IEEE 802.3at Power over Gigabit Ethernet Extender

Product Features

- IEEE 802.3at/802.3af Power over Ethernet compliant
- 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

Long Distance High Power PoE and Gigabit Data Extension Solution

PLANET POE-E201 is a newly-designed simple extender which extends both the **Gigabit Ethernet Data** and **IEEE 802.3at/802.3af Power over Ethernet** transmission distance over the standard 100m (328 ft.) Cat. 5/5e/6 UTP cable to 200m, 300m, 400m and the maximum 500m.

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-E201 is designed as the extender to transmit both Gigabit Ethernet data and high power PoE power over another distance of 100m. By daisy-chaining multiple POE-E201s, distance can be tripled or quadrupled to meet your requirements.

Product Outlook

■ Left Side - PoE Out

POE-E201

Data + Power		Data + Power
PSE	802.3at PoE Extender	PD
100M		100M
802.3at Power Source Equipment		802.3af/802.3at Powered Device

With its ability to providing high power PoE and Gigabit Ethernet data extension, the POE-E201 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 now remote the location is.
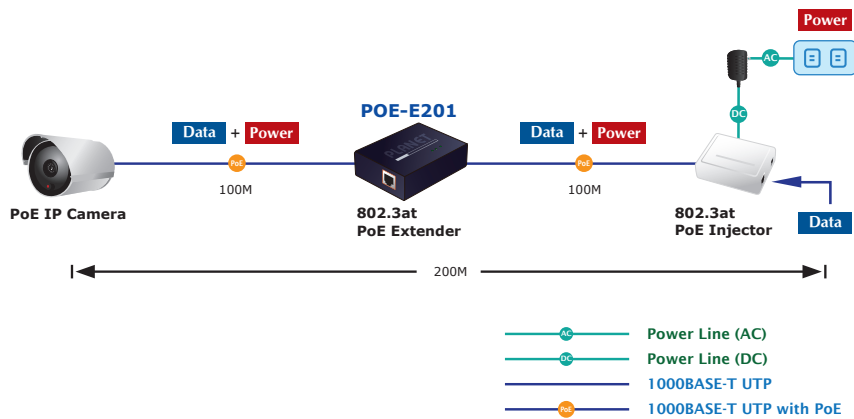
■ Right Side - PoE In

Easy Cabling Installation

The POE-E201 Gigabit high power PoE Extender is quite easy to be installed by simple plug and play. It is used between a power source equipment (PSE) and a powered device (PD). The POE-E201 injects power to the PD without affecting the data transmission performance. The POE-E201 offers a cost effective and quick solution to doubling the standard range of PoE from 100 to 200 meters. This Gigabit high power PoE Extender is designed in a compact mini box containing 2 RJ45 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 in the Cat. 5/5e/6 cable and transfer data and power simultaneously between the PSE and PD.
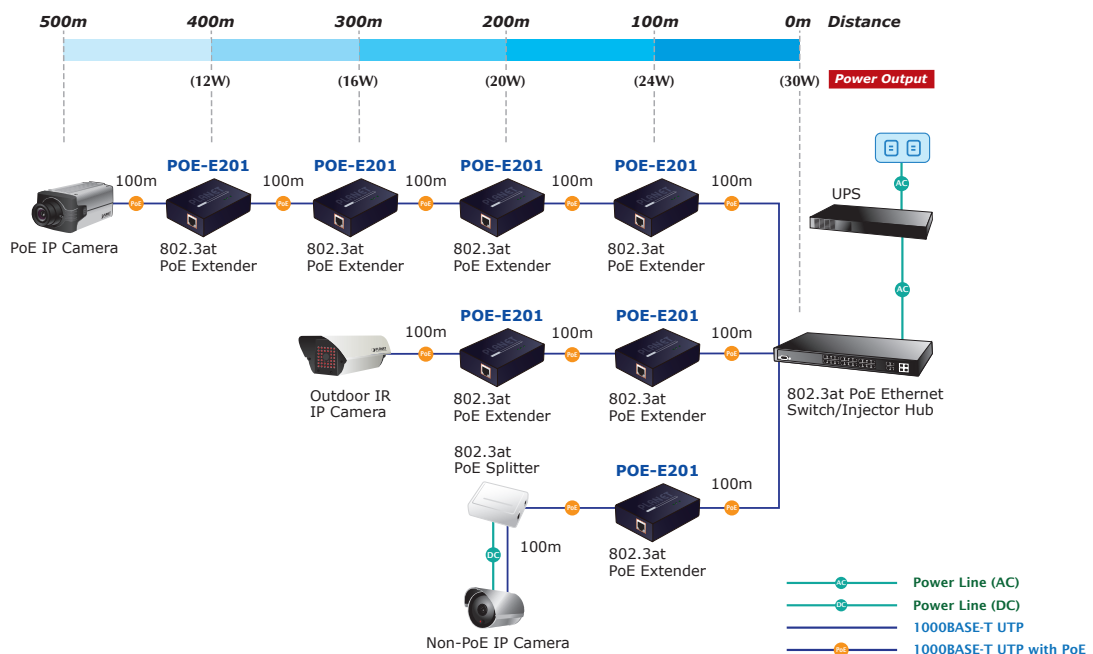
Applications

Long Distance PoE IP Surveillance

Is 100 meter cable long enough for a wide range of 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-E201 Gigabit high power 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-E201 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-E201 over UTP cable, and then the POE-E201 forwards the Ethernet data and remaining POE power to the PoE IP camera. The POE-E201 does not require an external power supply and can be installed easily by just plug and play, meaning the operator does not need to configure the POE-E201.

Long Distance PoE Wireless Access Point

In the Wireless LAN, the POE-E201 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-E201 is also powered by the incoming PoE on the Ethernet cable and does not require any external power feed. Therefore, the POE-E201 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-E201
Interfaces	
LAN IN	1 x 10/100/1000BASE-T Ethernet with IEEE 802.3at/802.3af PoE **"Data + DC"** in auto MDI/MDI-X, auto-negotiation RJ45 connector
LAN OUT	1 x 10/100/1000BASE-T Ethernet with IEEE 802.3at/802.3af PoE **"Data + DC"** out auto MDI/MDI-X, auto-negotiation RJ45 connector
Power over Ethernet	
PoE Standard	IEEE 802.3af Power over Ethernet IEEE 802.3at Power over Ethernet Plus
PoE Power Supply Type	Mid-span/Type B
PoE Power Output	52V DC, 510mA, max. 26 watts
Power Pin Assignment	4/5(+), 7/8(-)
Maximum Distance	500m with daisy-chain installation
Hardware 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	1552Bytes
Flow Control	Back pressure for half duplex IEEE 802.3x pause frame for full duplex
LED Indicators	• 1 x PoE IN (Green) • 1 x LAN Data (Green) • 1 x PoE OUT (Green)
Protection	ESD (Ethernet): 2KV Surge (EFT for power) : 2KV
Dimensions (W x D x H)	94 x 70 x 26 mm
Weight	197g
Power Requirements	IEEE 802.3at compliant with voltage within 52V-56V DC
Power Consumption	3.2 watts (system maximum)
Enclosure & Installation	Metal & wall mounting
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)
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 IEEE 802.3x Flow Control
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-E201	IEEE 802.3at Power over Gigabit Ethernet Extender

Accessories

RKE-DIN-C	DIN-rail Mounting Kit

POE-E201