

## 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-EP is the smallest and fastest HomePlug pass thru bridge with noise filtering power socket in the market! This PE959-EP 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-EP without taking up another wall socket. The built-in noise filter effectively reduces noise interference from the device plugged into the PE959-EP's pass thru socket, thus improving its network bandwidth performance. This PE959-EP uses Atheros' newest AR7400 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-EP is equipped with 128-bit AES security encryption. Combining the private home power grid and the 128-bit AES security encryption, this PE959-EP is extremely secure compared to other technologies such as WiFi network.



### Features

- Qualcomm AR7400
- IEEE1901 / HomePlug AV standard
- No new wire approach
- Extension to 68Mhz spectrum and up to 500Mbps PHY rate
- Gigabyte Ethernet capability (IEEE802.3ab, 1000BASE-T)
- 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 AR7400
Computer Interface	IEEE802.3(10BASE-T), IEEE802.3u(100BASE-T) IEEE802.3ab(1000BASE-T)
Standards	IEEE1901 / HomePlug AV
Network Interface	One RJ-45 (10/100/1000Base-T Ethernet) 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 10/100/1000Mbps over Ethernet
Modulation Schemes	OFDM symbol modulation on line synchronization 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; 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 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 PLC link: red / orange / green / off Ethernet link: solid / blinking / off
Certifications	HomePlug AV Powerline certification FCC Class B / CE mark

### Application

