1-Port Gigabit 802.3bt PoE++ Extender



Long Distance 802.3bt PoE++ and Gigabit Data Extension Solution

PLANET POE-E301 is a simple extender that extends both the **Gigabit Ethernet Data** and **IEEE 802.3bt/802.3at/802.3af Power over Ethernet** transmission distance over the standard 100m (328 ft.) Cat. 5/5e/6 UTP cable to 200m, 300m, and the maximum 400m. The POE-E301 can obtain a maximum of **95-watt** PoE power from **802.3bt PoE++** input port and the output port can supply a maximum of 65-watt power, providing a simple solution to achieve more wide-coverage network applications without requiring an external power adapter.



No matter how many PoE supported networking devices such as PoE IP cameras, PoE wireless access points and PoE IP phones are deployed, they are easily installed without the need of having an additional electrical outlet. However, limited by the UTP cabling, only up to 100 meters (328 ft.) of cable is used. Thus, the POE-E301 is designed as the extender to transmit both Gigabit Ethernet data and 802.3bt PoE++ power over another distance of 100m. By daisy-chaining multiple POE-E301s, distance can be tripled or quadrupled to meet your requirements.



With its ability to provide 802.3bt PoE++ and Gigabit Ethernet data extension, the POE-E301 is an ideal networking solution for service providers, campuses and public areas. It enables you to centrally manage the power easily, efficiently and cost-effectively no matter how remote the location is.

- Compliant with IEEE 802.3bt PoE++ Power over Ethernet Plus PSE and PD standard on POE in Port and POE out Port.
- Backward compatible with IEEE 802.3af/802.3at Power over Ethernet
- Supports PoE in BT and UPoE mode
- Complies with IEEE 802.3/802.3u/802.3ab 10/100/1000BASE-T
- Extends the range of PoE to more than 100 meters (328ft.).
- Automatically detects and protects PoE equipment from being damaged by incorrect installation
- Daisy-chain installation support
- Forwards both Ethernet data and PoE power to the remote device
- No external power cable installation required
- Compact size, wall-mountable design
- Plug and Play

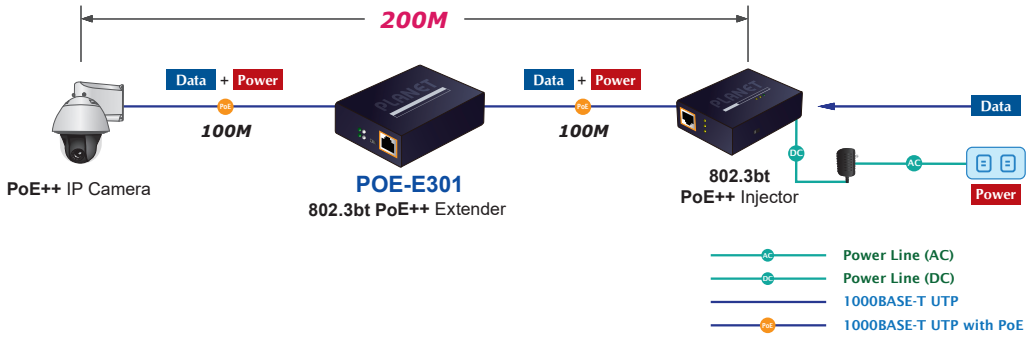
Plug and Play, and Easy Cabling Installation

The POE-E301 Gigabit 802.3af/at/bt PoE Extender is quite easy to be installed by the simple plug and play configuration. It is used between a power source equipment (PSE) and a powered device (PD). The POE-E301 injects power to the PD without affecting the data transmission performance. It offers a cost-effective and quick solution to double the standard range of PoE from 100 to 200 meters. The POE-E301 Compact 2-Port 802.3af/at/bt PoE Extender, suitable for use, features 2 1000Mbps auto-negotiation ports, of which the **"PoE IN"** port functions as **PoE (Data and Power)** input and the **"PoE OUT"** port on the other side functions as **PoE (Data and Power)** output. The **"PoE OUT"** port is also the power injector to transmit DC voltage via the Cat. 5/5e/6 cable and transfer data and power simultaneously between the PSE and a PD.

Applications

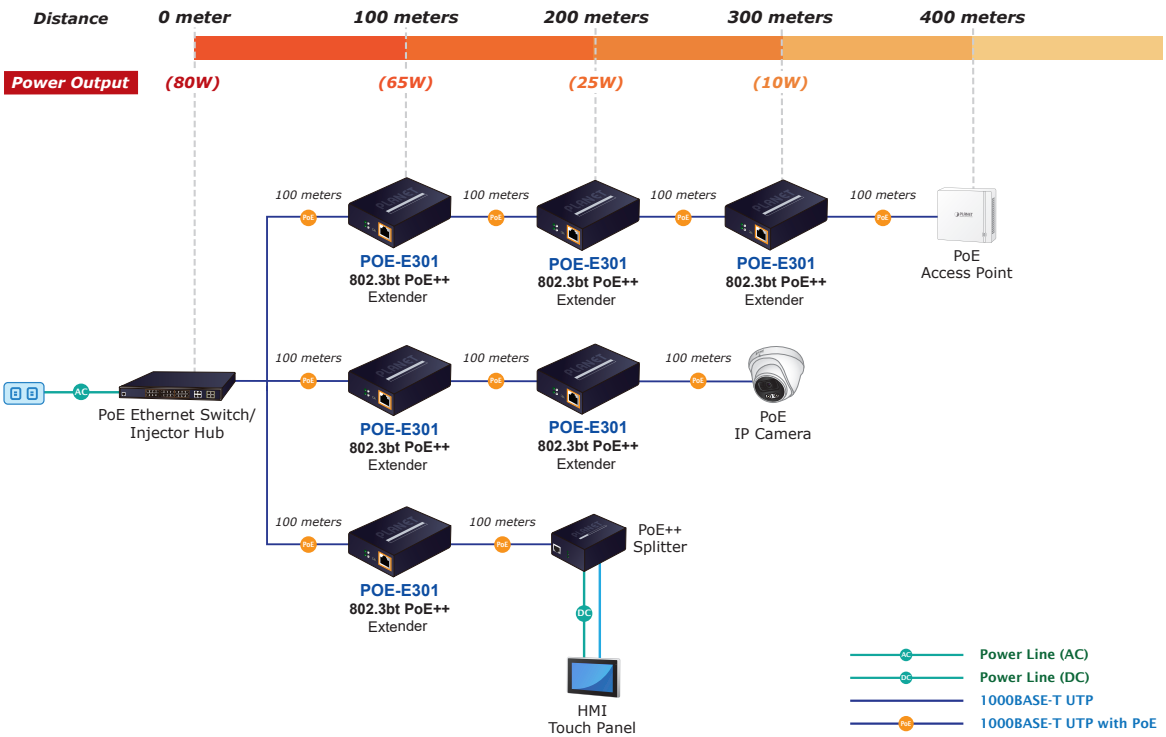
Long Distance PoE IP Surveillance

Is 100 meter cable long enough for a long-distance IP surveillance deployment? The answer is certainly not. To achieve the benefits of IP surveillance and also the long-distance IP camera distribution, PLANET POE-E301 Gigabit 802.3af/at/bt PoE Extender is a quick and cost-effective option besides adopting a PoE injector or PoE Ethernet switch equipped with fiber optic interface. In the simplest application, the POE-E301 enables a PoE IP camera to be installed up to 200 meters away from a PoE injector. The PoE injector delivers PoE power over the first 100 meters to the POE-E301 over UTP cable, and then the POE-E301 forwards the Ethernet data and remaining POE power to the PoE IP camera. The POE-E301 does not require an external power supply and can be installed easily by the plug and play configuration, meaning the operator does not need to configure the POE-E301.



Long Distance PoE Wireless Access Point

In the wireless LAN, the POE-E301 enables wireless access points to be connected using standard Cat.5/5e/6 cable over 100 meters in length from the PSE, such as PoE switch, PoE injector hub or single port PoE injector. The POE-E301 is also powered by the incoming PoE on the Ethernet cable and does not require any external power feed. Therefore, the POE-E301 can reduce the usage of cables and eliminate the need of dedicated electrical outlets on the wall, ceiling or any unreachable place for the wireless AP deployment.



Specifications

Model	POE-E301
Hardware Specifications	
PoE IN	1 x 10/100/1000BASE-T Ethernet with IEEE 802.3bt/at/af PoE “Data + DC” inauto MDI/MDI-X, auto-negotiation RJ45 connector
PoE OUT	1 x 10/100/1000BASE-T Ethernet with IEEE 802.3bt/at/af PoE “Data + DC” out auto MDI/MDI-X, auto-negotiation RJ45 connector
DIP Switch	PoE power feeding options (BT/UPOE) selection
Dimensions (W x D x H)	94 x 70 x 26 mm
Weight	258g
Power Requirements	IEEE 802.3bt PoE++ compliant with voltage within 52V-56V DC IEEE 802.3af PoE compliant with voltage within 44V-56V DC
Power Consumption	2.4 watts (system maximum) /PoE Output at maximum 60 watts
Enclosure	Metal
Installation	Wall or DIN-rail mounting
Protection	ESD (Ethernet): 2KV Surge (EFT for power) : 2KV
LED Indicators	• 1 x PWR (Green) • 1 x PoE IN Data (Green) • 1 x PoE OUT Data (Green) • 1 x PoE Out : PoE-in-use (Green: BT PD; Amber UPOE PD)
Network Cable	10BASE-T: 4-Pair UTP Cat. 5 up to 100m (328ft) 100BASE-TX: 4-Pair UTP Cat. 5 up to 100m (328ft) 1000BASE-T: 4-Pair UTP Cat. 5e, 6, up to 100m (328ft) EIA/TIA- 568 100-ohm STP (100m, 328ft)
Switching Specifications	
Data Rate	10/100/1000Mbps
Switch Architecture	Store-and-Forward
Switch Throughput	10Mbps:14880pps@64Bytes 100Mbps:148810pps@64Bytes 1000Mbps:1488000pps@64Bytes
Maximum Frame Size	9K bytes
Flow Control	Back pressure for half duplex IEEE 802.3x pause frame for full duplex
Power over Ethernet	
PoE Standard	**“PoE In” Port** IEEE 802.3bt Power over Ethernet Plus end-span/mid-span PD class 4 PD **Per “PoE Out” Port** IEEE 802.3bt Power over Ethernet Plus end-span PSE Backward compatible with IEEE 802.3af/at Power over Ethernet standard
PoE Power Supply Type	End-span + Mid-span
PoE Power	**“PoE In” Port** 50-56V DC, max. 95 watts PoE input **“PoE Out” Port** 55V DC, max. 65 watts PoE budget
Power Pin Assignment	**“PoE In” Port** 1/2 (-), 3/6 (+); 4/5 (+), 7/8 (-) **“PoE Out” Port** 1/2 (-), 3/6 (+); 4/5 (+), 7/8 (-)
Maximum Distance	400 meters with daisy-chain installation of 3 units
Standards Conformance	
Regulatory Compliance	FCC Part 15 Class A, CE
Standard Compliance	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 IEEE 802.3x Flow Control IEEE 802.3az Energy Efficient Ethernet (EEE)

Environment	
Operating	Temperature: -10 ~ 60 degrees C Relative Humidity: 5 ~ 95% (non-condensing)
Storage	Temperature: -40 ~ 85 degrees C Relative Humidity: 5 ~ 95% (non-condensing)

Ordering Information

POE-E301	1-Port 802.3bt to 1-Port 802.3bt Gigabit PoE++ Extender

Accessories

RKE-DIN	DIN-rail Mounting Kit

Related Products

POE-E201	IEEE 802.3at Power over Gigabit Ethernet Extender
POE-E202	1-Port IEEE 802.3at PoE+ to 2-Port 802.3af/at Gigabit PoE Extender
POE-E304	1-Port 802.3bt PoE++ to 4-Port 802.3af/at Gigabit PoE Extender
IPOE-E302	Industrial IP67 1-Port 802.3bt PoE++ to 2-Port 802.3at/bt PoE++ Extender

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