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 rate 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%.

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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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

<table>
<thead>
<tr>
<th>Hardware</th>
<th>Standards</th>
<th>Effect Data Rate</th>
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<tbody>
<tr>
<td>1 x AC plug (EU, UK, US, or AU)</td>
<td>IEEE 1901</td>
<td>TCP: Up to 95 Mbps effective throughput</td>
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<tr>
<td>1 x Power socket</td>
<td>IEEE 802.3</td>
<td>UDP: Up to 95 Mbps effective throughput</td>
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<tr>
<td>3 x 10/100Mbps Ethernet LAN ports</td>
<td>IEEE 802.3u</td>
<td>Powerline: 500Mbps (PHY rate)</td>
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<tr>
<td>1 x Power ON/OFF Switch</td>
<td>HomePlug AC compliant</td>
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<tr>
<td>1 x Group/Reset button</td>
<td></td>
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<tr>
<td>LED indicators: power, Ethernet, Powerline</td>
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Frequency Band: 2-68MHz (with Mask)
Modulation Schemes: OFDM symbol modulation on line synchronization 1024/256/64/16/8-QAM, QPSK, BPSK, ROBO modulation
Operating Range: Up to 300 meters

QoS: 4 levels priority based contention access, and mult segment bursting
8 levels VLAN priority field, TOS field
QoS classification by destination MAC address and IP port
Nodes: Up to 15 slaves with 1 master, 16 total devices
Max 8 bridged devices per station
IGMP: Support for IPv4/IGMPv1,v2,v3 snooping
Support for IPv6 and MLDv1, v2 snooping
Max 16 source addresses and group members

IC / Memory: AR7420+1540
1MB Flash
8MB SDRAM
128-bit AES link encryption with key management

Power Source & Power Consumption:
100-240V AC, 50-60Hz
5W

Dimensions & Weight:
125 x 69 x 43mm
199g

Certification:
CE, FCC, LVD

APPLICATION DIAGRAM

HARDWARE INTERFACE