

IEEE 802.3af Power over Ethernet Extender



Long Distance PoE and Data Extension Solution

PLANET's POE-E101 is a newly designed and simple device which extends the reach of **Ethernet Data** and **IEEE 802.3af Power over Ethernet** over the standard 100m (328 ft.) CAT5e/6 UTP cable to 200m, 300m or longer distance.

PoE supported networking devices such as PoE IP cameras, PoE wireless access points and PoE IP phones have become a mainstream in network deployment because these devices are easy to install and don't require additional power supply. However, these devices are limited by UTP cable specifications, which only allows a reach of 100 meters (328 ft.). The POE-E101 is designed as the repeater that simultaneously forwards both Ethernet data and PoE power, extending the range of the PoE powered device installation. The simple plug and play requires no additional power supply or setup. One single POE-E101 can increase the PoE range to 200m. Daisy-chaining multiple POE-E101 devices offers you with the flexibility to triple the distance of your PoE network.

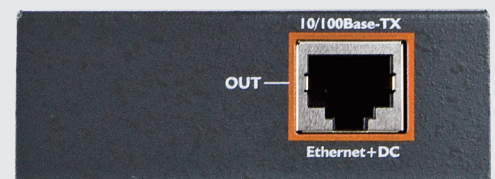


The POE-E101 is an ideal solution for service providers, campuses and public areas seeking to extend the PoE range of their networking applications that requires PoE deployment of wireless access points, IP-based surveillance cameras or IP phones in any location. The device enables you to easily manage the power from one location in a cost-effective manner.

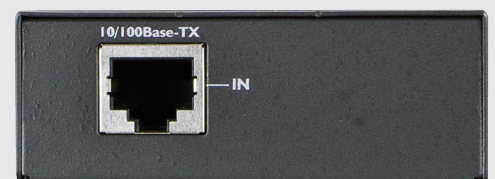
The POE-E101 PoE Extender features simple 'plug and play' installation. The device is used between a power sourcing equipment (PSE) and a powered device (PD); it injects power to the PD without affecting the data transmission performance. The POE-E101 is the ideal solution to double the standard PoE range from 100 to 200 meters. The device features 2 RJ-45 ports in the compact PoE Extender. The devices IN port functions as the "PoE (Data and Power) input" and the remaining port on the opposite side functions as the "PoE (Data and Power) output". The "PoE OUT" port injects DC voltage via the Cat5e/6 cable and also simultaneously transfers data and power between the PSE and PD.

- Complies with IEEE 802.3af Power over Ethernet
- Extends the range of PoE by an additional 100 meters (328ft.)
- Forwards both Ethernet data and PoE power to remote devices
- Automatically detects and protects PoE equipment from being damaged by incorrect installation
- Multiple units, daisy-chain installation support
- No external power cable required for installation
- Compact size, wall-mountable design
- Plug-and-Play

Left Side - PoE Out



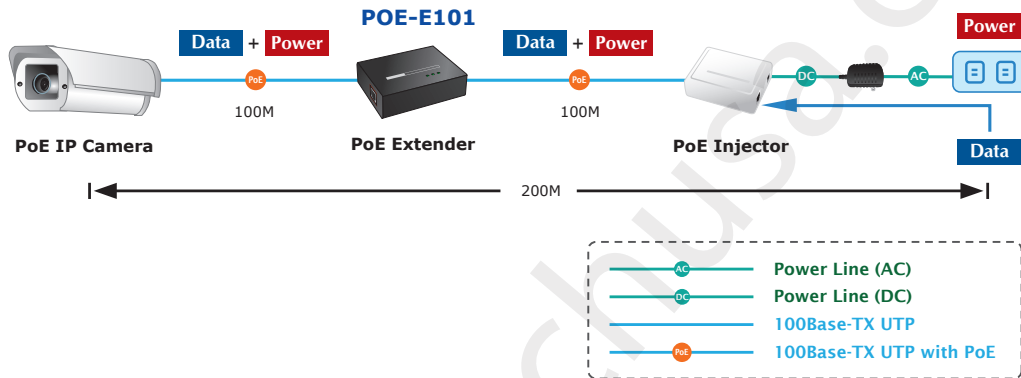
Right Side - PoE In



Applications

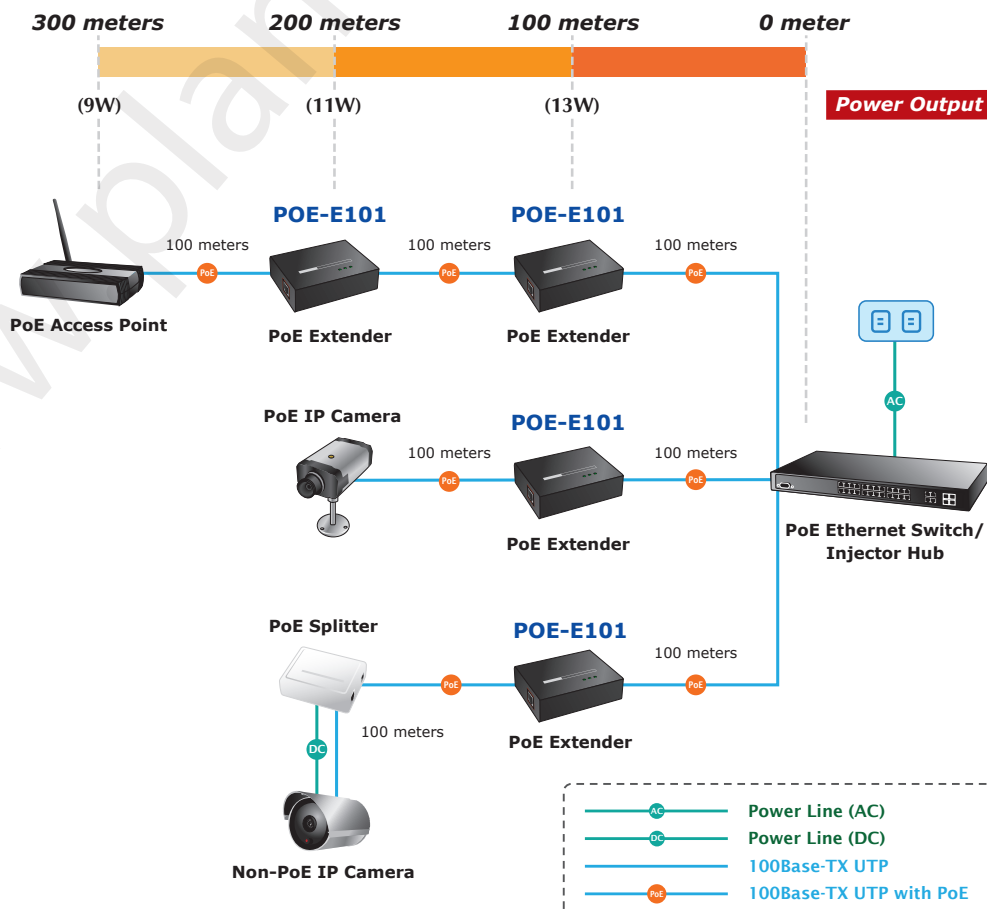
Long Distance PoE IP Surveillance

The standardized 100 is not enough cable length to meet the wide range of IP surveillance deployments. To receive the benefits of IP surveillance and achieve long-distance IP camera distribution, the POE-E101 PoE extender, is a quick and cost-effective option besides adopting a PoE Injector or PoE Ethernet Switch equipped with fiber optical interface. For simpler applications, the POE-E101 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-E101 via a UTP cable. The POE-E101 then forwards the Ethernet data and remaining POE power to the PoE IP camera. The POE-E101 does not require an external power supply and features a 'plug and play' installation, which eliminates further configuration of the device.



Long Distance PoE Wireless Access Point

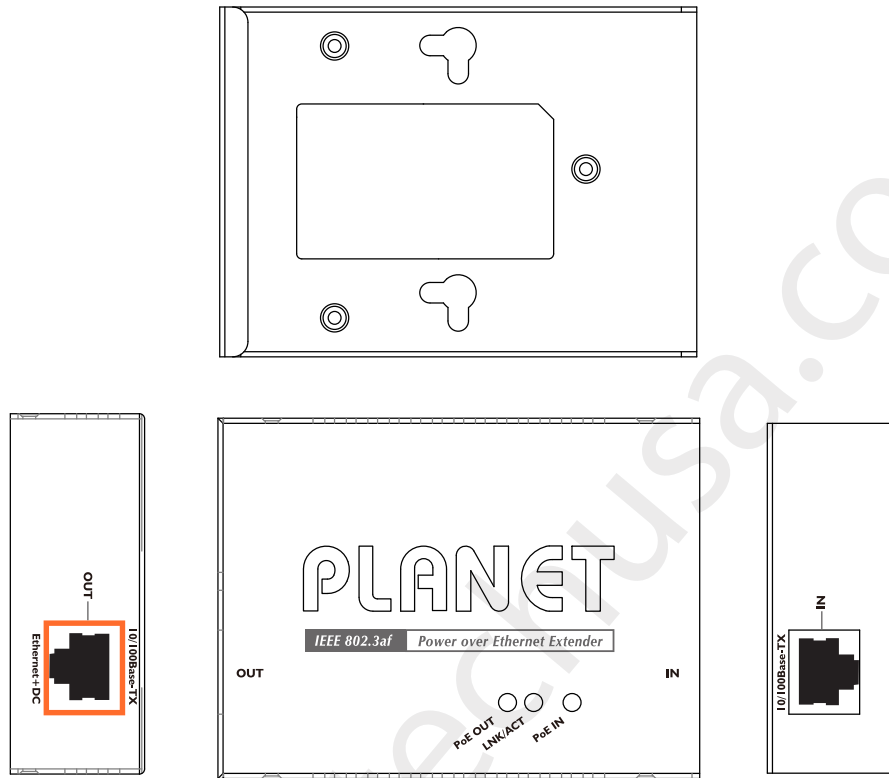
In LAN environments, the POE-E101 enables wireless access points to connect via standard Cat5e/6 cables at distances greater than 100 meters from the power sourcing equipment (PSE), such as a PoE switch, a PoE injector hub or a single port PoE injector. The POE-E101 is powered by the incoming PoE and does not require an external power feed. The POE-E101 will reduce the usage of cables and eliminate the need of dedicated electrical outlets on the wall, ceiling or any unreachable place. It frees the security IP cameras and wireless APs deployment from the restrictions of power outlet locations.



Specifications

Model	POE-E101
Interfaces	
LAN IN	1 x 10/100Base-TX Ethernet with IEEE 802.3af PoE "Data + DC" in Auto MDI/MDI-X, auto-negotiation RJ-45 connector
LAN OUT	1 x 10/100Base-TX Ethernet with IEEE 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
PoE Power Supply Type	Mid-Span / Type B
PoE Power Output	48V DC, 270mA, Max. 13 Watts
Power Pin Assignment	4/5(+), 7/8(-)
Maximum Distance	Class 1 (3.8 watts): 300m Class 2 (6.5 watts): 300m Class 3 (12.9 watts): 200m Non-PoE (Data): 300m
Hardware Specification	
Hardware Version	Version 2
Data Rate	10/100Mbps
Switch Architecture	Store-and-Forward
Switch Throughput	148810pps@64Bytes
Latency	7.840 μ s
Maximum Frame Size	1552Bytes
Flow Control	Back pressure for half-duplex IEEE 802.3x pause frame for full-duplex
LED Indicators	<ul style="list-style-type: none"> • 1 x PoE IN (Green) • 1 x LAN Data (Green) • 1 x PoE OUT (Green)
Protection	ESD(Ethernet): 6KV Surge (EFT for power) : 6KV
Dimensions (W x D x H)	94 x 70 x 26 mm
Weight	215g
Power Requirements	IEEE 802.3af compliant with voltage within 44V-56V DC
Power Consumption	2 watts (maximum)
Mechanical	Metal / wall mountable and optional DIN-rail kit for installation
Cable	TIA/EIA-568, Category 5/5e cable
Standard Conformance	
Regulation Compliance	FCC Part 15 Class A, CE
Standard Compliance	IEEE 802.3 10Base-T Ethernet IEEE 802.3u 10/100Base-TX Fast Ethernet IEEE 802.3af Power over Ethernet PSE / Mid-Span IEEE 802.3af Power over Ethernet PD / Mid-Span IEEE 802.3x Flow Control
Standard Conformance	
Operating	Temperature: -10 ~ 60 degrees C Relative Humidity: 0 ~ 95% (non-condensing)
Storage	Temperature: -40 ~ 85 degrees C Relative Humidity: 5 ~ 95% (non-condensing)

Product Outlook



Ordering Information

POE-E101	IEEE 802.3af Power over Ethernet Extender
----------	---

Accessories

RKE-DIN	DIN-Rail Mounting Kit
---------	-----------------------

Related PSE Products

POE-151	IEEE 802.3af Power Over Ethernet Injector
FTP-802	100Base-FX to 10/100Base-TX PoE Media Converter
POE-1200	IEEE 802.3af 12-Port Power over Ethernet Web Management Injector Hub
FSD-808P	8-Port 10/100Mbps PoE Fast Ethernet Switch
FGSD-910P	8-Port 10/100Mbps 802.3af PoE + 1-Port 10/100/1000Mbps Desktop Switch
FNSW-1600P	16-Port 10/100Mbps PoE Fast Ethernet Switch
FGSW-1828PS	16-Port 10/100Mbps + 2 Gigabit TP / SFP Combo Web Smart PoE Switch
FNSW-2400PS	24-Port 10/100Mbps PoE Web Smart Ethernet Switch

Related PD Products

ICA-2200	Full HD PoE Box IP Camera
ICA-2500	5 Mega-pixel PoE Box IP Camera
ICA-HM101	2 Mega-pixel PoE Cube IP Camera
ICA-HM131	H.264 Full-HD Fixed Dome IP Camera
WNAP-1120PE	802.11n Wireless Access Point with PoE
WNAP-W2200	300Mbps 802.11n Wireless In-wall PoE Access Point
WNAP-C3220	300Mbps 802.11n Wireless Ceiling Mount Range Extender

PLANET Technology Corporation
Headquarters

11F., No.96, Minquan Rd., Xindian Dist.,
New Taipei City 231, Taiwan (R.O.C.)
Tel: 886-2-2219-9518
Email: sales@planet.com.tw
Fax: 886-2-2219-9528

Versa Technology
Authorized North
American Distributor

5224 Bell Court
Chino, California 91710
Tel: 888-229-3183
Email: sales@versatek.com
www.planetechusa.com



C-POE-E101v2

PLANET reserves the right to change specifications without prior notice. All brand names and trademarks are property of their respective owners. Copyright © 2014 PLANET Technology Corp. All rights reserved.