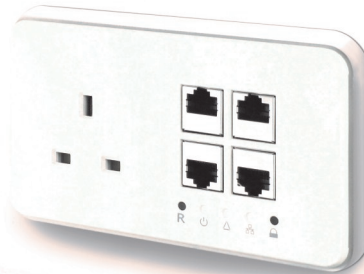


# The all-in-one Ethernet Power Socket

## Home Builders and Retrofitters



### BENEFITS

- Simple to install networking solution: an all-in-one power socket that creates a secure network
- Internet access everywhere in the building
- Removes the need to run additional cables: it uses the mains cables already in the walls
- Reduces costs: no need for specialised staff as any electrician can install it quickly and easily
- New class of intelligent high speed networking
- Is easy to expand: simply add more Power Ethernet Sockets
- Adds value: buyers are prepared to pay more for a network-ready home

### 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

## Transform homes into more desirable multifunctional living spaces

The growing demand for Triple Play services (Internet, VoIP, Video on Demand) and home automation in residential buildings opens up a new opportunity for home builders to create more desirable living spaces by providing a network-ready home.

### The challenge

How to provide a network-ready home that is easy to install, is fast enough to transmit any kind of digital media and environmental services, adds value for future occupants and does not require a high investment cost.

Installing structured cabling is an expensive solution:

- requires dedicated space where all the cables are terminated
- requires all the cables to be connected to an Ethernet switch
- requires data cabling professionals to install it
- is complex and expensive to expand

WiFi is not robust or secure enough to be used as a primary form of networking. As the total wireless bandwidth is shared by all users, it is unsuitable for triple play services.

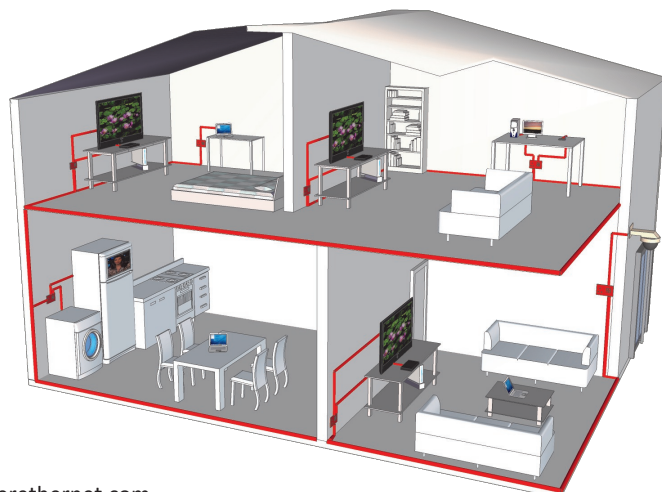
### The solution

With Power Ethernet's PE Sockets, creating a network-ready home is easy and cost effective.

By installing two or more PE Sockets a high speed, secure network is instantly created. There is no need to install structural cables as it uses the existing mains cables already installed in the building for the delivery of many forms of digital data and environmental services.

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.

A simple but elegant solution that provides home builders with a competitive design edge by enabling Internet connectivity around the home.



## 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



Connect to the Internet everywhere in the building



Smart Metering and Smart Home applications



Network backbone for Home Automation



Triple Play services



Voice over IP telephony



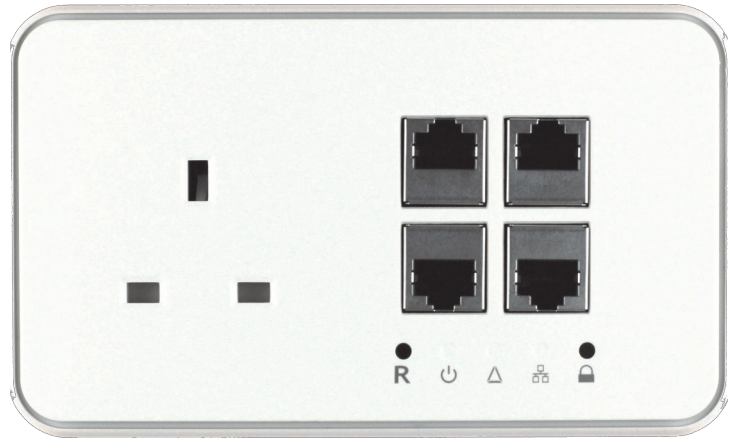
IPTV and Video on Demand



CCTV Surveillance



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.

