

Industrial IP67 1-Port 60W 802.3bt PoE++ Injector



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.



Environmental Adaptations in Outdoor Area

Physical Port

- **Two 10/100/1000/2500BASE-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 PSE
 - Compatible with IEEE 802.3at PoE+ powered devices
 - Provides DC 56V 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

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 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.

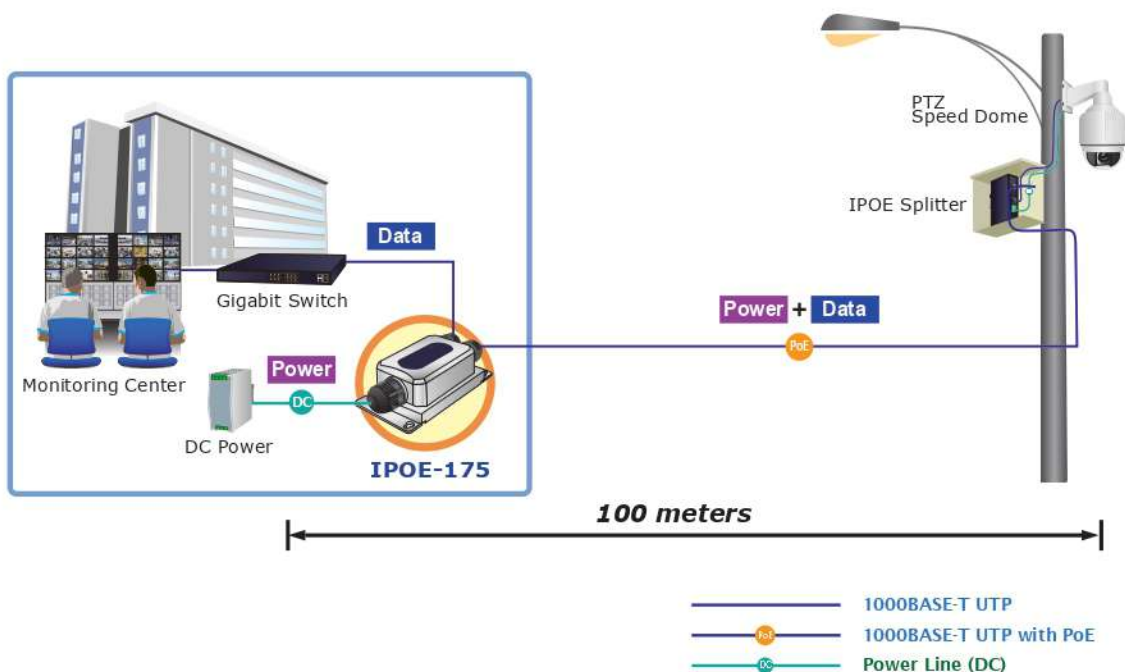


Robust Protection

The IPOE-175 provides $\pm 8\text{KV}$ DC for Ethernet ESD protection and $\pm 6\text{KV}$ 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

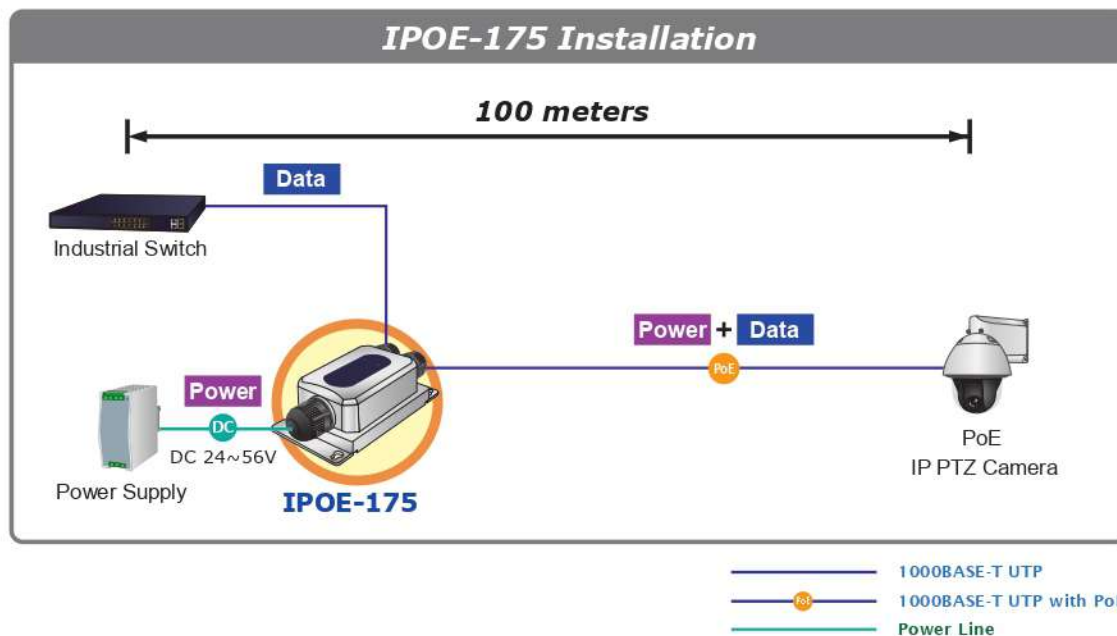
The IPOE-175 can deliver 60-watt 54V DC power over Cat.5/5e/6/6A Ethernet cables which allow data and power to transmit simultaneously through the cable between the Injector (IPOE-175) and PoE PD or PoE++ Splitter (IPOE-173S). The maximum distance between the Injector and Splitter is 100 meters. As the 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

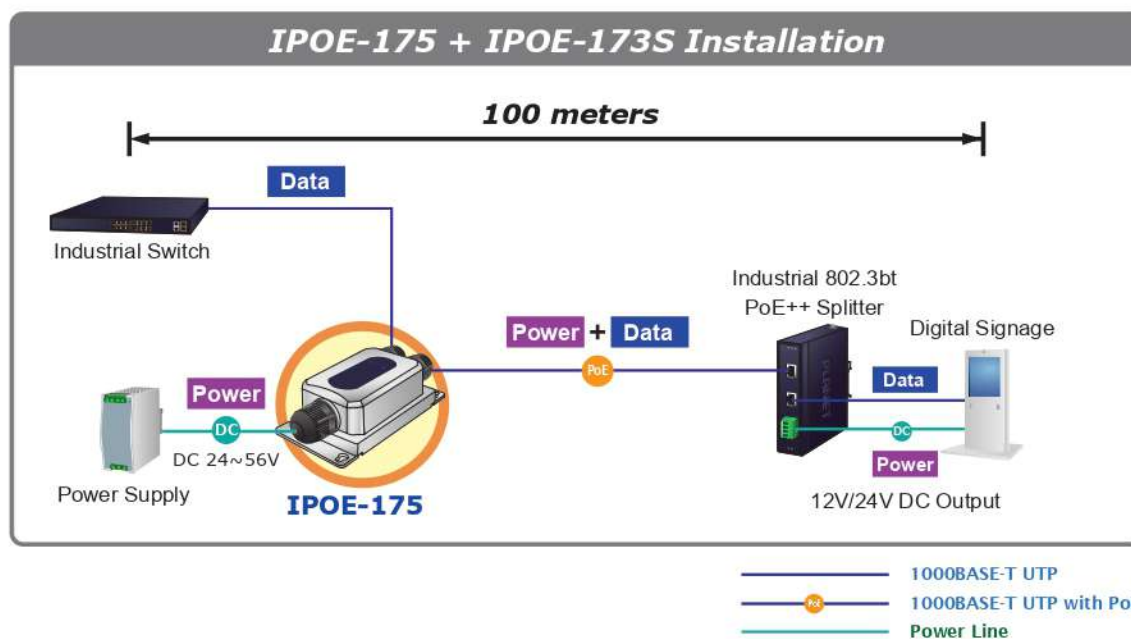
Connecting to IEEE 802.3bt Compliant Powered Devices

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 above-mentioned Ethernet devices that need high power consumption for any applications designed for large industries, enterprises and communities.

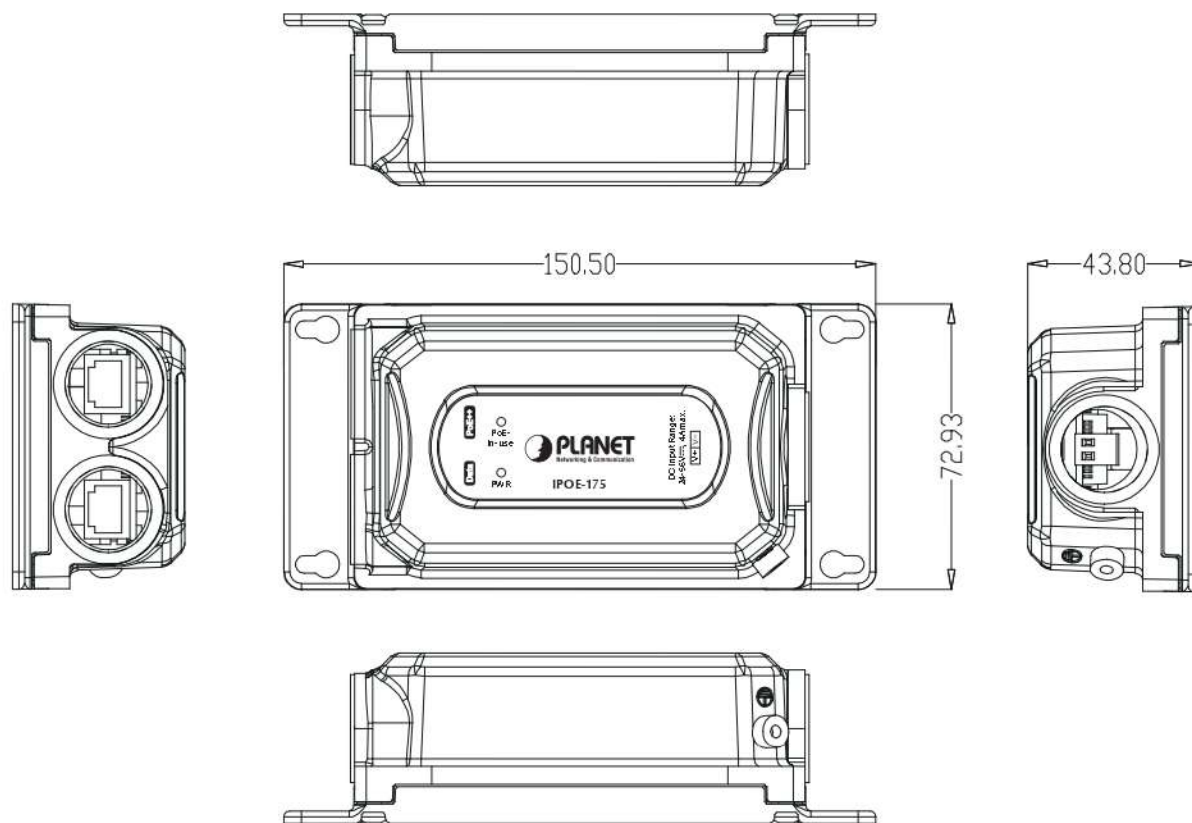


Product Specifications

Product		IPOE-175	
Hardware Specifications			
Interface	Input Port	1 x 10/100/1000/2500BASE-T “Data” in RJ45 port	
	Output Port	1 x 10/100/1000/2500BASE-T Ethernet with IEEE 802.3bt PoE++ “Data + DC” out RJ45 port	
	Input Power Terminal Block	1 x 2-pin terminal block - Pin 1/2 for Power (Pin 1: V+ / Pin 2: V-)	
Data Rate		10/100/1000/2500Mbps	
LED Indicator		PWR (Green) 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
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		485g	
MTBF		>100,000 hours	
Network Cable		10BASE-T: UTP category 3, 5 cable (≤100m) 100BASE-TX: UTP category 5,5e cable (≤100m) 1000BASE-T: UTP category 5e,6 cable(≤100m) 2500BASE-T: UTP category 5e, 6, 6A cable(≤100m)	
Power over Ethernet			
PoE Standard		IEEE 802.3bt PoE++ type 3 PSE Backward compatible with IEEE 802.3at PoE+	
PoE Power Output		802.3bt End-span/Mid-span	
PoE Power Supply Type		55V DC Max. 60 watts to 802.3bt PoE++ PD Max. 30 watts to 802.3at PoE+ PD	
Power Pin Assignment		802.3bt: 1/2 (-), 3/6 (+), 4/5 (+), 7/8 (-) End-span: 1/2 (-), 3/6 (+) Mid-span: 4/5 (+), 7/8 (-)	
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 Conformances		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 Plus IEEE 802.3bt Power over Ethernet Plus Plus	
Environment			
Operating Temperature		-40 ~ 75 degrees C	
Storage Temperature		-40 ~ 85 degrees C	
Humidity		5 ~ 95% (non-condensing)	

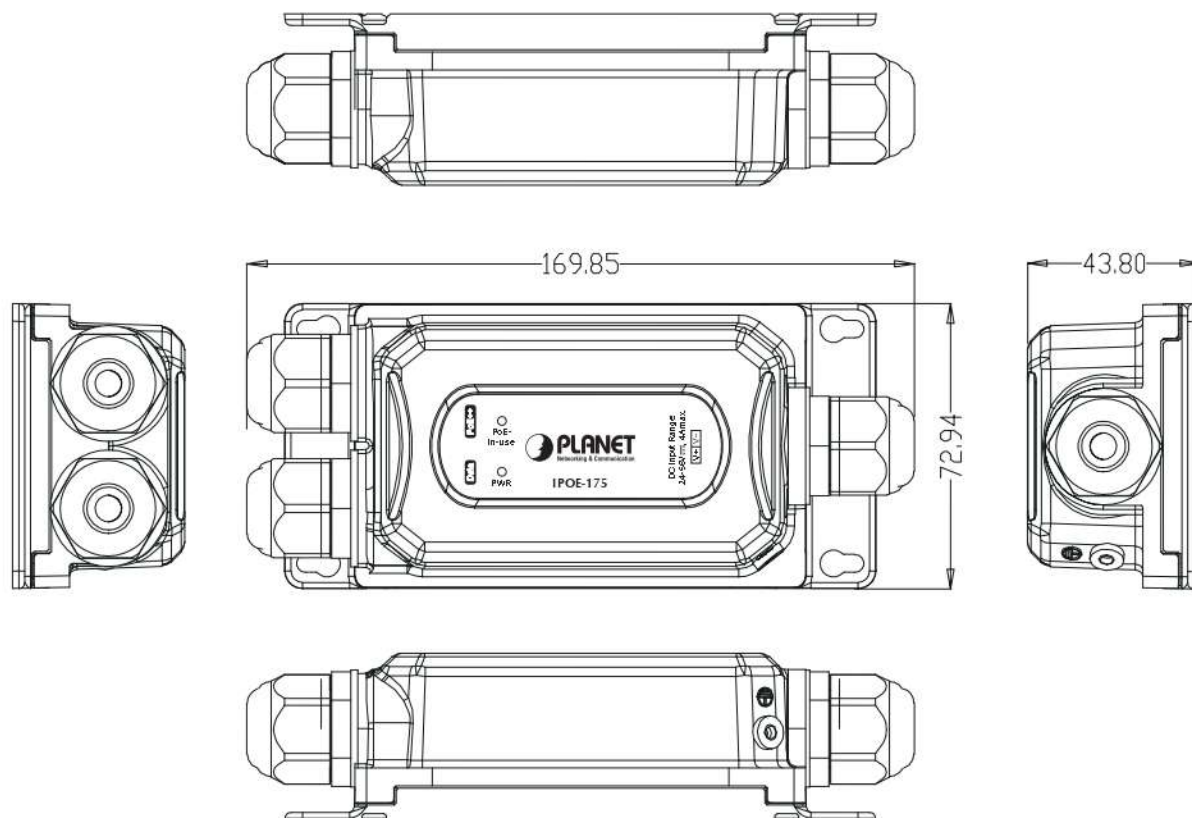
Diagram

- 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)
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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 Single-Port 10/100/1000Mbps 802.3bt PoE++ Splitter
IPOE-175S	Industrial IP67 802.3bt PoE++ Splitter (DC 12V, -40~75 degrees C)
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 /	48V, 75W Din-rail Power Supply (NDR-75-48, adjustable 48-56V DC Output)
IPOE-270-12V	Industrial 2-port Multi-Gigabit 802.3bt PoE++ Injector Hub
PWR-75-48	48V, 75W Din-rail Power Supply (NDR-75-48, adjustable 48-56V DC Output)
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)

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IPOE-175