





500Mbps Powerlin



**HD IPTV** 



Reduce power use by over 30%

**HP-5102** 

# **500Mbps Nano PowerLine Adapter**

#### **Transmit Network Data via Existing Electrical Wires**

The Edimax HP-5102 transforms 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-5102 enables you to create a network environment easily and cost-effectively.

### 500Mbps HomePlug AV Standard & IGMP Support

The Edimax HP-5102 not only complies with the HomePlug AV standard but also supports IGMP managed multicast streams. The HP-5102 can transmit network data over existing electrical wires at speeds of up to 500Mbps. 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-5102, you can transfer high-definition video and digital audio quickly and easily.

#### Compatible with HomePlug 1.0 & 1.0 Turbo Devices

The HP-5102 is designed to ensure efficient coexistence with HomePlug 1.0 and 1.0 Turbo devices, providing guaranteed QoS to all devices present in a heterogeneous powerline network. In such an architecture, the HP-5102 and other HomePlug 1.0 stations share the CSMA/CA allocations, thus providing fair access to HomePlug 1.0 stations based on traffic priority.

#### **Hardware Combo Group/Reset Button**

The Edimax HP-5102 has a combo group/reset button for simplified group and reset configurations. Press the group/reset button and the HP-5102 will help you set up a password for your network automatically, or reset the device to factory defaults.

#### **Key Features:**

- Easy plug-n-play setup and 128 bit AES security
- Maximum powerline speed up to 500Mbps
- Backward compatible with 200Mbps powerline adapters
- Features energy saving mode to reduce power consumption
- Utilizes existing electrical wires to transmit network data
- Powerline transmission range up to 300 meters





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#### **TECHNICAL SPECIFICATIONS**

| Hardware  | Standards   | Effect Data Rate   |
|---|---|--|
| <ul> <li>1 x Power jack</li> <li>1 x 10/100Mbps Ethernet LAN port</li> <li>1 x Group/Reset button</li> <li>LED indicators: power, Ethernet, powerline</li> </ul>  | <ul><li>★IEEE 1901</li><li>★IEEE 802.3</li><li>★IEEE 802.3u</li></ul>                                       | <ul><li>TCP: Up to 95 Mbps effective throughput</li><li>UDP: Up to 95 Mbps effective throughput</li></ul>  |
| Frequency Band  | Modulation Schemes  | Operating Range  |
| *2-68MHz (with Mask)  | ◆OFDM symbol modulation on line<br>synchronization 1024/256/64/16/8-QAM,<br>QPSK, BPSK, ROBO modulation     | ♣Up to 300 meters  |
| QoS   | Nodes   | IGMP   |
| <ul> <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><li>Up to 15 slaves with 1 master, 16 total devices</li><li>Max 8 bridged devices per station</li></ul> | <ul> <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   |
| *AR7420+1540<br>*1MB Flash<br>*8MB SDRAM  | 128-bit AES link encryption with key<br>management  | <ul><li>0-45 degrees Celsius</li><li>10-90% (non-condensing)</li></ul>   |
| Power Source / Power Consumption  | Dimensions & Weight   | Certification  |
| *100-240V AC, 50-60Hz<br>*4W  | <b>*67 x 50 x 32mm *109g</b>  | ♦CE, FCC, LVD  |

#### **NETWORK SETUP DIAGRAM AND RELATED PRODUCTS**

- Plug a HP-5102 into a power outlet and connect it to a broadband router.
- Plug another HP-5102 into a power outlet and connect it to a computer's Ethernet port to establish a powerline connection.





