HomePlug AV (500Mbps) > Ethernet Bridge with Smart Link™

The GigaFast HomePlug AV 500Mbps Ethernet Bridge operates on the HomePlug Powerline AV Specification standard, providing up to 500Mbps bandwidth over home AC wiring. Smart Link™ enhances the performance and coverage of powerline technology by transferring data across all three electrical wires—line, neutral and ground. The PG958-EB uses Atheros AR7400 chipset which is optimized for streaming high definition media applications. The AR7400 includes a faster processor, high speed interfaces and an analog front end (AFE). With these added high performance abilities, PG958-EB is perfect for ultra-high speed HD entertainment networks in homes and is perfect for areas that are hard to reach by wireless connections. 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. Combined with a broadband DSL/Cable connection, every room with electrical power outlets will have easy access to high-speed Internet connection.

Like all of our HomePlug AV products, this PG958-EB is equipped with 128-bit AES security encryption. Combining the private home power grid and the 128-bit AES security encryption, this PG958-EB is extremely secure compared to other technologies such as WiFi network.

Features

- Qualcomm AR7400 chipset
- IEEE1901 / HomePlug AV standard
- Smart Link™ enhances the performance and coverage of powerline technology by transferring data across all three electrical wires—line, neutral and ground
- Extension to 68Mhz spectrum and up to 500Mbps PHY rate
- Gigabit Ethernet capability (IEEE 802.3ab, 1000BASE-T)
- Co-exists with HomePlug 1.0 (14/85mbps)
- Stand-alone unit attaches directly to Broadband device and home power line network for seamless integration
- Security push button for software free configuration
- Power packet utility provides unsophisticated users a way to graphically manage their HomePlug network (optional)

Application

Specifications

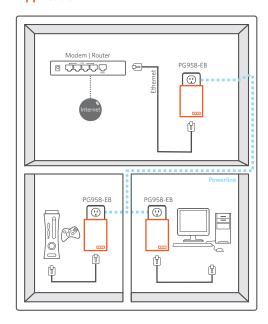|	
Main Chipset	Qualcomm AR7400
Computer Interface	IEEE802.3 (10BASE-T)
	IEEE802.3u (100BASE-T)
	IEEE802.3ab (1000BASE-T)
Standards	IEEE 1901 / HomePlug AV
Network Interface	One RJ-45 (10/100/1000Base-T Ethernet)
	One 500Mbps power line port supporting co-existence with HomePlug 1.0 (14/85Mbps)
Security	128-bit AES link encryption with key management
Data PHY Rate	500Mbps 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	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 US / EU / UK / AU specifications
Housing	Plastic (98mm x 71mm x 34mm)
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

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