

Industrial Single-Port 10Gbps 802.3bt PoE++ Splitter



Highly Convenient, Advanced Multi-Gigabit and Robust Industrial PoE++ Splitter

PLANET IPOE-176S is an Industrial-grade 802.3bt Power over Ethernet Splitter which delivers the Ethernet digital data and PoE power from an 802.3bt PoE++ type-4 PSE (power source equipment) over an UTP cable. It comes with a selectable **12V/19V/24V** DC DIP switch, enabling to deliver a maximum of **70-watt** power output to a non-PoE device. It is also equipped with two **10M/100M/1G/2.5G/5G/10GBASE-T RJ45 copper interfaces** to handle extremely large amounts of data transmission. To fulfill the growing industrial applications, the IPOE-176S is designed to work under the operating temperature range from -40 to 75 degrees C. The IPOE-176S is an ideal solution to transfer power to a traditional network device with high power demand directly without the need to install additional power outlets and electrical cabling in the industrial environment.



Quick and Easy 802.3bt PoE++ Network Deployment

If the existing network deployment consists of non-PoE powered devices that require high power to function, the IPOE-176S, powered by an ultra PoE power sourcing equipment, is able to feed the PDs with 802.3bt PoE++ as the splitter can split the data and power into two streams. The PDs get their power through the splitter's DC jack

Interface

- 2 **Multi-Gigabit Speed** RJ45 interfaces
 - 1-port **Data + Power input**
 - 1-port **Data output**
- 2 DC output (4-pin terminal block)
- 1 12V/19V/24V DC DIP switch

Power over Ethernet

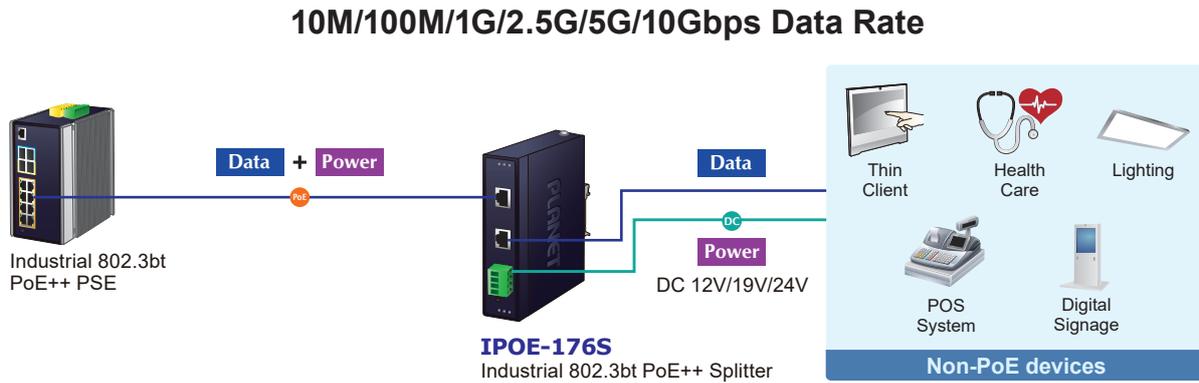
- Complies with 802.3bt PoE++ Power over Ethernet end-span + mid-span PSE
- Backward compatible with 802.3at PoE+
- Splits the PoE power over RJ45 Ethernet cable into 12V/19V/24V DC output
- Supports power output up to 70 watts
- Remote power feeding up to 100 meters

Hardware

- IP30 slim metal case
- DIN-rail or wall-mount design
- Supports high surge/ESD protection
- -40 to 75 degrees C operating temperature

and the RJ45 interface accepts only Ethernet data. The following non-PoE PDs can be turned into an PoE++ environment with the IPOE-176S:

- PTZ speed dome camera
- Thin client
- AIO (All-in-One) touch PC
- Remote digital signage display
- Non-PoE network devices that need higher power to work normally



The IPOE-176S frees the network device deployment from restrictions of power outlet locations, thus eliminating the costs for additional AC wiring and reducing the installation time.

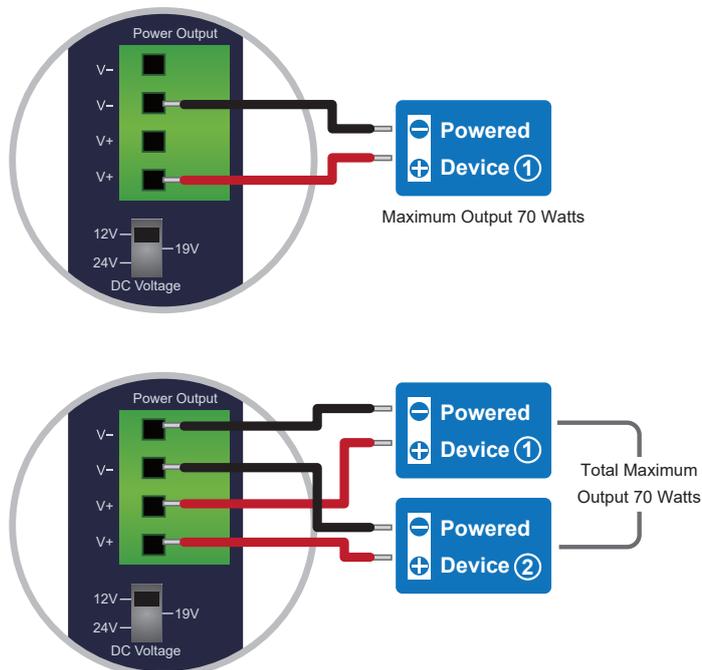
Innovative, Selectable DC Power Output Voltage

Via the innovative 12/19/24 volt DIP switch on the front panel, the IPOE-176S can supply 24V DC power to industrial equipment or 12V/19V DC output to the common network devices. It highly increases the flexibility of the product applications.

Dual Power Output Capability

The IPOE-176S shares its 70-watt output power with not only one power-hungry device but also two non-PoE Ethernet devices simultaneously through a 4-pin terminal block. For example, the two power output can be applied as shown below to completely solve the need of electric source:

- IP camera (Power 1) + Outdoor housing with fan and heater (Power 2)
- IP camera (Power 1) + Pan and tilt motor (Power 2)
- Analog camera (Power 1) + IP video server (Power 2)



Environmentally Hardened Design

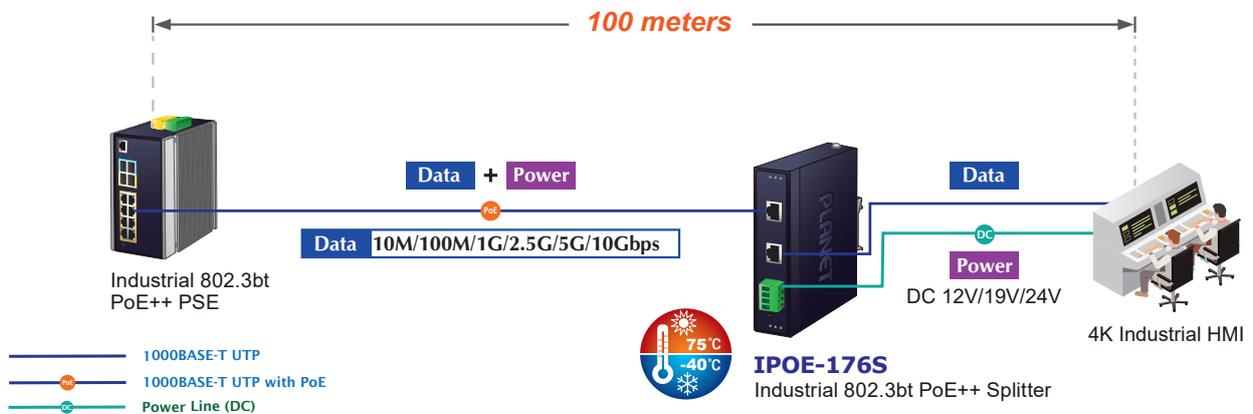
With the compact, slim-type IP30 industrial case, the space-saving industrial 802.3bt PoE++ splitter IPOE-176S can be placed in almost any difficult environment. It allows either DIN-rail or wall mounting for efficient use of cabinet space. Being able to operate under the temperature range from **-40 to 75 degrees C**, the IPOE-176S is the ideal product for co-working with industrial 802.3bt PoE++ type-4 injector which can feed the power to non-PoE devices while also supporting **Multi-Gigabit connection speeds**.



Applications

802.3bt PoE++ Switch and Splitter Installation

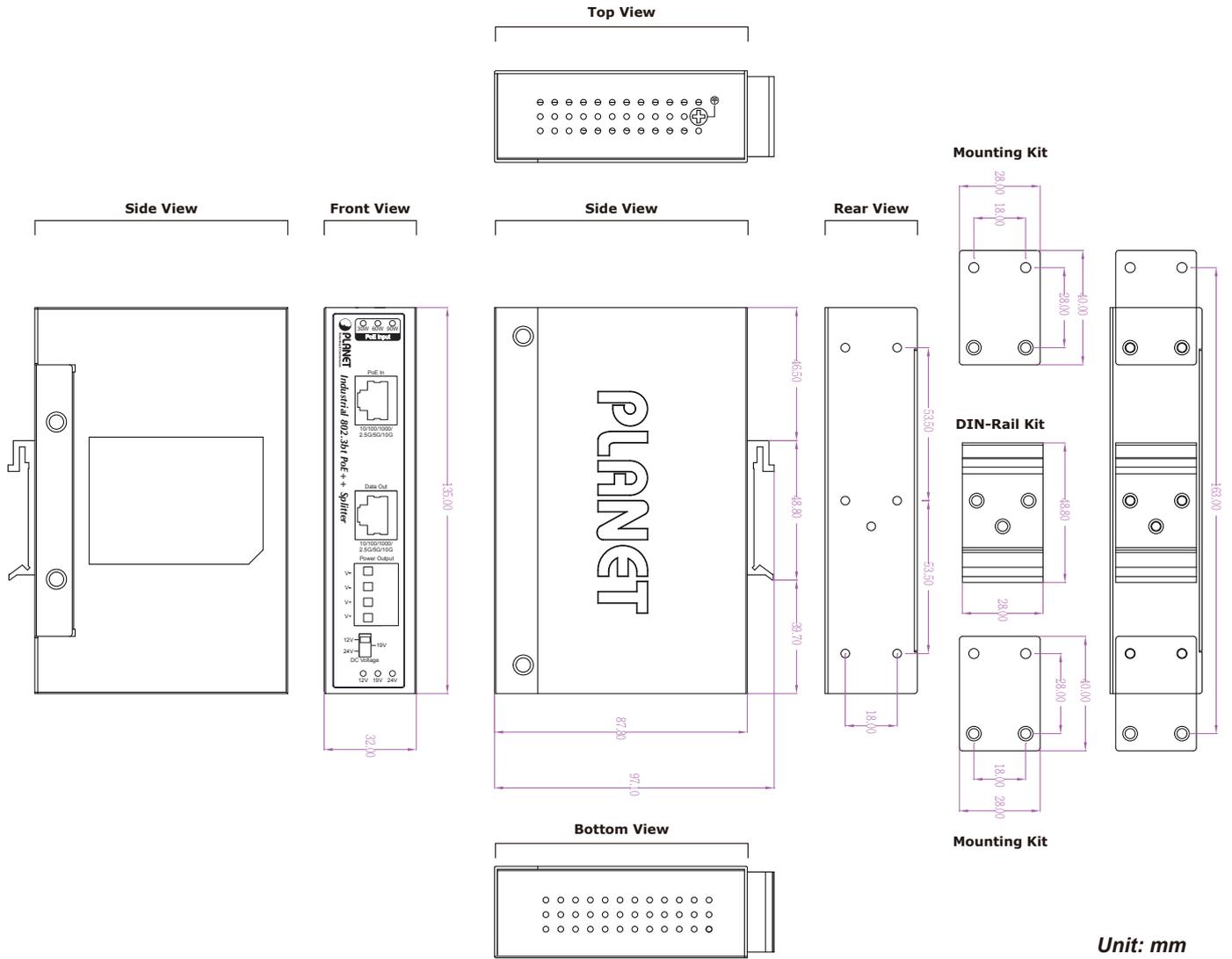
For a place which is hard to find the power inlet or a matching connection speed, the IPOE-176S separates digital data with **Multi-Gigabit speed (10M/100M/1G/2.5G/5G/10Gbps)** and power into three optional outputs (**12V/19V/24V DC**) to non-PoE devices such as 4K Industrial HMI, 5G-NR ODU points and other network devices at distance up to 100 meters.



Specifications

Product		IPOE-176S
Hardware Specifications		
Interface	PoE Input Port	1 10M/100M/1G/2.5G/5G/10G BASE-T RJ45
	Data Output Port	1 10M/100M/1G/2.5G/5G/10G BASE -T RJ45
	DC Out Plug Connector	1 removable 4-pin terminal block
	DIP Switch	12V/19V/24V DC output
LED Indicators		PoE Input: 30W (Green), 60W (Green), 90W (Green) DC Voltage: 12V (Green), 19V (Green), 24V (Green)
Data Rate		10M/100M/1G/2.5G/5G/10Gbps
Dimensions (W x D x H)		32 x 87 x 135 mm
Weight		433g
Installation		DIN-rail/wall mountable
ESD Protection		4KV
EFT Protection		4KV
Enclosure		IP30 metal case
Power Requirements		4-pair 802.3at PoE+ and 802.3bt PoE++ PoE DC 48 ~ 54V
Power Consumption	System on with PoE input	12V DC: 5.5 watts 19V DC: 6.8 watts 24V DC: 7.6 watts
	Full loading with maximum 12V DC, 6.8A output	12V DC: 98.3 watts 19V DC: 98.5 watts 24V DC: 97.9 watts
Power Output	802.3 bt type 4 PoE++ input	12V DC, 6.8A (max.) 19V DC, 4.3A (max.) 24V DC, 3.3A (max.)
Network Cable		Twisted-pair cable up to 100 meters (328ft) 10BASE-T: 4-pair UTP Cat. 3, 4, 5, 5e, 6, 6A 100BASE-TX: 4-pair UTP Cat. 5, 5e, 6, 6A 1G/2.5G: 4-pair UTP Cat 5e/Cat 6/Cat 6A/ Cat 7 5G: 4-pair UTP Cat 6/Cat 6A/Cat 7 10G:4-pair UTP Cat 6A/Cat 7
Power over Ethernet		
PoE Standard		802.3 bt PoE++ 4-pair 802.3at PoE+
Power Output		DC 12V/19V/24V by DIP switch control
PoE Power Supply Type		End-span + Mid-span End-span Mid-span
Power Pin Assignment		1/2 (+), 3/6 (-); 4/5 (+), 7/8 (-) or 1/2 (-), 3/6 (+); 4/5 (+), 7/8 (-)
Remote Power Distance		1G/2.5G speed: 100M (max.) 5G/10G speed: 80M (max.)(cat6A/cat7)
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 802.3bz 2.5G/5G/10GBASE-T IEEE 802.3af Power over Ethernet IEEE 802.3at Power over Ethernet Plus IEEE 802.3bt 4-pair Power over Ethernet (Type 4)
Regulatory Compliance		FCC Part 15 Class A, CE
Environment		
Operating Temperature		-40~ 75 degrees C
Storage Temperature		-40~ 85 degrees C
Humidity		5 ~ 95% (non-condensing)

Dimensions



Ordering Information

IPOE-176S	Industrial Single-Port 10Gbps 802.3bt PoE++ Splitter
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Related Products

IPOE-173S	Industrial Single-Port 10/100/1000Mbps 802.3bt PoE++ Splitter (12V/19V/24V, -40~75 degrees C)
IPOE-171-60W	Industrial Single-Port 10/100/1000Mbps 802.3bt PoE++ Injector (60 watts, -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)
IGS-6325-8UP2S2X	Industrial L3 8-Port 10/100/1000T 802.3bt PoE + 2-Port 100/1000X SFP + 2-Port 10G SFP+ Managed Ethernet Switch
POE-173S	Single-Port 10/100/1000Mbps 802.3bt PoE++ Splitter

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