One-Port 10/100/1000Mbps 802.3bt PoE++ Injector



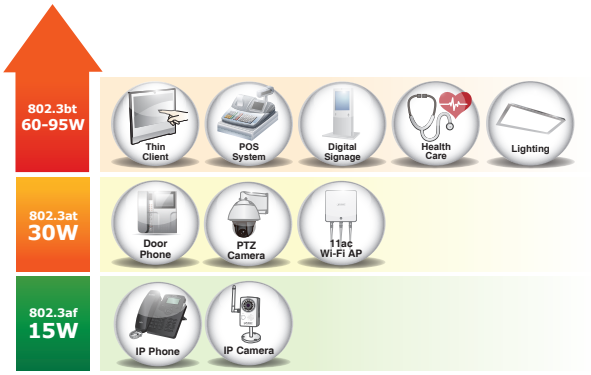
Advanced 802.3bt PoE Network Solution

PLANET POE-175-95 is a **1-Port 802.3bt Power over Ethernet Injector** with a maximum of up to **95 watts** of power output over Ethernet cables.



It is designed specifically to meet the demand for growing higher power required network equipment such as:

- PTZ speed dome camera
- All-in-one touch PC
- Remote digital signage display
- Other network devices that need higher power to work normally



The POE-175-95 delivers the Ethernet digital data with 54V DC power over the twisted-pair cables as a 95-watt Power over Ethernet Injector, and the connected ultra Power over Ethernet splitter, the POE-173S, will separate the digital data and the power into three optional outputs (**12V/19V/24V DC**) with distance up to 100 meters.

Interface

- 2 RJ45 interfaces
  - 1-port **Data + Power output**
  - 1-port **Data input**
- 1 AC100~240V input power socket
- 1 dip switch for selection of BT, UPoE or Legacy BT.

Power over Ethernet

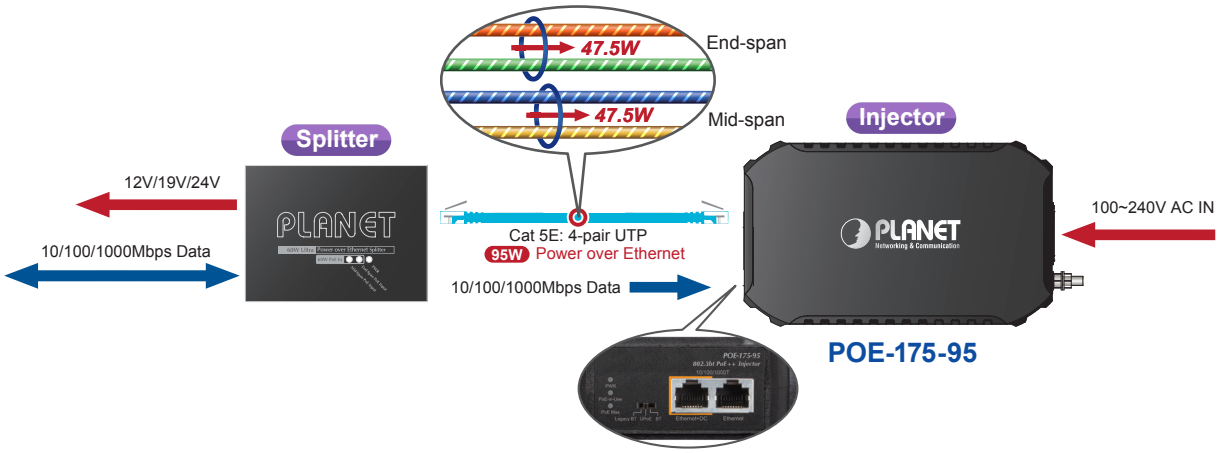
- Complies with IEEE 802.3 at/bt PoE end-span/mid-span PSE
- Supports PoE power up to 95 watts for PoE port
- Auto-detection of PoE IEEE 802.3at/bt equipment and devices from being damaged by incorrect installation
- Monitor the status of the total PoE usage in real time
- Remote power feeding up to 100m

Hardware

- All-in-one compact size design
- Internal power supply
- LED indicators for Power LED, PoE-in-Use LED and PoE Max. LED
- Wall-mount design

95 Watts of Power over 4-pair UTP

Instead of delivering power over 2-pair twisted UTP – be it end-span (Pins 1,2,3 and 6) or mid-span (Pins 4,5,7 and 8), it provides the capability to source up to 95 watts of power by using all the four pairs of standard Cat.5e/Cat. 6 Ethernet cabling.



PoE Standard	IEEE 802.3af (802.3at Type 1)	IEEE 802.3at (802.3at Type 2)	IEEE 802.3bt (802.3at Type 3)	IEEE 802.3bt (802.3bt Type 4)	UPoE
Maximum Power Delivered by PSE	15.4 watts	30 watts	60 watts	95 watts	95 watts
Power Available at PD	12.95 watts	25.5 watts	51 watts	71 watts	72 watts
Voltage Range	48V	50~57V	50~57V	52~57V	52~57V
Twisted-pair Used	2-pair		4-pair	4-pair	4-pair
Supported Modes	End-span or Mid-span		End-span + Mid-span	End-span + Mid-span	End-span + Mid-span
Supported Cabling	Cat. 3/5/5e/6		Cat. 5e/6	Cat. 5e/6	Cat. 5e/6

Dip Switch for PoE BT / UPoE / Legacy BT mode, built-in PoE Injector

The POE-175-95 provides power to those powered devices which do not fully follow the IEEE 802.3 af/at/bt standard. The UPoE and Legacy bt mode provide the PD with 60 to 95 watts power output voltage.

- **BT mode**: Powered devices that fully support IEEE 802.3 bt standards with output budget of 90W.
- **UPoE mode**: Powered devices that support Cisco UPoE standards or PoH standards with output budget 95W.
- **Legacy BT Mode**: PD devices that support capacitive or resistance electronic tag with output budget of 90W.



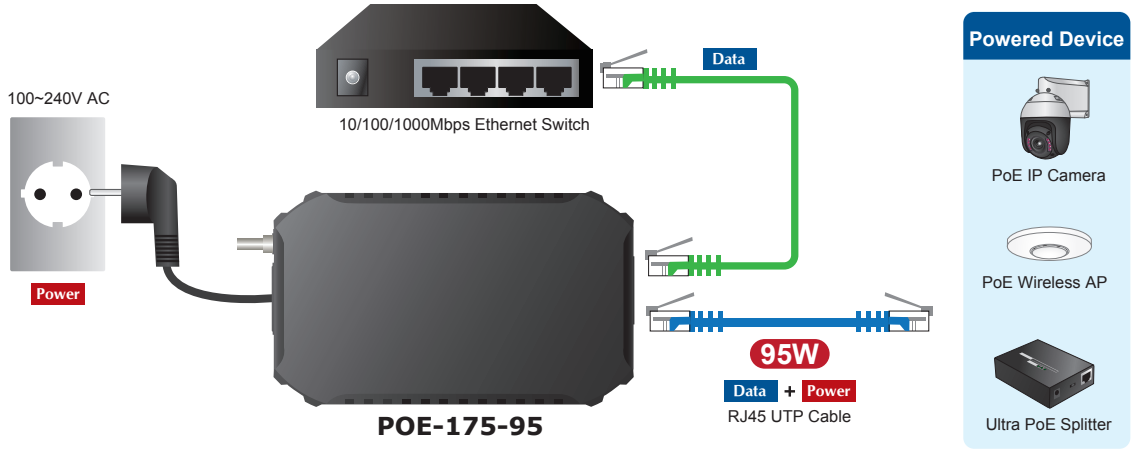
All-in-One and Compact Size Design

It is easy to install the PoE injector by way of **Plug and Play** and comes with simple troubleshooting, making it easy for business and home users to own it. Besides, the POE-175-95 comes in compact housing, and has a built-in internal power supply. On the side panel of the POE-175-95 features one 100-240V AC input socket, real-time LEDs (Power LED, PoE-in-Use LED and PoE Max LED) and two RJ45 ports -- Ethernet port and Ethernet+DC port. Simply plug in the Ethernet cables and AC power cord, and the POE-175-95 is ready to provide high-speed network communication and the 802.3bt PoE++ injector functions simultaneously with no need of software configuration.



Quick and Easy Cabling Installation for PoE Network Deployment

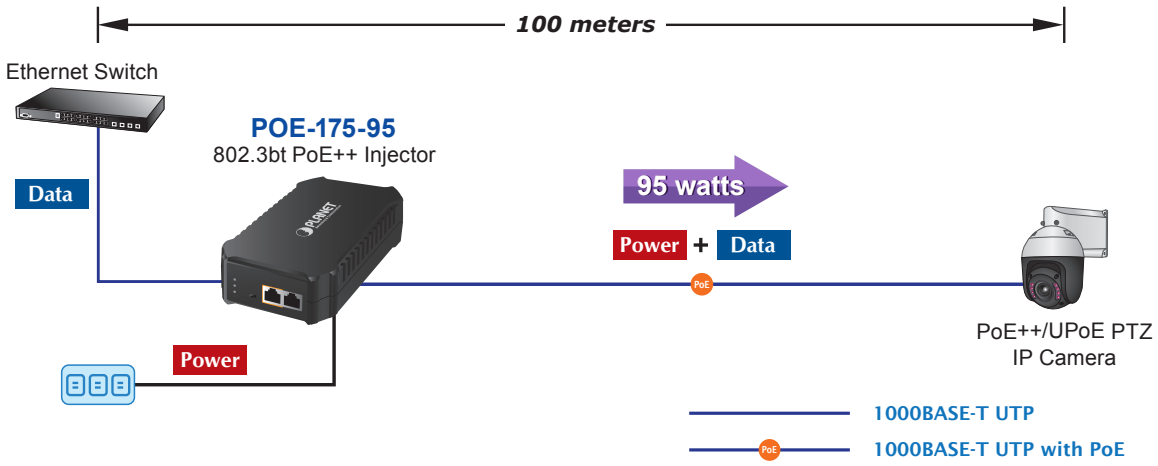
Backward compatible with both 802.3 af/at PoE standards, the POE-175-95 allows users to flexibly deploy standard and high powered devices to transfer data and power simultaneously through one Ethernet cable for up to 100 meters. The POE-175-95 frees the security IP camera and wireless AP deployment from restrictions of power outlet locations and the additional AC wiring. It thus reduces cables and eliminates the need for electrical outlets on the wall, ceiling or any unreachable place, and most of all, it reduces installation time.



Applications

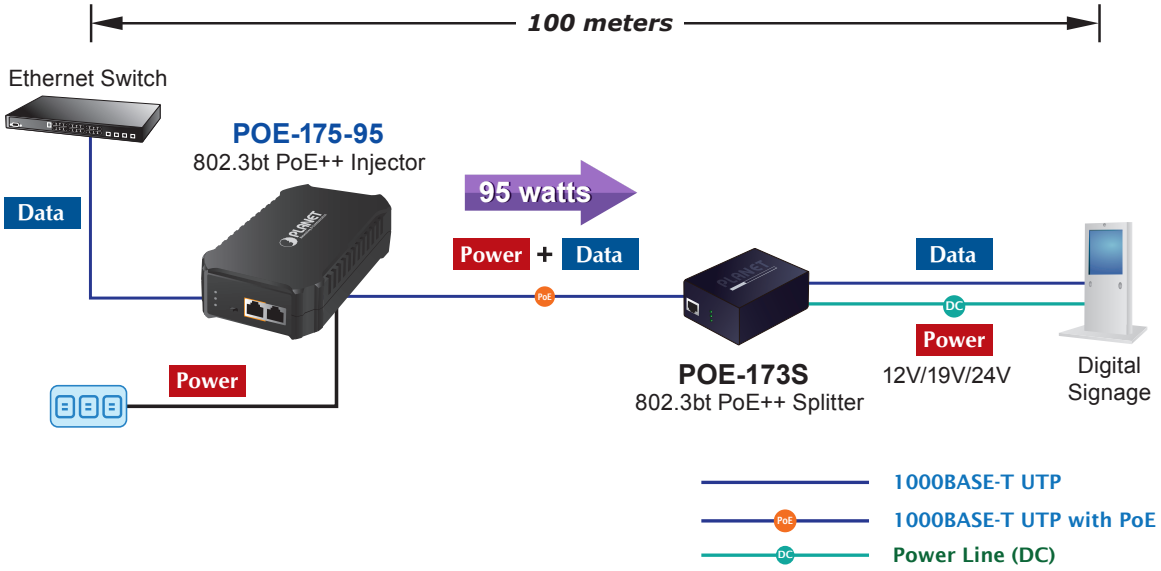
Installation of 802.3bt PoE Injector

Due to the backward capability of IEEE 802.3af/at/bt PoE standard, the POE-175-95 can directly connect with any IEEE 802.3af/at end nodes, such as PTZ (pan, tilt & zoom) speed dome network cameras, color touch-screen voice over IP (VoIP) telephones, and multi-channel wireless LAN access points.



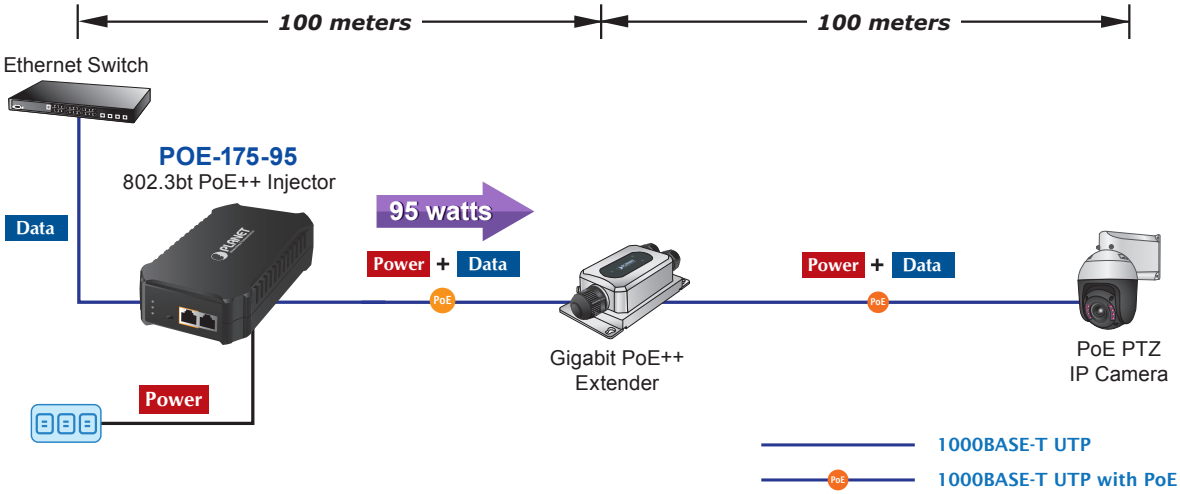
Installation of 802.3bt PoE Injector and Splitter

For a place which is hard to find the power inlet, the POE-175-95 and POE-173S operate as a pair to provide the easiest way to power your Ethernet devices which need high power input, such as PTZ network cameras, PTZ speed dome cameras, color touch-screen voice over IP (VoIP) telephones, and multi-channel wireless LAN access points installed on the top of the building or used in enterprise office or home.



Extended Installation of IEEE802.3bt Injector and PoE Network

Is 100-meter cable long enough for a wide range of IP surveillance deployments? The answer is certainly not. To achieve the benefits of IP surveillance and also the long-distance IP camera distribution, the POE-175-95 and PLANET PoE Extender, IPOE-E172, can be a quick and cost-effective option. In the simplest application, the PoE Extender enables a PoE IP camera to be installed up to 200 meters away from the POE-175-95. The POE-175-95 delivers PoE power over the first 100 meters to the PoE Extender over UTP cables, and then the PoE Extender forwards the Ethernet data and remaining PoE power to the remote PoE IP cameras.



Specifications

Product		POE-175-95
Hardware Specifications		
Interface	Input Port	1 x RJ45 STP Data In
	Output Port	1 x RJ45 STP PoE (Data + Power) Out
	AC Socket	1 x AC input socket
	Dip Switch	BT, UPoE or Legacy BT Mode
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
LED Indicators		PWR x 1 (**Green**) PoE-in-Use x 1 (**Green**) PoE Max x 1 (**Green**)
Data Rate		10/100/1000Mbps
Dimensions (W x D x H)		170 x 100 x 40 mm
Weight		443g
Unit Output Voltage		DC 54V
Power Requirements		AC 100-240V, 1.8A max.
Power Consumption		Max. 1 watt/3.41 BTU (No Loading) Max.111 watts/378.5 BTU (Full loading)
No. of Devices that can be powered		1
Power over Ethernet		
PoE DIP Switch		IEEE 802.3 at/bt PSE UPoE Legacy BT
PoE Power Output Budget		DC 54V / 95-watt PoE via 4-pair
PoE Power Output		Max. 95W@1 m cable Max. 73W@100 m cable
PoE Power Supply Type		End-span + Mid-span
Power Pin Assignment		Pair 1 End-span: 1/2 (-), 3/6 (+) Pair 2 Mid-span: 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 802.3bt 4-pair Power over Ethernet Type 4 IEEE 802.3at Power over Ethernet Plus
Regulatory Compliance		FCC Part 15 Class A, CE
Environment		
Operating Temperature		0 ~ 50 degrees C
Storage Temperature		-10 ~ 70 degrees C
Operating Humidity		5 ~ 90%, relative humidity, non-condensing
Storage Humidity		5 ~ 90%, relative humidity, non-condensing
Standard Accessories		
Package Contents		■ POE-175-95 ■ User's manual ■ Power cord ■ Ground cable

Ordering Information

POE-175-95	One-Port 10/100/1000Mbps 802.3bt PoE++ Injector (95 watts, internal power)

Related Products

POE-171A-95	Single-Port 10/100/1000Mbps 802.3bt PoE Injector (95 Watts)
POE-171A-60	Single-Port 10/100/1000Mbps 802.3bt PoE Injector (60 Watts)
POE-176-95	Single-Port 10Gbps 802.3bt PoE Injector (95 Watts)
POE-171	Single-Port 10/100/1000Mbps 60W Ultra PoE Injector
POE-172	Single-Port 10/100/1000Mbps Ultra PoE Injector (60 watts, internal power)
POE-173	60-watt Ultra Power over Ethernet Injector
POE-171S	60-watt Ultra Power over Ethernet Splitter with 12V/19V/24VDC output (10/100/1000Mbps)
POE-172S	Single-Port 10/100/1000Mbps Ultra PoE Splitter (12V/19V/24V)
POE-173S	Single-Port 10/100/1000Mbps 802.3bt PoE++ Splitter
POE-E304	1-Port Ultra PoE to 4-Port 802.3af/at Gigabit PoE Extender
IPOE-E174	1-Port Ultra PoE to 4-port 802.3af/at Gigabit PoE Extender
IPOE-175	Industrial IP67 1-Port 60W 802.3bt PoE++ Injector (-40~75 degrees C)

PLANET Technology Corporation

11F., No.96, Minquan Rd., Xindian Dist., New Taipei City 231, Taiwan (R.O.C.)

Tel: 886-2-2219-9518 Fax: 886-2-2219-9528

Email: sales@planet.com.tw www.planet.com.tw

PLANET reserves the right to change specifications without prior notice. All brand names and trademarks are property of their respective owners. Copyright © 2022 PLANET Technology Corp. All rights reserved.