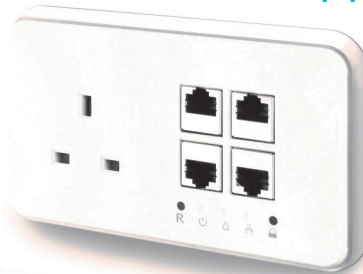


The all-in-one Ethernet Power Socket

Education applications



BENEFITS

- High-value, low-cost means of providing Internet connection anywhere in the school premises
- Classrooms can be digitised without the need of installing cables allowing the use of Virtual Learning Environment (VLE) equipment
- No rewiring needed as existing mains wiring will be used throughout the building
- No need for costly structural alterations
- Saves the cost and the disruption of installing CAT5/6 cables and the equipment to support them
- Protects data by encrypting the network with 128 bit AES security
- Eliminate network 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

Inspire and engage students with digital content

The use of smart boards and the Internet as part of the Virtual Learning Environment (VLE) is expanding and has become an essential tool that enhances the teaching and learning experience. It enables pupils and staff to access engaging and interactive online curriculum content and other educational services wherever and whenever needed.

The challenge

How to implement the infrastructure needed to deliver fast, reliable and secure Internet connections in a cost effective manner.

Structured CAT5/6 cables is expensive and its installation is too disruptive.

WiFi is not reliable or fast enough to be used as a primary network medium.

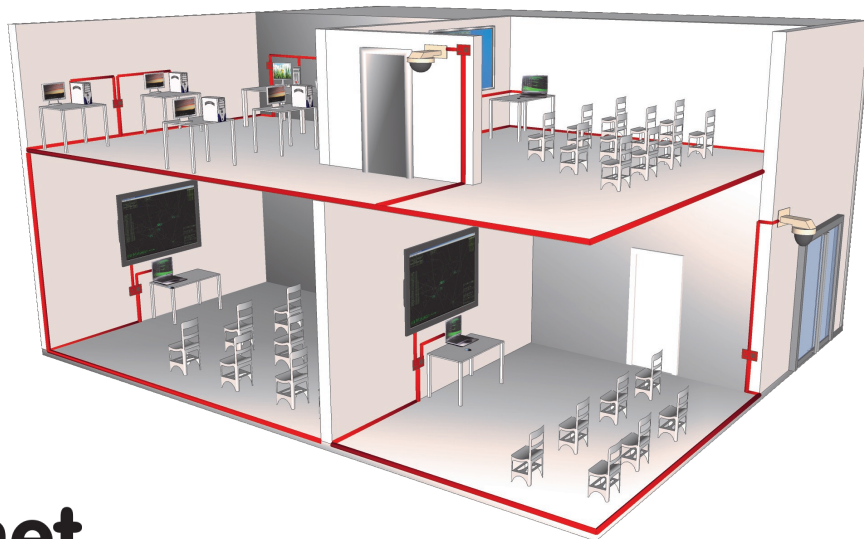
Plug-In Adaptors do not comply with Health and Safety requirements in a school environment and can be easily removed which could break the network.

The Solution

With the PE Sockets, digitising the classroom has never being easier.

By simply replacing existing power sockets with PE Sockets (without requiring any rewiring) a secure network is created throughout the school premises.

PE Sockets provide the freedom to connect all Internet enabled devices including smart boards and computers anywhere required on the school's premises, with all the advantages of reliability and compliance with Health & Safety regulations.



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.

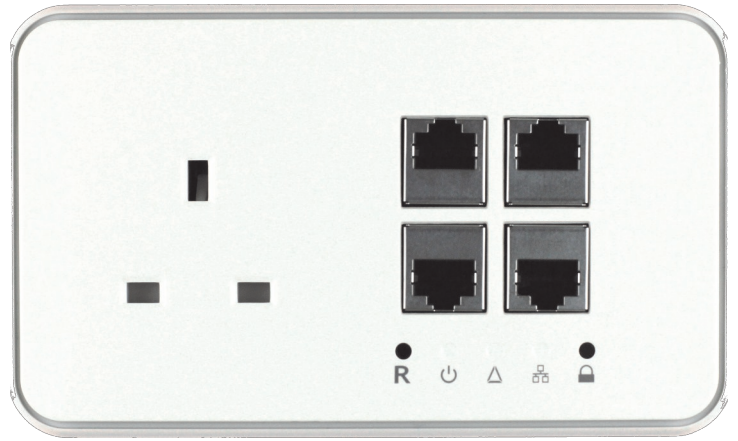
The PE Sockets have an integrated mains filter which improves the data transmission speeds and the units automatically go into power save mode for reduced power consumption when the network ports are not being used.

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.

