

## HomePlug AV (500Mbps) > mini Ethernet Bridge with Pass Thru

The GigaFast HomePlug AV mini Ethernet Bridge with Pass Thru operates on the HomePlug Powerline AV specification standard, providing up to 500Mbps bandwidth over home AC wiring. This PE959-EP2 is the smallest and fastest HomePlug pass thru bridge with noise filtering power socket in the market! This PE959-EP2 has a built-in AC socket with noise filtering feature. As a result, another device needing power can be plugged into the AC socket on this PE959-EP2 without taking up another wall socket. The built-in noise filter effectively reduces noise interference from the device plugged into the PE959-EP2's pass thru socket, thus improving its network bandwidth performance. This PE959-EP2 uses Atheros' newest AR7420 chipset which is optimized for high definition streaming movies, online multi-player games and other data intensive activities for today's HD Entertainment Center demand. Combined with a broadband DSL/Cable connection, every room with electrical power outlets will have easy access to high-speed Internet connection. With a plug and play installation, you can easily combine all of your AV electronics together and instantly enjoy your Entertainment Center from virtually any room in your home.

Like all of our HomePlug AV products, this PE959-EP2 is equipped with 128-bit AES security encryption. Combining the private home power grid and the 128-bit AES security encryption, this PE959-EP2 is extremely secure compared to other technologies such as WiFi network.



### Features

- Qualcomm AR7420
- IEEE1901 / HomePlug AV standard
- No new wire approach
- Up to 500Mbps PHY rate
- Co-exists with HomePlug 1.0 (14 / 85Mbps)
- Pass-thru socket with filtering
- Available plug types for US, UK, France, Germany, Switzerland, and Italy
- Security push button

### Specifications

|                              |  |
|------------------------------|--|
| Main Chipset                 | Qualcomm AR7420  |
| Computer Interface Standards | IEEE802.3(10BASE-T), IEEE802.3u(100BASE-T)   |
| Network Interface            | IEEE1901 / HomePlug AV<br>One RJ-45 (10/100Base-T Ethernet)<br>One 500Mbps power line port supporting co-existence with HomePlug 1.0 (14/85Mbps)   |
| Security                     | 128-bit AES link encryption with key management  |
| Data PHY Rate                | 500 Mbps over Powerline and 10/100Mbps over Ethernet   |
| Modulation Schemes           | OFDM symbol modulation on line synchronization<br>1024/256/64/16/8 - QAM, QPSK, BPSK, ROBO carrier modulation                                      |
| Frequency Band               | 2 ~ 50 Mhz   |
| Additional Protocols         | Mix of TDMA and CSMA/CA channel access scheme;<br>CO device generates a periodic beacon carrier for channel access scheme                          |
| Operation Range              | Estimated range of 300 meters in wall power lines  |
| Cabling                      | 100Base-T<br>Cat. 5 UTP cable  |
| Operating Temperature        | 0°C to 40°C ambient temperature  |
| Storage Temperature          | -20°C to 70°C ambient temperature  |
| Humidity                     | 10 to 90% maximum (non-condensing)   |
| Power Input                  | 100 ~ 240V @ 50/60Hz internal  |
| Power Connector              | Embedded EU / UK / US specifications   |
| Pass Thru                    | 12A max. load  |
| Housing                      | Plastic ( 121.7mm x 56.3mm x 39.3mm )  |
| Software Utility             | Device detect/diagnostic, NEK password setup for local and remote device Windows 98 SE, ME, 2000, NT, XP, Vista, or 7 for initial setup (optional) |
| Status Lights                | Power: on / off<br>PLC link: red / orange / green / off<br>Ethernet link: solid / blinking / off   |
| Certifications               | HomePlug AV Powerline certification<br>FCC Class B / CE mark   |

### Application

