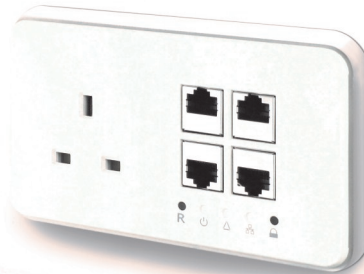


# The all-in-one Ethernet Power Socket

## Home Automation and Home Theatre



### BENEFITS

- All-in-one Ethernet enabled power socket
- No rewiring needed as the existing mains wiring is used
- Internet access everywhere in the building
- Provides a new class of intelligent high speed networking
- PE Socket becomes the backbone network for the delivery of digital media and environmental data
- No need for costly structural alterations
- Eliminates cost of "making good" and matching the decor which could include wallpaper
- Network can be expanded simply and quickly without the clutter of cables
- Eliminate coverage black spots

### KEY FEATURES

- Ethernet at up to 200Mbps across a meshed network
- Connect to a broadband router to share Internet access
- High speed managed switch for business class networking
- Fast enough to stream High Definition (HD) video
- Supports Quality of Service (QoS) and tagged VLANs
- Supports Windows, Mac, Linux and all operating systems with TCP/IP support
- Encrypted with 128bit AES security
- Compatible with the HomePlug AV standard
- Fits a UK standard two-gang 35 mm deep metal back box
- And of course power

### High Speed networking solution throughout the building

As Home Automation systems become increasingly cheaper and technology advances provide a wider variety of home automation applications, providers of these systems must find a way to install a high-speed networking solution as a network backbone that is available throughout the home.

### The challenge

WiFi coverage degrades too quickly over moderate distances for it to distribute effectively digital and environmental content.

Installing Ethernet cables is expensive and very disruptive. Plug in adaptors are large and unwieldy and provide an unreliable network because they may be accidentally unplugged or stolen.

The solution must meet the customer's high expectations in terms of functionality, security and design.

How to provide a high-speed networking solution capable of delivering high-definition digital entertainment and environmental content throughout the home in a simple and cost-effective way without the need of expensive cabling or unsightly adaptors?

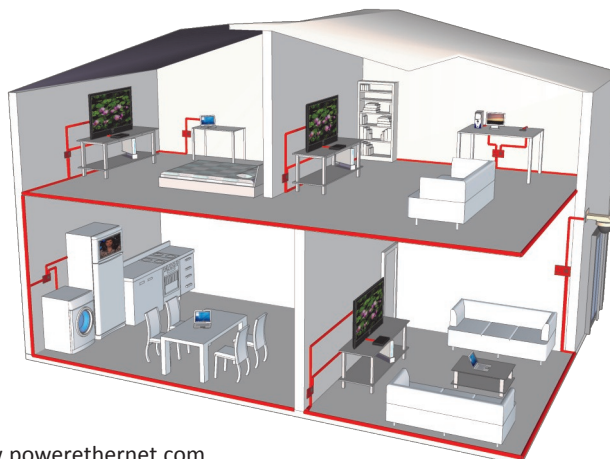
### The solution

Power Ethernet provide an elegant, simple and cost-effective way to create a functional network at home without the need for expensive cabling or unsightly plug-in adaptors.

Installing two or more of our unique PE Sockets instantly creates a high speed secure network without the need for rewiring. The PE Sockets use the existing mains wiring in the building for the delivery of all forms of digital data or environmental devices.

Because almost every room in a house has access to mains power, the PE Sockets can be installed practically anywhere where a reliable home automation system is required.

The PE Sockets are UK Standard in size and simple to install by any electrician with all the advantages of reliability, compliance with Health & Safety regulations and aesthetic appeal.



## How do the Power Ethernet Sockets work?

The PE Sockets incorporate the Atheros INT6400 PowerLine chipset (which is compatible with HomePlug Alliance AV standard) along with other complementary technologies to create a high speed secure network by utilising the existing mains cables available throughout any building.










The PE Socket's unique design incorporates all of the electronics inside the wall socket. Replacing two or more traditional UK double-gang wall power sockets with PE Sockets instantly creates a high-speed, secure Ethernet network without the cost and disruption of installing additional cabling.

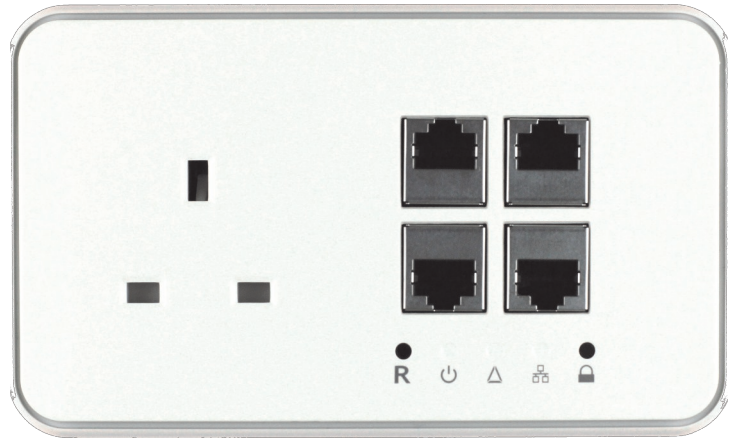
The PE Sockets have an integrated mains filter which improves the data transmission speeds and the units automatically go into power save mode for reduced power consumption when the network ports are not being used.

The network backbone is robust and encrypted with 128bit AES security and as the PE Sockets are simple to install by any electrician, it benefits from a tamper and theft proof installation.

The PE Socket incorporates a high speed managed switch with 4 Ethernet ports which eliminates the need for adding additional network switches. This removes the clutter and hassle of additional cables under desks or behind televisions and provides a solution with all the advantages of reliability, Health & Safety compliance and aesthetic appeal.

Multiple applications can be run across the Power Ethernet network throughout the building including:

 High speed Ethernet networking	 Network backbone for Home Automation	 IPTV and Video on Demand
 Connect to the Internet everywhere in the building	 Triple Play services	 CCTV Surveillance
 Smart Metering and Smart Home applications	 Voice over IP telephony	 Digital Signage



## Supported Standards

- Ethernet at up to 200Mbps across a meshed network with shared Internet access
- Connect to a broadband router to share Internet access
- High speed managed switch for business class networking
- Fast enough to stream High Definition (HD) video
- Supports Quality of Service (QoS) and tagged VLANs
- Supports Windows, Mac, Linux and all operating systems with TCP/IP support
- Encrypted with 128bit AES security
- Utilises the Atheros INT6400 chipset which is compatible with HomePlug Alliance AV standard
- Fits a UK standard two-gang 35 mm deep metal back box
- Supports TV over IP (IPTV), Voice Over IP (VoIP), Digital Signage and Security CCTV cameras
- And of course power

Two or more HomePlug AV compatible devices are required. The power outlets must be electrically connected sharing the same power rail in order for Powerline devices to provide a network connection between them.

