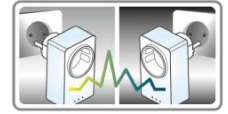




AV500 Powerline



Plug & Play



HD IPTV



Energy Saving

**HP-5101ES**

## AV500 PowerLine 3-Port Switch with Integrated Power Socket

Unsatisfied that your wireless can't reach certain areas in your house? Powerline is an ideal and simple solution for you. Edimax's HP-5101ES AV500 Powerline 3-Port Switch extends your internet access with standard power outlets to create a 500 Mbps high-speed network to any room without internet dead spot and no more messy wires running through your house. Integrated power socket for other electrical appliances, the HP-5101ES won't interfere with your usual power requirements.

Unlike Wi-Fi devices with limited bandwidth, HP-5101ES is perfect for high-bandwidth applications like HD video and audio streaming, and it's compatible with any networking Ethernet-enable devices. With 3 Fast Ethernet ports, you can connect more devices to HP-5101ES per room. HP-5101ES expands your network to the locations wireless cannot, so it is ideal for computers, home theater, smart TVs and gaming devices. It provides you an expandable and easy to set up network at home.

### Transmit Network Data via Existing Electrical Wires

The Edimax HP-5101ES can turn the existing electrical wires in your home or office into a high-speed network. Complicated, disruptive and unsightly cabling is no longer necessary - if your home or office doesn't have an existing Ethernet cable infrastructure, the HP-5101ES enables you to create a network environment easily by Plug-and-Play, and cost-effectively.

### Integrated Power Socket with Noise Filter

With the Edimax HP-5101ES, no electrical outlet goes to waste. It is designed with an integrated power socket, which you can use with any electrical device. So even when the HP-5101ES is plugged into a socket, you can still plug another electrical device into the HP-5101ES and maintain your original socket capacity. The in-built noise filter also ensures that you do not experience a sudden drop of network speed when a high power consuming electrical device is being used.

### 500Mbps HomePlug AV Standard & IGMP Support

The Edimax HP-5101ES not only complies with the HomePlug AV standard but also supports IGMP managed multicast streams. The HP-5101ES can provide users with a stable high-speed data transmission rates of up to 500Mbps over the existing electrical wires. It is also backward compatible with the 200Mbps HomePlug AV standard and has a transmission range of up to 300 meters. IGMP can be used for online gaming and video streaming applications, and allows for more efficient use of network resources. With the HP-5101ES, you can transfer high-definition video and digital audio quickly and easily.

### 3-Port Ethernet Switch

Connect up to three network devices at super-fast speeds with built-in 10/100Mbps Ethernet ports for flexible connectivity. Expand your home network to include a home entertainment system or printers and storage solutions from any room.

### Energy Saving

The HP-5101ES supports the energy saving mode to reduce power consumption. If no data transmission or reception occurs over a certain period of time, the switch will automatically go into standby mode to save power up to 50%.

# AV500 PowerLine 3-Port Switch with Integrated Power Socket

HP-5101ES

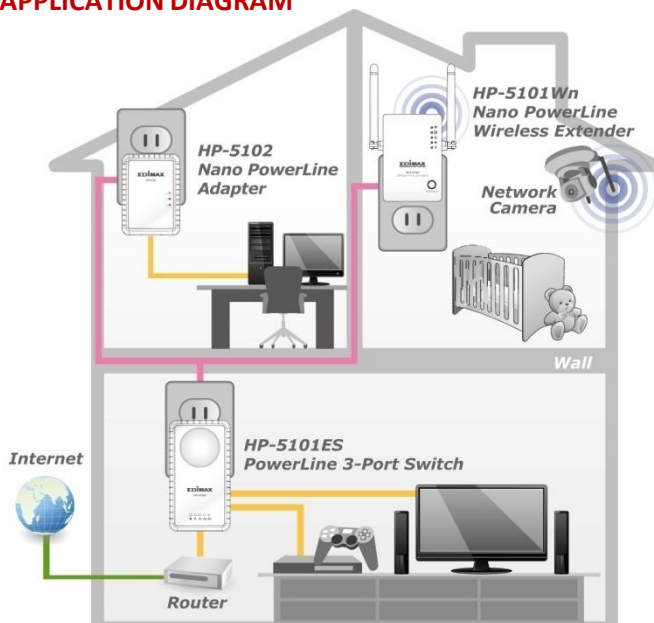
## KEY FEATURES

- Easy plug-n-play setup and 128 bit AES security
- Maximum Powerline speed up to 500Mbps
- Backward compatible with 200Mbps Powerline adapters
- Compatible with HomePlug 1.0 & 1.0 Turbo Devices
- Features energy saving mode to reduce power consumption
- Utilizes existing electrical wires to transmit network data
- Powerline transmission range up to 300 meters
- Integrated power socket with noise filter

## TECHNICAL SPECIFICATIONS

Hardware	Standards	Effect Data Rate
<ul style="list-style-type: none"> <li>• 1 x AC plug (EU, UK, US, or AU)</li> <li>• 1 x Power socket</li> <li>• 3 x 10/100Mbps Ethernet LAN ports</li> <li>• 1 x Power ON/OFF Switch</li> <li>• 1 x Group/Reset button</li> <li>• LED indicators: power, Ethernet, Powerline</li> </ul>	<ul style="list-style-type: none"> <li>• IEEE 1901</li> <li>• IEEE 802.3</li> <li>• IEEE 802.3u</li> <li>• HomePlug AC compliant</li> </ul>	<ul style="list-style-type: none"> <li>• TCP: Up to 95 Mbps effective throughput</li> <li>• UDP: Up to 95 Mbps effective throughput</li> <li>• Powerline: 500Mbps (PHY rate)</li> </ul>
Frequency Band	Modulation Schemes	Operating Range
<ul style="list-style-type: none"> <li>• 2-68MHz (with Mask)</li> </ul>	<ul style="list-style-type: none"> <li>• OFDM symbol modulation on line synchronization 1024/256/64/16/8-QAM, QPSK, BPSK, ROBO modulation</li> </ul>	<ul style="list-style-type: none"> <li>• Up to 300 meters</li> </ul>
QoS	Nodes	IGMP
<ul style="list-style-type: none"> <li>• 4 levels priority based contention access, and multi segment bursting</li> <li>• 8 levels VLAN priority field, TOS field</li> <li>• QoS classification by destination MAC address and IP port</li> </ul>	<ul style="list-style-type: none"> <li>• Up to 15 slaves with 1 master, 16 total devices</li> <li>• Max 8 bridged devices per station</li> </ul>	<ul style="list-style-type: none"> <li>• Support for IPv4/IGMPv1,v2,v3 snooping</li> <li>• Support for IPv6 and MLDv1, v2 snooping</li> <li>• Max 16 source addresses and group members</li> </ul>
IC / Memory	Security	Temperature & Humidity
<ul style="list-style-type: none"> <li>• AR7420+1540</li> <li>• 1MB Flash</li> <li>• 8MB SDRAM</li> </ul>	<ul style="list-style-type: none"> <li>• 128-bit AES link encryption with key management</li> </ul>	<ul style="list-style-type: none"> <li>• 0-45 degrees Celsius</li> <li>• 10-90% (non-condensing)</li> </ul>
Power Source & Power Consumption	Dimensions & Weight	Certification
<ul style="list-style-type: none"> <li>• 100-240V AC, 50-60Hz</li> <li>• 5W</li> </ul>	<ul style="list-style-type: none"> <li>• 125 x 69 x 43mm</li> <li>• 199g</li> </ul>	<ul style="list-style-type: none"> <li>• CE, FCC, LVD</li> </ul>

## APPLICATION DIAGRAM



## HARDWARE INTERFACE



500/200Mbps is the maximum theoretical communication speed at the physical layer via electric power lines (i.e. speed between Powerline devices) based on the IEEE 1901 standard. Maximum performance, actual data rates, and coverage will vary depending on network conditions and environmental factors. Product specifications and design are subject to change without notice.

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