IEEE 802.3at Power over Gigabit Ethernet Extender

Providing high power PoE and Gigabit Ethernet data extension ability, the POE-E201 is an ideal solution for service providers, campuses and public areas networking applications which require PoE deployment of wireless access points, IP-Based surveillance or IP phones in any places. It enables you to centrally manage the power easily, efficiently and cost effectively.

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 the 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 doubles 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 RJ-45 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.

Long Distance PoE and Data Extension Solution

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

Currently, PoE supported networking devices such as PoE IP Cameras, PoE Wireless Access Points and PoE IP Phones have become the mainstream of network deployment because of the convenience of easy installation regardless of additional power supply. However, limited by the UTP cable specifications, only up to 100 meters (328 ft.) cable could be applied for IP-Based and PoE powered devices (PD) installation. Therefore, the POE-E201 is designed as the repeater to forward both Gigabit Ethernet data and high power PoE power and thus extend the range of PoE installation. By just plug and play without additional power supply and set up, one single POE-E201 can increase the PoE range to 200m. By daisy-chaining multiple PoE-E201s, it offers you great flexibility to extend the distance of PoE network to triple, quadruple further in length or more.
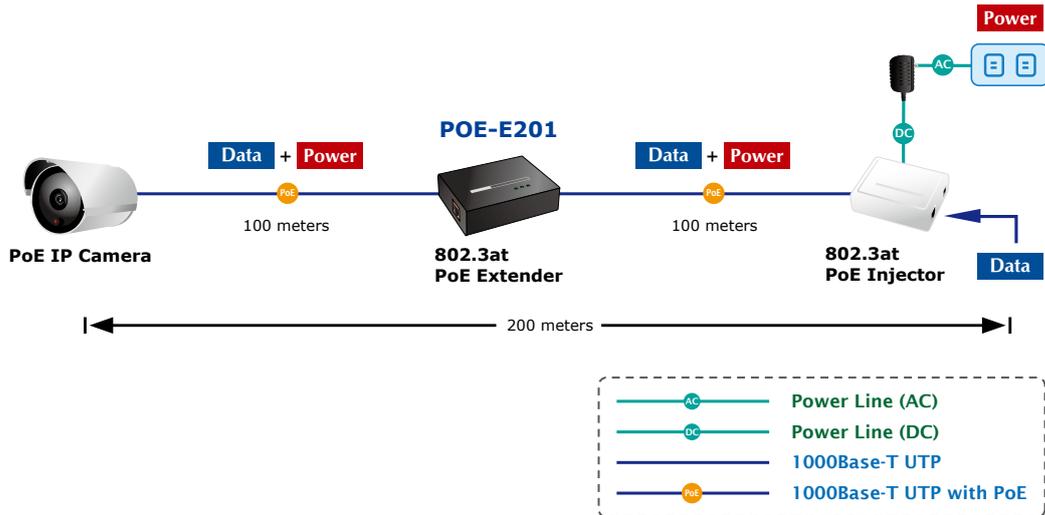

KEY FEATURES

- **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 100 meters (328ft.) more

- Automatically detects and protects PoE equipments from being damaged by incorrect installation

- Multiple units, 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**
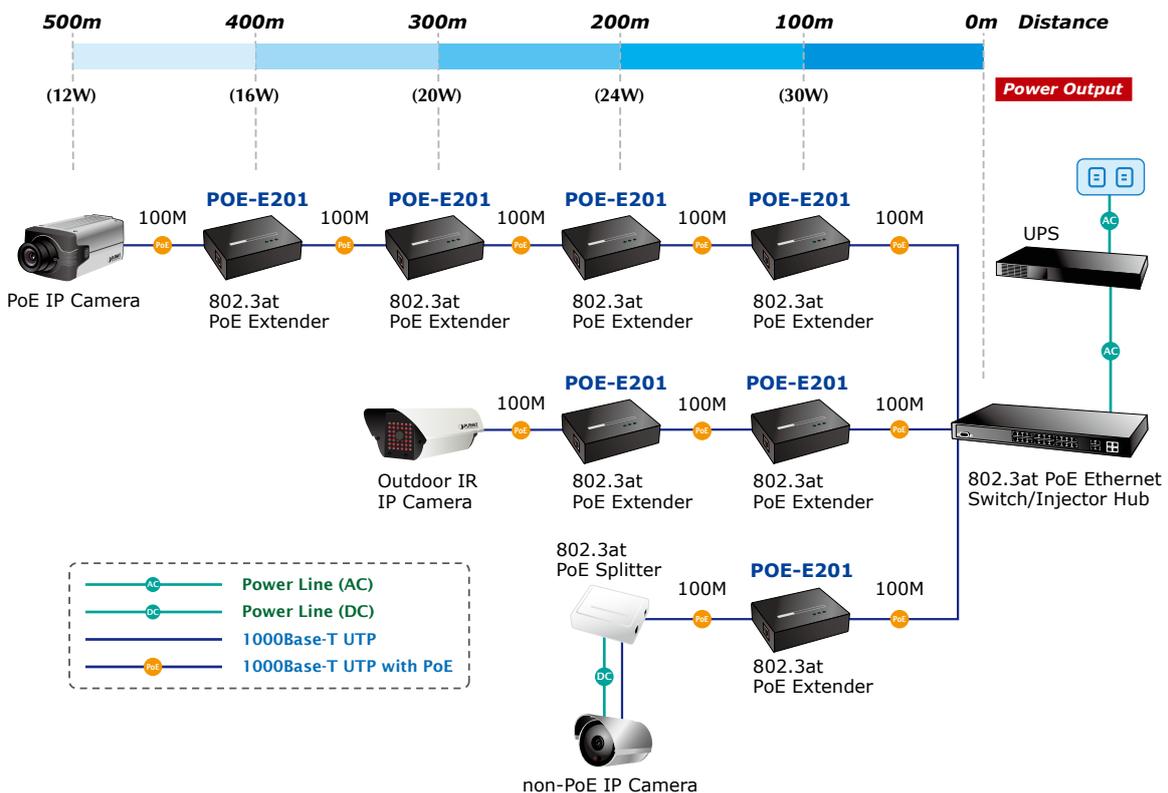
APPLICATIONS

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, the PLANET Gigabit high power PoE Extender - POE-E201 is a quick and cost-effective option besides by adopting a PoE Injector or PoE Ethernet Switch equipped with fiber optical 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; that means the operator does not need to configure the POE-E201 for immediate installation.

Long Distance PoE Wireless Access Point

When being used in the Wireless LAN, the POE-E201 enables Wireless Access Points to be connected using standard Cat.5/5e/6 cable over 100 meters from the Power Source Equipment (PSE), such as PoE Switch, PoE Injector Hub and 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 shall reduce the usage of cables and eliminate the need of dedicated electrical outlets on the wall, ceiling or any unreachable place. It frees the wireless AP deployment from restrictions of power outlet locations.

SPECIFICATION

Product	IEEE 802.3at Power over Gigabit Ethernet Extender
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 RJ-45 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 RJ-45 connector
Power over Ethernet	
PoE Standard	IEEE 802.3af (Power over Ethernet) IEEE 802.3at (High Power over Ethernet)
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	4 units, daisy-chain installation with 500m support*
Hardware Specification	
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 (TBD) Surge (EFT for power) : 2KV (TBD)
Dimension (W x D x H)	94 x 70 x 26 mm
Weight	197g
Power Requirement	IEEE 802.3at compliant with voltage within 52V-56V DC
Power Consumption	3.2 Watts (system maximum)
Mechanical	Metal / Wall Mountable / Optional kit for Din-Rail Mount
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	
Regulation 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 High Power over Ethernet IEEE 802.3x Flow Control
Environment	
Operating	Temperature: -10 ~ 60 Degree C Relative Humidity: 0 ~ 95% (non-condensing)
Storage	Temperature: -40 ~ 85 Degree C Relative Humidity: 5 ~ 95% (non-condensing)

* The maximum distances will vary on the quality of the UTP cable and environment.

ORDERING INFORMATION

POE-E201	IEEE 802.3at Power over Gigabit Ethernet Extender

ACCESSORIES

RKE-DIN	DIN-Rail Mounting Kit

Data Sheet

RELATIVE PRODUCTS

ICA-H316	2 Mega-Pixel 20M IR Vandal Proof Dome IP Camera
ICA-H610	H.264 Indoor CCD Internet Camera
ICA-HM100	Wired H.264 Mega-Pixel IP Camera
ICA-HM126	H.264 Full HD Box IP Camera
ICA-HM126R	Full HD Real-Time H.264 Box IP Camera
ICA-HM131	H.264 Full-HD Fixed Dome IP Camera
ICA-HM131R	H.264 Real Time Full-HD Fixed Dome IP Camera
ICA-HM240	H.264 Mega-Pixel Vandal Proof Pan/Tilt IP Camera
ICA-HM710	10x Optical Zoom WDR IP Camera
ICA-HM718	18x Optical Zoom WDR IP Camera
ICA-HM830	H.264 2Mega-Pixel Fish-Eye Panorama IP Camera
POE-151S	IEEE 802.3af Power Over Ethernet Splitter
POE-152S	IEEE 802.3af Power over Ethernet Splitter
POE-161S	IEEE 802.3at Gigabit High Power over Ethernet Splitter
POE-E101	IEEE 802.3af Power over Ethernet Extender
VIP-156PE	802.3af PoE SIP Analog Telephone Adapter
VIP-254PT	SIP PoE IP Phone
VIP-255PT	Multi–Language PoE IP Phone
VIP-360PT	Enterprise PoE IP Phone
VIP-560PE / VIP-56EXT	Professional PoE IP Phone with Expansion Function
VIP-560PT	Professional PoE IP Phone
WNAP-C3220	300Mbps 802.11n Wireless Ceiling Mount Range
WNAP-1120PE	802.11n Wireless Access Point with PoE
WNAP-3000PE	802.11n Enterprise PoE Access Point

C-POE-E201