

Product External Specification For Powerline AV 500 Adapter

Model Name: DHP-500AV Rev. A1

Document Revision: 1.3



History

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Rev	Date	Author	Reason for Changes
1.0	2010/9/7	Webber Hsu	• 1 st release
1.1	2010/9/24	Webber Hsu	• Typo revise
1.2	2010/10/15	Webber Hsu	• Add block diagram
1.3	2011/01/31	Webber Hsu	• Revise LED
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1.0 Scope

1.1 Document

The D-link DHP-500AV Powerline AV 500 Adapter uses your home's existing electrical wiring to create a network or extend your existing network. It turns every power outlet into a possible network connection to access digital media devices, game consoles, print servers, computers, and network storage devices throughout your home. Compliance with the IEEE 1901 standard and backward compatibility with the Homeplug AV ensure that the DHP-500AV can be used with older powerline devices.

1.2 Product Feature

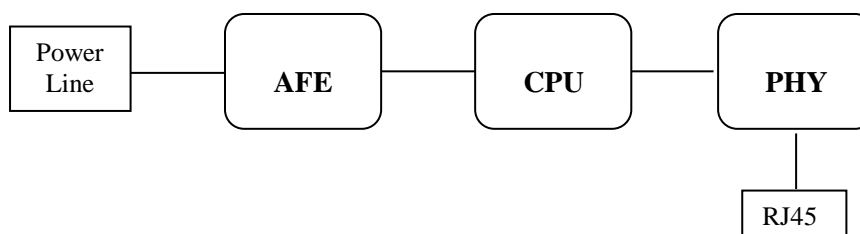
- **Power Line Interface**
One PowerLine interface Compatible with IEEE1901 specification
- **LAN Interface:**
One Gigabit LAN port
- **Security**
128-bit AES Link Encryption with key management for secure power line communications
- **Functions support:**
Power saving mode
Qos
Simple connect Button

2.0 Requirements

The following sections identify the detailed requirements of the DHP-500AV Powerline AV 500 Adapter.

2.1 Hardware Specification

2.1.1 Block Diagram



2.1.2 Hardware Interface

	Feature	Detailed Description
2.1.2.1	Power Line Interface	<ul style="list-style-type: none"> One PLC interface Compatible with IEEE 1901 specification up to 500 Mbps HomePlug® AV compliant
2.1.2.2	LAN Interface	<ul style="list-style-type: none"> One Gigabit LAN port Complies IEEE 802.3 specification Support IEEE 802.3x Flow Control Support Auto Negotiation Support Auto MDI/MDIX
2.1.2.3	Reset Button	<ul style="list-style-type: none"> 1 Push button for reset the device to default setting.
2.1.2.4	Simple Connect Button	<ul style="list-style-type: none"> 1 Push button for Power Line sync connection



2.1.3 LED Indicators

	LED Indicator	Color	Status	Description
2.1.3.1	Power	Green	Blinking Green	• The device is under process of Simple Connect Button
			Slow Blinking	• The device is under power saving mode
			Solid Green	• The device is power on
			Light off	• The device is power off
	Power Line	Green/Orange/Red	Solid	• The link is established
			Blinking Green	• Data transmission on high performance
			Blinking Orange	• Data transmission on medium performance
			Blinking Red	• Data transmission on low performance
			Light off	• The link is not established
	LAN	Green	Solid Green	• The link is established
			Blinking Green	• Data transmission
			Light off	• The link is down

2.2 Utility Specification

	Feature	Detailed Description
2.2.1	System compatible	• Compatible with Windows XP, Vista, and Windows 7
2.2.2	Support Functions	<ul style="list-style-type: none"> • Support parameter settings such as Encryption Key • GUI display information such as TX/RX PHY rate, MAC address of PLC devices on the powerline network, End-user connecting numbers.

2.3 Electrical Characteristic

	Feature	Detailed Description
2.3.1	Power Input	<ul style="list-style-type: none"> 100V ~ 240V
2.3.2	Power Consumption	<ul style="list-style-type: none"> Maximum 8W

2.4 Mechanical Requirements

	Feature	Detailed Description
2.4.1	Length	<ul style="list-style-type: none"> 100mm
2.4.2	Width	<ul style="list-style-type: none"> 70mm
2.4.3	Height	<ul style="list-style-type: none"> 34mm
2.4.4	Weight	<ul style="list-style-type: none"> 143.8g

2.5 Environmental Requirements

	Feature	Detailed Description
2.5.1	Operating Temperature Conditions	<ul style="list-style-type: none"> The product is capable of continuous reliable operation when operating in ambient temperature of 0 °C to +40°C.
2.5.2	Non-Operating Temperature Conditions	<ul style="list-style-type: none"> Neither subassemblies is damaged nor the operational performance be degraded when restored to the operating temperature after exposing to storage temperature in the range of -20 °C to +65 °C.
2.5.3	Operating Humidity conditions	<ul style="list-style-type: none"> The product is capable of continuous reliable operation when subjected to relative humidity in the range of 10% and 90% non-condensing.
2.5.4	Non-Operating Humidity Conditions	<ul style="list-style-type: none"> The product is not be damaged nor the performance be degraded after exposure to relative humidity ranging from 5% to 95% non-condensing

2.6 Certification Requirements

	Feature	Detailed Description
2.6.1	EMC	<ul style="list-style-type: none"> FCC, CE, K.21
2.6.2	Safety	<ul style="list-style-type: none"> UL, CE/LVD