

# **IPOE-175**

# Industrial IP67 1-Port 60W 802.3bt PoE++ Injector (-40~75 degrees C)



#### Ideal for Powered Devices that Consume High Power

Planet IPOE-175 Industrial **IP67-rated** Single-port **802.3bt PoE ++** Injector provides a maximum of up to **60 watts** for PoE output port, transmitting both the Gigabit Ethernet data and 802.3bt PoE power over the UTP cable. It is specifically designed for such powered devices (PDs) as PTZ network cameras, PTZ speed dome cameras, color touch-screen voice over IP (VoIP) telephones, multi-channel (11a/b/g/n) wireless LAN access points and other network devices that need a higher power to work stably.



#### Weather-proof RJ45 Ethernet Connector and Shielded Plug

The IPOE-175 is ideal for installing an extended range of outdoor PoE devices such as outdoor PoE wireless access points, outdoor PoE IP cameras, outdoor PoE IP intercoms and many more. The IPOE-175 is equipped with 3 waterproof cable glands for direct-attach applications. Assembled with waterproof cable gland, it can make the general RJ45 connector weather-proof and provides tight and strong connection. Moreover, it comes with the industrial protection rating of IP67 capable of withstanding humidity, dirt, dust, shock, vibrations, heat and cold.

#### Environmentally-hardened Design

With industrial-level IP67-rated aluminum case, the IPOE-175 provides a high level of immunity against electromagnetic interference, and is able to protect itself from dust and water ingress and to operate under the temperature range from -40 to 75 degrees C. All these features ensure the highest level of reliability for mission-critical applications in any difficult environment.

## **Physical Port**

- Two 10/100/1000BASE-T Gigabit RJ45 ports
  - 1-port Data + Power output
  - 1-port Data input
- One 2-pin terminal block for power input. (Power Range: 24 ~ 56V DC)

### Power over Ethernet

- 1-port data + power output
  - Complies with IEEE 802.3bt Power over Ethernet plus plus PSE
  - Compatible with IEEE 802.3at PoE+ powered devices
  - Provides DC 55V power over RJ45 Ethernet cable to device with Ethernet port
  - Supports total PoE budget up to 60 watts for PoE output port
  - Auto detects powered device (PD)
  - Remote power feeding up to 100m

### Industrial Case and Installation

- · IP67-rated aluminum case
- · LED indicators for power LED and PoE-in-use
- · Wall-mount design
- Supports 6KV DC Ethernet ESD protection
- -40 to 75 degrees C operating temperature
- · Plug and Play installation

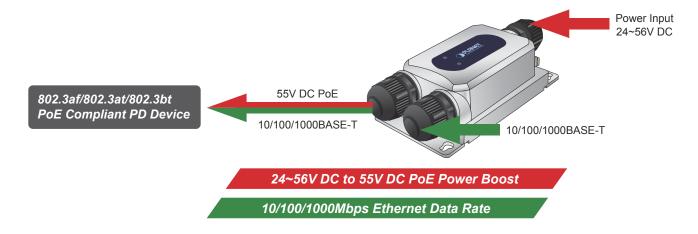




# Environmental Adaptations in Outdoor Area

#### Convenient and Reliable Power System

To facilitate the 802.3bt PoE++ usage with commonly used **24~56V DC** power input for transportation and industrial-level applications, the IPOE-175 adopts 24~56V DC to 55V **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.



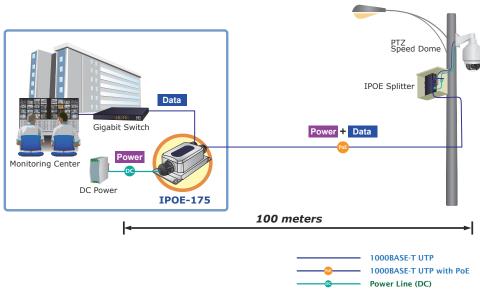
#### **Robust Protections**

The IPOE-175 provides ±8KV DC for Ethernet ESD protection and ±6KV surge immunity to improve product stability and protects users' networks, making sure the flow of operation does not fluctuate.

#### Making Network Easier and More Reliable

The IPOE-175 can deliver 60-watt 55V DC power over Cat.5/5e/6 Ethernet cables which allow data and power to transmit simultaneously through the cable between the Injector (IPOE-175) and PoE PD or PoE++ Splitter (IPOE-173S). The maximum distance between the Injector and Splitter is 100 meters. As the IPOE-175 is also backward compatible with IEEE 802.3at PoE+ PD or PoE Splitter, the system administrator only has to use one single RJ45 Ethernet cable to carry both power and data to another device. It would make the network deployment easier and more reliable.

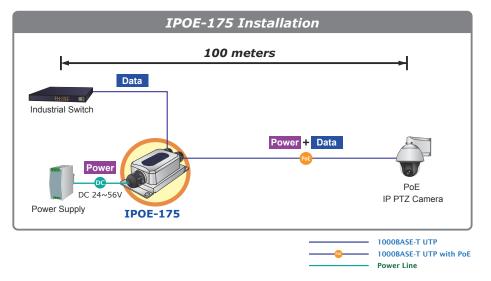




## **Applications**

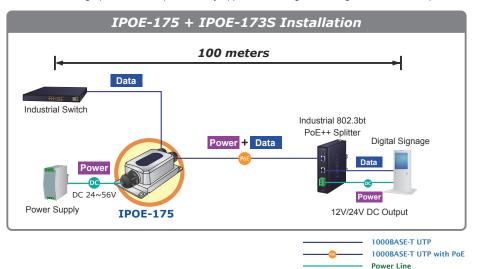
## Connecting to IEEE 802.3bt Compliant Powered Devices

Meeting the IEEE 802.3bt PoE++ standard, the IPOE-175 can directly connect and inject power via RJ45 Ethernet cable to any IEEE 802.3bt end-nodes like PTZ network cameras, PTZ speed dome cameras, color touch-screen VoIP telephones, multi-channel wireless LAN access points and other network devices.



#### IEEE 802.3bt Injector and Splitter Installation

For a place which is hard to find the power inlet, the IPOE-175 and IPOE-173S can operate as a pair to provide the easiest way to power the abovementioned Ethernet devices that need high power consumption for any applications designed for large industries, enterprises and communities.





# **Product Specifications**

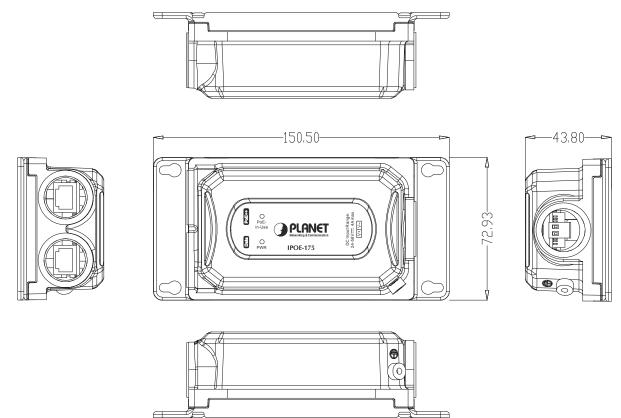
Product		IPOE-175			
Hardware Spe	cifications				
indianalo ope	Input Port	1 x 10/100/1000BASE-T " <b>D</b> a	ata" in RJ45 port		
Interface		1 x 10/100/1000BASE-T Ethernet with IEEE 802.3bt PoE+			
	Output Port	Port "Data + DC" out RJ45 port			
		1 x 2-pin terminal block			
	Input Power Terminal Block	- Pin 1/2 for Power (Pin 1: V+ / Pin 2: V-)			
Data Rate		10/100/1000Mbps			
		PWR (Green)			
LED Indicators		PoE-in-use x 1 (Amber)			
Input Voltage		24~56V DC			
PowConsumption		Voltage	System on	Full Load (Max.)	
		DC 24V	1.2W	72W	
		DC 36V	1.44W	70.56W	
		DC 54V	1.71W	65.8W	
		DC 56V	2.24W	62.1W	
ESD Protection		Air 8KV DC			
		Contact 6KV DC			
Surge Protection		6KV			
Enclosure		IP67-rated and IK10 aluminum metal case			
Installation		Wall-mount ear			
Dimensions (W x D x H)		150 x 43.8 x 72.94 mm			
		169.85 x 43.8 x 72.94 mm, with cable gland			
Weight		339g			
-		373g (with three waterproof cable glands)			
MTBF		>100,000 hours			
Notwork Cabl	<u>_</u>	10BASE-T: UTP category 3, 5 cable (≤100m) 100BASE-TX: UTP category 5,5e cable (≤100m)			
Network Cable		100BASE-TX. 0TP category 5e,6 cable(<100m)			
Power over Et	hernet	1000B/IOE 1. OTT category			
r ower over Ethemet		IEEE 802.3bt PoE++ type 3 PSE			
PoE Standard		Backward compatible with IEEE 802.3at PoE+			
PoE Power Supply Type		802.3bt/PoH (Power over HDBaseT)			
		End-span/Mid-span			
		55V DC			
PoE Power Output		Max. 60 watts to 802.3bt PoE++ PD			
		Max. 60 watts to PoH PD			
		Max. 30 watts to 802.3at PoE+ PD			
Power Pin Assignment		802.3bt/PoH: 1/2 (-), 3/6 (+), 4/5 (+), 7/8 (-)			
		End-span: 1/2 (-), 3/6 (+)			
		Mid-span: 4/5 (+), 7/8 (-)			
Standards Cor	nformance				
Regulatory Co	ompliance	FCC Part 15 Class A			
		CE			
Stability Testing		IEC 60068-2-32 (Free fall)			
		IEC 60068-2-27 (Shock)			
		IEC 60068-2-6 (Vibration)			
		IEEE 802.3 10BASE-T Ether			
		IEEE 802.3u 100BASE-TX Fast Ethernet			
Standards Conformances		IEEE 802.3ab 1000BASE-T Gigabit Ethernet			
		IEEE 802.3af Power over Ethernet			
		IEEE 802.3at Power over Ethernet Plus IEEE 802.3bt Power over Ethernet Plus Plus			
Environment		ILEE OUZ.SUL POWEI OVER EL			
Environment	nnerature	$-40 \sim 75$ degrees C			
Operating Ten		-40 ~ 75 degrees C -40 ~ 85 degrees C			
Storage Temperature		-40 ~ 85 degrees C 5 ~ 95% (non-condensing)			
Humidity		5 - 55 / (non-condensing)			



**IPOE-175** 

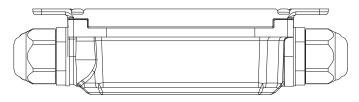
## Dimension

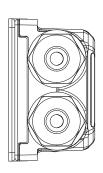
• IPOE-175 without waterproof cable glands

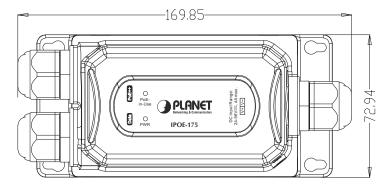


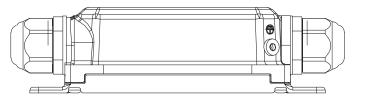
Unit: mm

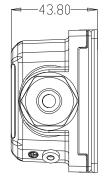
• IPOE-175 with waterproof cable glands











Unit: mm



# **Ordering Information**

IPOE-175

Industrial IP67 1-Port 60W 802.3bt PoE++ Injector (-40~75 degrees C)

## **Related Products**

IPOE-E302	Industrial IP67 802.3bt PoE++ Extender(-40~75 degrees C)		
IPOE-165	Industrial IP67 1-Port 802.3at PoE+ Injector (-40~75 degrees C)		
IPOE-173S	Industrial IEEE 802.3bt PoE++ Splitter		
IPOE-171-95W	Industrial Single-Port 10/100/1000Mbps 802.3bt PoE++ Injector (95 Watts, -40~75 degrees C, 12~48V DC)		
IPOE-171-60W	Industrial Single-Port 10/100/1000Mbps 802.3bt PoE++ Injector (60 Watts, -40~75 degrees C)		
IPOE-270 /IPOE-270-12V	Industrial 2-port Multi-Gigabit 802.3bt PoE++ Injector Hub		
PWR-60-24	60W 24V DC Single Output Industrial DIN-rail Power Supply (-20 ~ 70 degrees C)		
PWR-75-24	75W 24V DC Single Output Industrial DIN-rail Power Supply (-20 ~ 70 degrees C)		
PWR-75-48	48V, 75W Din-rail Power Supply (NDR-75-48, adjustable 48-56V DC Output)		

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