200M Powerline + 802.3af PoE Power Adapter
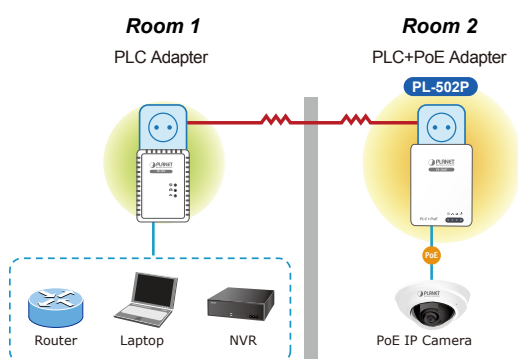
Extending PoE Connecting Range Easily and Eliminating Dead Spots

Powerline communication (PLC) and Power over Ethernet (PoE) are both advanced technology to simplify cabling and quickly building an Ethernet network. PLANET PL-502P is a powerline adapter acting as a PoE injector in compact housing. Based on **Homeplug AV** and **IEEE 802.3af PoE** standards, the PL-502P supports data transfer at up to **200Mbps** over the existing household power circuit and provides a 10/100Mbps Ethernet port with up to **15 watts** of inline power over UTP cable respectively, allows users to extend a local area network by simply plugging the PLC adapter with built-in PoE into a wall power outlet. It is ideal for powering PoE powered devices and transmitting Ethernet data in home or small office environments where only a power outlet but no network connection is available.

A New Level of Surveillance and Wireless Networking for Smart Homes

Featuring high-speed backbone connection through electrical power lines and carrying both data and PoE power over its RJ45 port simultaneously, the PL-502P helps users to utilize **just power outlets and one Ethernet cable** to easily deploy a network of IP surveillance, wireless internet access or voice over IP system in less than a minute. The PL-502P turns every power outlet into a PoE network connection, taking home surveillance or wireless networking to the next level.

IEEE Compliant HomePlug AV and LAN

- Designed for home surveillance and wireless applications
- Data rate of up to 200Mbps and 300 meters over existing electrical wiring
- IEEE 1901 and HomePlug AV standard compliant
- Equipped with 10/100Mbps RJ45 ports for LAN/ WAN and auto MDI/ MDI-X

Power over Ethernet

- Complies with IEEE 802.3af standard, mid-span PSE
- Provides 48V DC power over RJ45 Ethernet cable to devices with Ethernet port
- Supports PoE power up to 15 watts for PoE port
- Auto detects IEEE 802.3af PoE equipment protecting the devices from being damaged via incorrect installation
- Remote power feeding up to 100m
- IEEE 802.3af splitter device compatibility

Secure Network Connection

- Converts any power socket into a wired connection point; Plug-and-Play installation in minutes; no need to configure software
- Simple push-button setup with sophisticated data encryption; 128-bit AES encryption for network protection enhancement
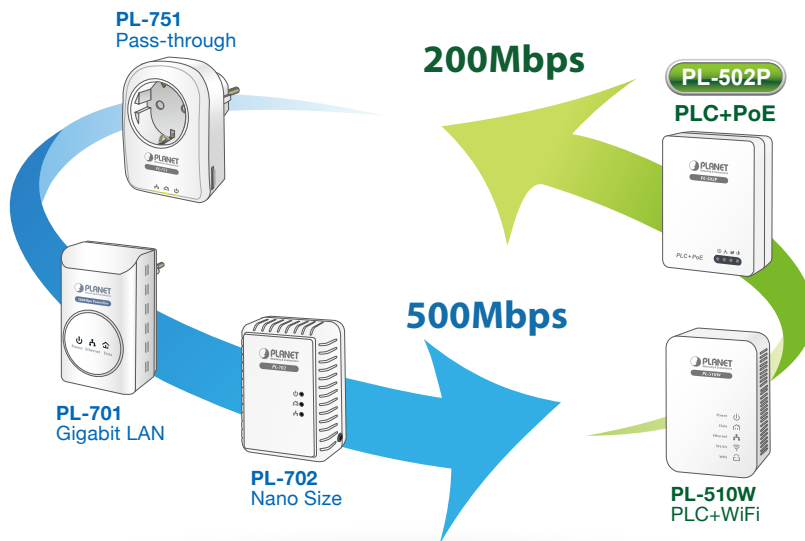
Easy Installation and Management

- Creates a network connection throughout your home without the mess of cables
- Easy-to-use utility for powerline network management
- Up to 16 Powerline Network Adapters can communicate on a single network
- Green technology helps conserve energy when no data link is detected
- Integrated enhanced Quality of Service (QoS) features

Quick and Easy Cabling for PoE Network Deployment

Complying with IEEE 802.3af PoE standard, the PL-502P allows users to flexibly deploy standard and low powered devices to transfer **data and power simultaneously** through one Ethernet cable for up to 100 meters. The PL-502P frees the deployment of any 802.3af PoE compliant PD equipment from restrictions of power outlet locations and the additional AC wiring. It thus reduces cables and eliminates the need for extra electrical wires in the wall, ceiling or any unreachable place, and most of all, it reduces installation time and total cost.

Highly Compatible and Secure Home Network

The PL-502P is compliant with IEEE 1901 and HomplugAV standards, allowing to be paired up with any PLANET PL-series powerline products or other suppliers' Homeplug AV equipment, creating a safe and secure home network environment that delivers quick and convenient access up to 300 meters over existing electrical wiring.
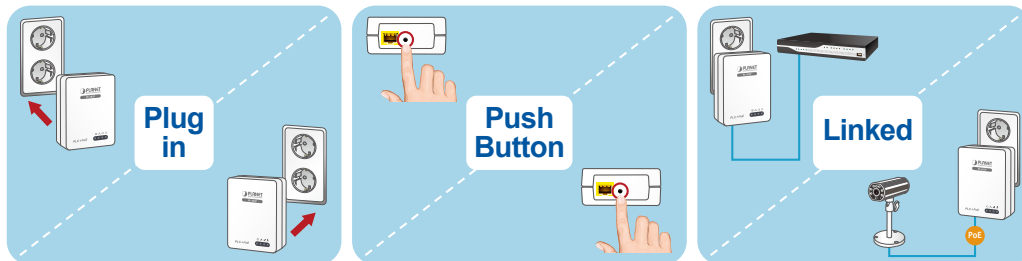

PLANET 200Mbps and 500Mbps Powerline products are highly compatible to deploy a secure home network.

Plug and Play Installation

The PL-502P and PLANET powerline adapters all have a configuration push button for a convenient way of creating a secure HomePlug network without the need to use software. Simply by pushing the button on the PL-502P, users can easily set up a hassle-free secure powerline network within minutes. It also provides 128-bit AES encryption for network security and data protection.
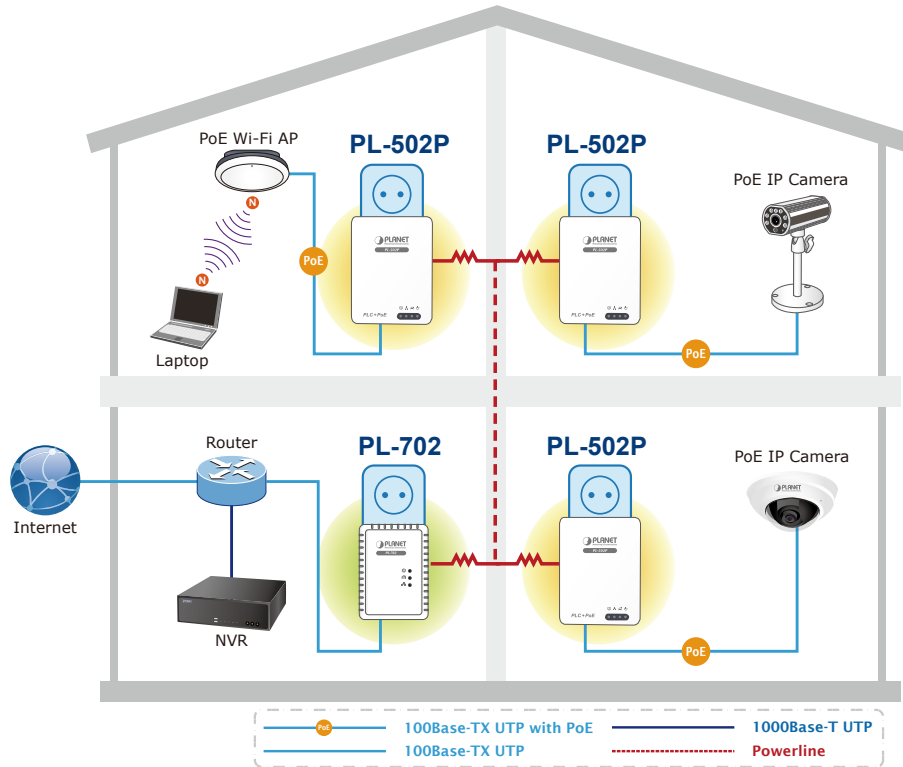
Easy Two Touch Setup

All-in-One and Compact Size Design

With concepts of "easy to install", "plug and play" and "simple troubleshooting" for general users, the PL-502P is an all-in-one designed Powerline plus PoE port with internal power supply in a compact-sized housing. Installation is as easy as plugging into a wall power socket and connecting the Ethernet cable; the PL-502P is ready to provide high-speed network communication and PoE injector functions simultaneously.
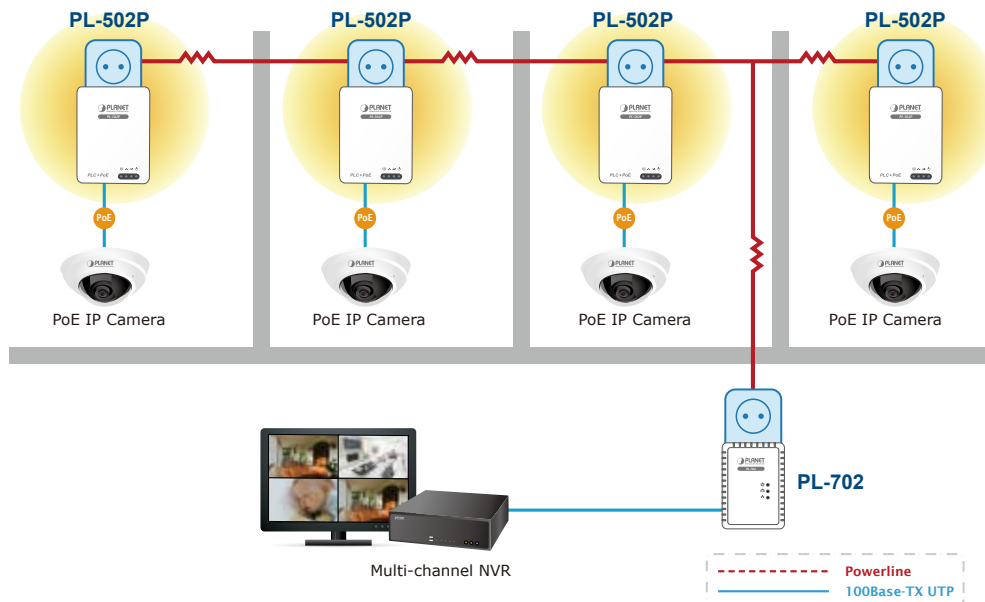
Applications

The PL-502P allows you to connect instantly to Access Points, IP Cameras or VoIP phones that support PoE standard by using the same LAN UTP cable for both network data and power. In general, the regular powerline adapter is connected to the home xDSL router to share the connectivity to wireless or VoIP network. The PL-502P thus brings users much more convenience that it can connect to any PoE PD equipment in and around the house to easily construct the home network.

Ideal Solution for SOHO Securing IP Surveillance Infrastructure

For SOHO/Home surveillance network, the regular powerline adapter is connected to your NVR (network video recorder) or monitor station, and the PL-502P, connected to your PoE IP camera, can be placed in a remote area. Users can install multiple PL-502P adapters in and around the house to quickly and safely build a security system.

SOHO/Home IP Surveillance Solution via Existing Wires

Specifications

Product	PL-502P
Hardware Specifications	
Network Interface	■ One 10/100BASE-TX RJ45 port with 802.3af PoE injector function ■ One AC power plug with 200Mbps powerline port supporting co-existence with HomePlug 1.0
Button	One pair sync / reset button
Power Socket	EU power connector; Type C, CEE 7/16 Europlug
LED	■ Power: On / Off / Flashing ■ Powerline link: Red / Orange / Green / Flashing Green / Off ■ Ethernet link: Green / Blinking / Off ■ PoE In-Use: Green / Off
Dimensions (W x D x H)	73 x 34 x 99 mm
Weight	140g
Material	Plastic
Power Connector	Embedded EU specifications
Power Requirements	100~240V AC, 50/60Hz internal
Power Consumption	Full loading with PoE: Max. 16 watts / 54.59 BTU Standby mode: 0.7 watts / 2.39BTU
Environment	Indoor use
Powerline Specifications	
Powerline Standards	IEEE 1901 / HomePlug AV
Data Rate	Up to 200Mbps over Powerline and 10/100Mbps over Ethernet UTP cable
Operation Range	Estimated range of 300 meters (984ft.) in wall powerlines
Frequency Band	2 ~ 28 MHz
Modulation Schemes	OFDM symbol modulation on line synchronization 1024/256/64/16/8 - QAM, QPSK, BPSK, ROBO carrier modulation
Access Methods	CSMA/CA channel-access schemes
Security	128-bit AES link encryption with key management
Nodes	Up to 16 per powerline network
Software Utility	Device detect / diagnostic Supports Windows XP, Vista, Window 7 and Windows 8
Power over Ethernet Specifications	
PoE Standard	IEEE 802.3af Power over Ethernet
PoE Power Output	48V DC, max. 15.4 watts, 300mA
Power Pin Assignment	1/2(+) , 3/6(-)
PoE Power Budget	15 watts
Distance	Up to 100 meters over Cat 5/5e UTP cable
Standards Conformance	
Regulation Compliance	CE mark
Standards Compliance	IEEE 1901 HomPlug AV IEEE 802.3af Power over Ethernet IEEE 802.3 10BASE-T IEEE 802.3u 100BASE-TX IEEE 802.3x flow control
Environment Specifications	
Operating	Temperature: 0 ~ 40 degrees C Relative Humidity: 10 ~ 90% (non-condensing)
Storage	Temperature: -20 ~ 70 degrees C Relative Humidity: 10 ~ 95% (non-condensing)

Ordering Information

PL-502P-EU	200M PLC + 802.3af PoE Power Adapter (EU Type directly-attached)

Related Powerline Products

PL-701-EU	500M Powerline Ethernet Bridge
PL-702-EU	500M Nano Powerline Ethernet Bridge
PL-751-EU	500M Powerline Pass-through Ethernet Bridge
PL-510W	200M Powerline Wireless N Extender

Related PoE / Surreillance Products

ICA-3110	HD Ultra-mini Bullet IR IP Camera
ICA-4130S	HD Ultra-mini SIP PoE IP Camera
ICA-3200	Full HD Ultra-mini Bullet IP Camera
ICA-HM131	H.264 Full-HD Fixed Dome IP Camera
ICA-1200	Full HD PoE Cube IP Camera
ICA-HM101	2 Mega-pixel PoE Cube IP Camera
ICA-2200	Full HD PoE Box IP Camera
ICA-8200	2 Mega-pixel PoE Fish-Eye IP Camera
ICA-8500	5 Mega-pixel PoE Fish-Eye IP Camera
NVR-915	9-Ch Network Video Recorder
HDVR-430	4 Channel Hybrid Digital Video Recorder
WNAP-C3220	300Mbps 802.11n Wireless Ceiling Mount Range Extender
POE-152S	IEEE 802.3af Power over Ethernet Splitter

PL-502P