

HL129EP

SMART LINK HOMEPLUG AV2 1200MBPS WITH PASS THROUGH

OVERVIEW

The Aztech HL129EP Smart Link HomePlug AV2 1200Mbps AC Pass-Thru Ethernet Adapter embarks on a concept of No New Wires © data communications, and transforms your in-house powerline into a networking infrastructure. It provides SmartLink Plus coupling to the Line-Neutral pair and the Line-Ground pair of the AC mains. It successfully reduces “dead spot” and increases throughput and network coverage within a home. Surf the Internet and share data at speeds of up to 1200Mbps PHY rates through powerline in any outdoor environment and rest assured with the best security from eavesdroppers through encryption on the power circuit.

HL129EP Smart Link HomePlug engine utilizes a Qualcomm Atheros QCA7500 chipset and a QCA8334 Giga Ethernet chipset. IC QCA7500 provides HPAV2 SISIO and MIMO dual integrated line drivers. Two transmitters possible to transmit on any two of three plug pairs: Line, Neutral and Ground. PHY layer takes single PB stream and segments into two independent bit streams. Two receivers provide independent bit streams and recombines into a single PB stream. It features faster processing power and Fast Ethernet host interfaces. The solution is in compliance with the IEEE1901 , Homeplug AV and Homeplug AV2, hence allowing hassle-free compatibility with existing Homeplug AV devices and other suppliers of IEEE1901 PLC (Powerline Line Communication) devices.

Enhanced Quality of Service (QoS) also provides the guaranteed bandwidth reservations for multimedia payloads including HDTV, SDTV over IP (IPTV), higher data rate broadband sharing, Online-Gaming, VoIP Calls, extending Wireless LANs coverage, printer and peripheral sharing, Audio-Video transmission across the network and Network camera connectivity as well.

HL129EP also provides a configuration push button for a convenient way of creating HomePlug network without the need to using the Device Utility from a computer. The security feature is supported by a 128-bit AES Hardware encryption, ensuring the network communications is free from various kinds of eavesdroppers and hackers.



MAIN FEATURES

Protocol/Standards	<ul style="list-style-type: none"> • IEEE 1901, IEEE 1905.1 and HomePlug AV Compliant • HomePlug AV2 Compliant • AV2 30MHz and 67MHz MIMO profiles • AV2 30MHz and 67MHz SISO profiles • Power Save mode • Co- existence with HomePlug 1.0/Turbo Nodes • Compliant to ErP 2013 directive • IEEE 802.3 10/100/1000 Ethernet(1200Mbps)
Data Transfer Rate	<ul style="list-style-type: none"> • Up to 1200Mbps over Powerline
Key features	<ul style="list-style-type: none"> • Integrated MAC/PHY, analog front end and line driver • Supports RGMII/RMII Ethernet with both MAC and PHY mode • Supports DDR2/3 Memory • Supports Line-Neutral/Line-Ground 2x2 MIMO with beam-forming • Dynamic channel adaption and channel estimation • Windowed OFDM with noise mitigation based on patented line synchronization techniques improves data integrity in noise condition • Advanced Turbo Code Forward Error Correction • Turbo Decode Rates: 1/2, 16/21, 8/9
Modulation Support	<ul style="list-style-type: none"> • Supports OFDM 4096/1024/256/64/16/8-QAM, QPSK, BPSK, ROBO, HS-ROBO and Mini-ROBO Modulation Schemes
Frequency Band	<ul style="list-style-type: none"> • 2MHz to 67.5MHz band
Quality of Service	<ul style="list-style-type: none"> • Priority-based CSMA/CA channel access schemes maximize efficiency and throughput • Integrated Quality of Service (QoS) Enhancements • Hardware Packet Classifiers for ToS, CoS and IP Port Number • Supports IGMP managed multicast session
Diagnostic and Management Interface	<ul style="list-style-type: none"> • Homeplug AV generic and vendor specific Management Message Entries (MME)
Security Support	<ul style="list-style-type: none"> • 128-bit AES Link Encryption with key management

SPECIFICATIONS MAY CHANGE WITHOUT PRIOR NOTICE

Memory	<ul style="list-style-type: none"> SPI Flash: 4 MB DDR3 SDRAM : 128MB
Hardware	<ul style="list-style-type: none"> Qualcomm Atheros QCA7500 AV2 Compliant MAC/PHY transceiver chipset (1pc) Qualcomm Atheros QCA8334 Four-Port Gigabit Ethernet Switch chipset (1pc)
Power Supply	<ul style="list-style-type: none"> Switch Mode 85VAC to 265VAC Supply for GBR/DEU/FRA/AUS 3-pin Plugs with Pass-Through

PHYSICAL SPECIFICATIONS

LED Indicators

Power LED	Green
Powerline Link/ Activity Status LED	Good (Red) Better (Amber) Best (Green)
2 x Ethernet LED	Green

Push Button Switch

- 1 x Simple Connect Push Button (Set up network password automatically)
 - » Press button for 10 seconds to randomize Private Network Name.
 - » Press button for 2-4 seconds for simple connect.
- 1 x Factory Default Reset Button
 - » Press button for 2-4 seconds to restore to Factory Default Settings.

External Connectors

- 1 x Electrical Power plugs
- 1 x AC Pass-Through Power Socket
- 2 x RJ45 for 10/100/1000 Ethernet

Dimensions

- XX(H) mm x XX(W) mm x XX(D) mm

Weight

- XX Kg

Power Consumption

- XX W

Resin/Plastic Casing

- Polycarbonate, FR rating UL94-V0

PLATFORM SUPPORT

- Windows 98SE, 2000, ME, XP 32bit, Vista 32bit, Window 7/8 (32/64-bit), Mac OS X.

REGULATORY APPROVALS

- Europe : CE (EN 55022/EN 50412), IEC60950

ENVIRONMENTAL

Temperature

- Operating : 0° to 40° Celsius (32° to 104° Fahrenheit)
- Non-Operating : -25° to 70° Celsius(-13° to 158° Fahrenheit)

Humidity

- Operating : 30% to 80% Relative Humidity (Non-Condensing)
- Non-Operating : 30% to 95% Relative Humidity (Non-Condensing)