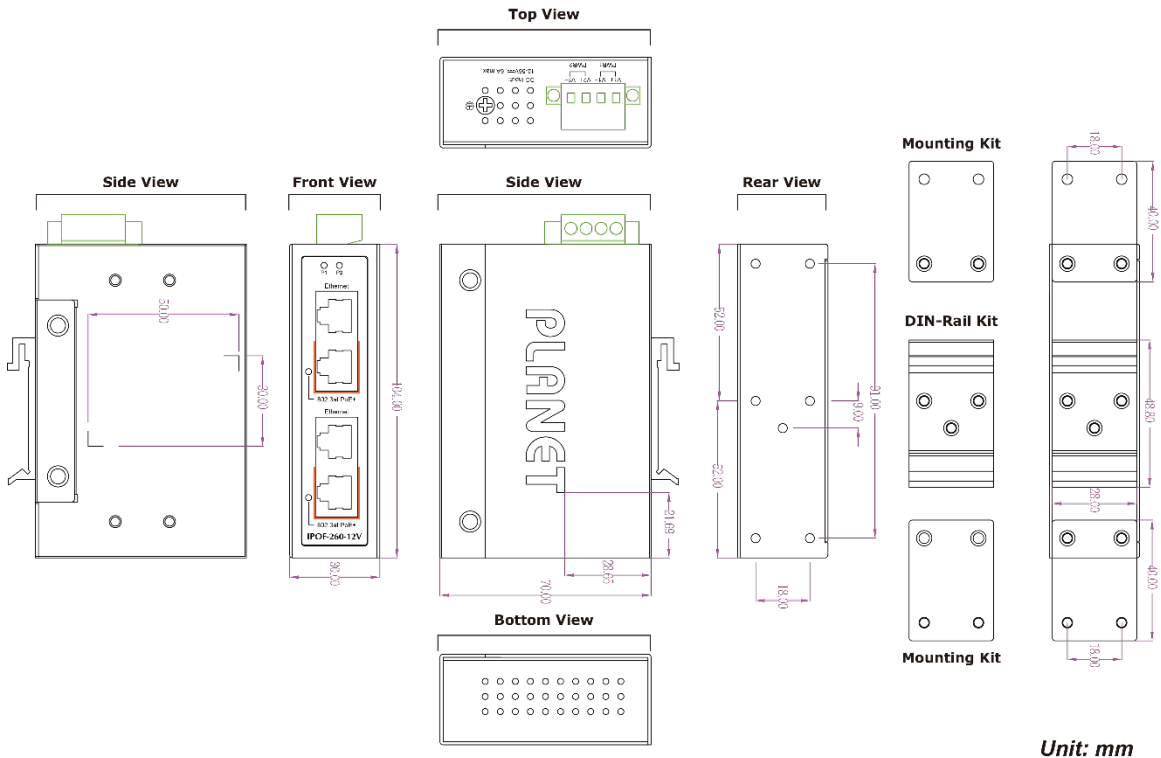
● **Dimensions**

IPOE-260:



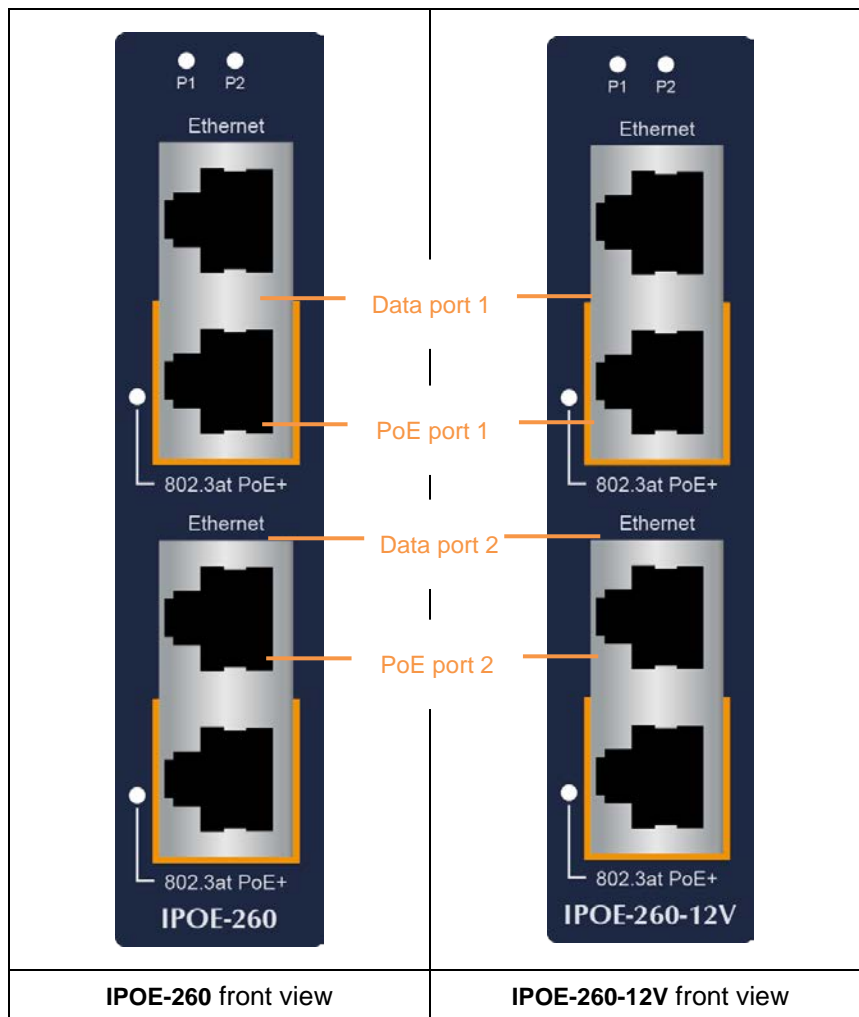
Unit: mm

IPOE-260-12V:



Unit: mm

● **Front Panel**



● **LED Indicators**

LED	Color	Function
P1	Green	Lights to indicate power input 1 has power.
P2	Green	Lights to indicate power input 2 has power.
802.3at PoE+ PoE-in-Use	Green	Lights to indicate the device is providing PoE power to 802.3af PD.
	Green + Amber	Lights to indicate the device is providing PoE power to 802.3at PD.

3.4 ENVIRONMENTAL SPECIFICATIONS

● **Operating:**

Temperature: -40 degrees C ~ 75 degrees C

Relative Humidity: 5% ~ 90% (non-condensing)

● **Storage:**

Temperature: -40 degrees C ~ 75 degrees C

Relative Humidity: 5% ~ 90% (non-condensing)

3.5 ELECTRICAL SPECIFICATIONS

- Input Voltage:**

IPOE-260: DC 48 to 56V

IPOE-260-12V: DC 12 to 56V

- Power Consumption:**

IPOE-260:

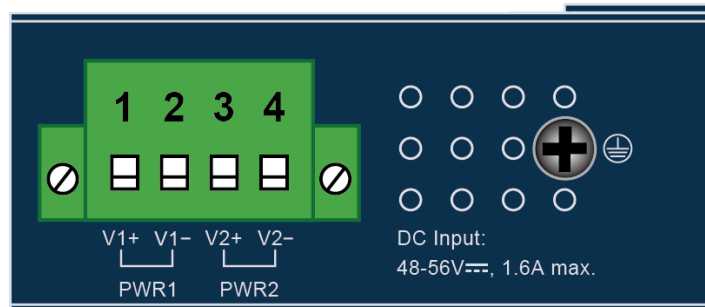
	48V DC Input	56V DC Input
System On (Without PoE)	1.4 watts / 4.8 BTU/hr	1.7 watts / 35.8 BTU/hr
Full loading with PoE function	75 watts / 255.9 BTU	80 watts / 273 BTU

IPOE-260-12V:

	12V DC Input	24V DC Input	48V DC Input
System On (Without PoE)	2.2 watts / 7.5 BTU/hr	3.4 watts / 11.6 BTU/hr	3.8 watts / 13 BTU/hr
Full loading with PoE function	79.8 watts / 272.3 BTU	78 watts / 266.1 BTU	79.5 watts / 271.3 BTU

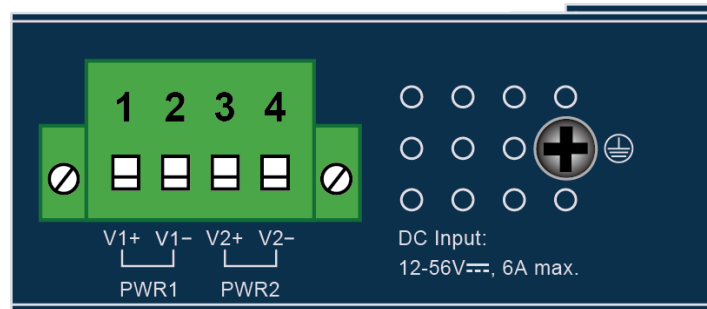
- Power Input PIN Definition:**

IPOE-260:



1	2	3	4
Power 1	Power 2		
+	-	+	-

IPOE-260-12V:



1	2	3	4
Power 1		Power 2	
+	-	+	-

3.6 REGULATORY COMPLIANCE

FCC Part 15 Class A, CE

3.7 RELIABILITY

MTBF > 50,000 hrs @ 25 degrees C

3.8 BASIC PACKAGING

- The Industrial PoE+ Injector Hub x 1
- User's Manual x 1
- Wall-mount Kit x 1
- Dust Cap x 4

3.9 PACKING INFORMATION

IPOE-260:

Box Dimensions (W x D x H):	205 x 144 x 46 mm
Gross Weight:	0.39 kg
Carton Dimensions (W x D x H):	435 x 325 x 280 mm
Total Weight:	9 kg
Quantity:	20pcs per carton

IPOE-260-12V:

Box Dimensions (W x D x H):	205 x 144 x 46 mm
Gross Weight:	0.41 kg
Carton Dimensions (W x D x H):	435 x 325 x 280 mm
Total Weight:	9.4 kg

Quantity:	20pcs per carton
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