



## PLA6456

### G.hn 2400 Wave 2 Powerline Pass-thru Gigabit Ethernet Adapter

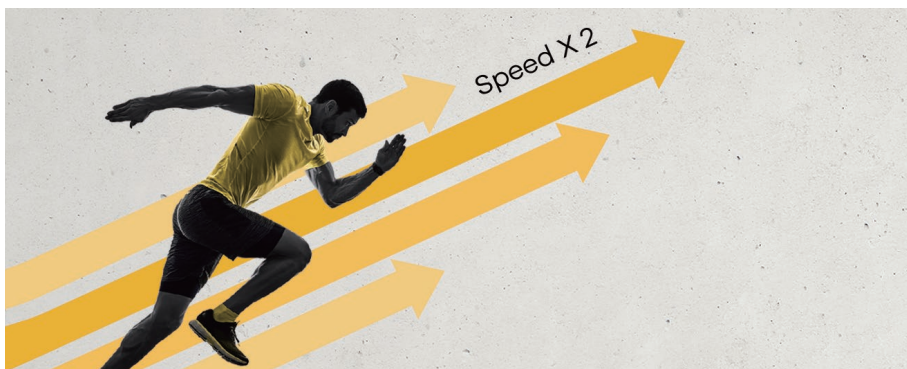
#### Converting power into a supersonic network

PLA6456 transforms the way users network their homes with the new G.hn technology! It transforms your power outlets into a fast network while extending Internet access throughout your home. Capable of delivering up to 2400 Mbps, it is perfect for 8K streaming and provides lag-free online gaming experience.

#### Benefits

##### Latest powerline technology with ITU-T G.hn standard

As demand for ultra-fast Internet speed increases, G.hn technology is becoming the best in-home electrical network connection. Up to two times faster than HomePlug AV2 technology. Zyxel PLA6456 with G.hn technology delivers maximum data transfer rate and stability for your home networking.



Innovative G.hn wave 2 technology for superior performance



Optimized 8K for video streaming with up to 2400 Mbps speed



Easy to setup, get connected within a minute



Pass-through design for an extra power outlet



Gigabit Ethernet port for blazing speed and faster transfer rates



Save up to 90% power consumption while in standby mode

### Optimized for 8K and online games

As more 4K and 8K video content are available, PLA6456 delivers superb performance and low latency for your home streaming entertainment system. PLA6456 provides plenty of bandwidth for 8K video streams and fast connection for lag-free online gaming sessions. Experience top-notch digital entertainment.



### Easy to setup and connect

Plug in two PLA6456 to any electrical outlets in your home and then instantly gain a network connection without having to run physical wires. Push the sync button on both PLA6456 to quickly and securely get a AES 128-bit encrypted network going through your electrical outlets.



### Pass-thru design for an extra power outlet

A pass-through outlet allows you to keep your existing powered devices connected. No power outlet sacrifice needed. The embedded noise filter eliminates electrical signal noise to further improve your electrical outlet's network quality.



## Gigabit Ethernet port for blazing speed

Equipped with a Gigabit Ethernet port, the PLA6456 allows you to connect Ethernet enabled devices at Gigabit speeds. Perfect for streaming 8K video on smart TVs. Just plug an Ethernet cable to your favorite device for maximum speed!

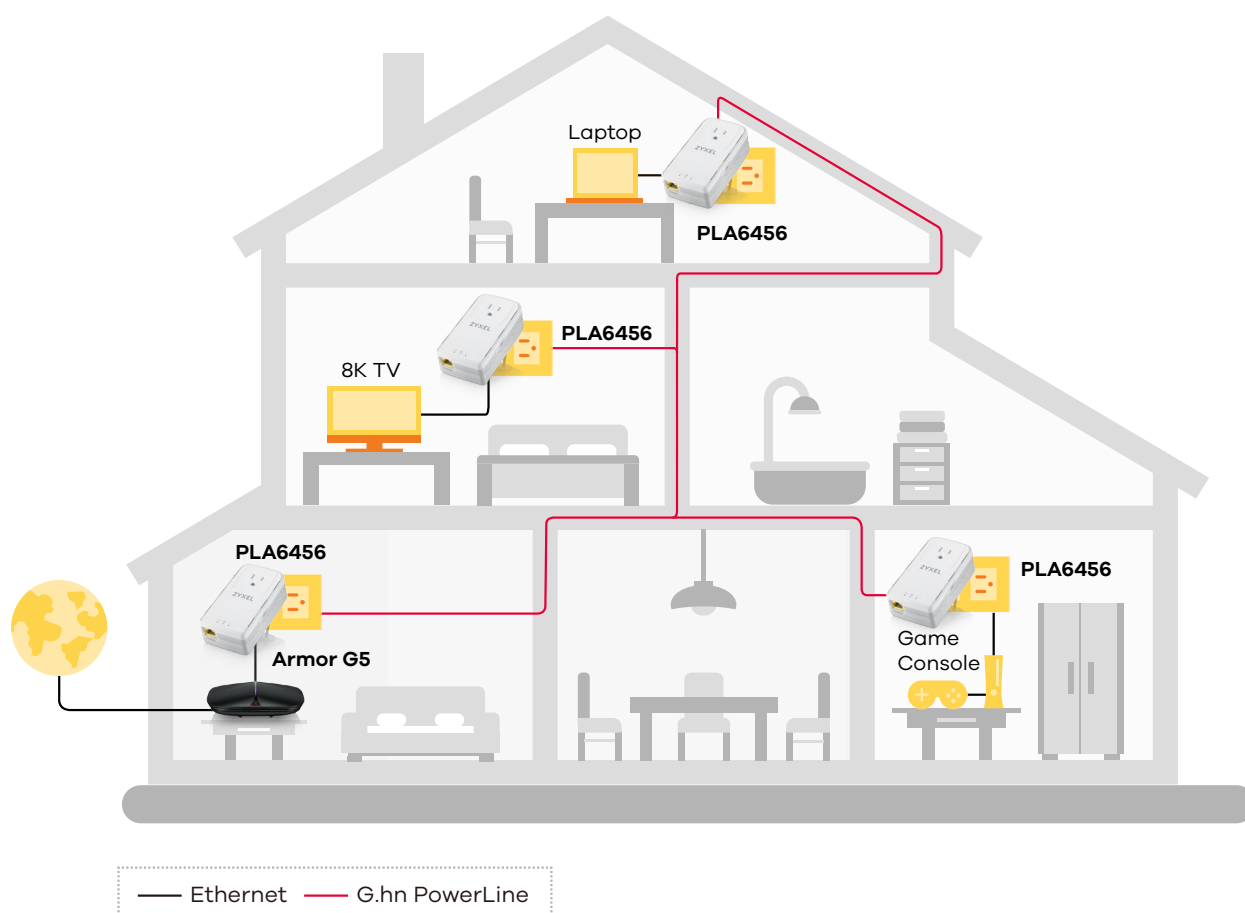


## Power saving with standby mode

PLA6456 automatically goes into standby mode to reduce the Powerline adapter's power usage when the device is not in use. Save on your electric bill, reduce up to 90% of power consumption while in standby mode.



## Diagram





# Specifications

## System Specifications

### Standard Compliance

- ITU-T G.hn G.9963
- IEEE 1905.1
- IEEE 802.3/4/ab 10/100/1000BASE-T
- G.hn 100MHz MIMO

### Transmission Speeds

- Powerline up to 2400 Mbps\*<sup>1</sup>
- Ethernet up to 1000 Mbps
- Power rating: 110AC, 60Hz
- Socket/Connector:



US outlet  
(15A Max. 110V)

- Type B (NEMA 5-15)/TW, US

### Modulations

- OFDM
- 4096/1024/256/64-QAM
- QPSK, BPSK Carrier modulation schemes

### Range

- Max. range up to 500 meters over power line\*<sup>2</sup>

### Group Node

- Max. group node up to 14 nodes

### Networking Protocols

- 802.1D Ethernet Bridge
- 8 levels of Powerline packet-prioritized QoS
- IPv6 MLD control
- IPv4 IGMP snooping

### Security

- 128-bit AES encryption

### Frequency Band

- 2 MHz ~ 80MHz

### Management

- HTTP Web-based

## Hardware Specifications

- Ethernet interface: One 10/100/1000 Mbps RJ-45 connector with auto MDI/MDIX support
- LED Indicators
  - Power on/off
  - Powerline network quality with Green, Amber, Red
  - Ethernet link/activity
- Button
  - Encrypt/Reset Button

## Physical Specifications

### Twin Pack

- Item dimensions (WxDxH): 113 x 64 x 42 mm (4.45" x 2.51" x 1.65")
- Item weight: 368 g (0.81 lb.)
- Packing dimensions (WxDxH): 175 x 150 X 81 mm (6.89" x 5.91" x 3.19")
- Packing weight: 560 g (1.23 lb.)

## Environmental Specifications

### Operating Environment

- Temperature: 0°C to 40°C (32°F to 104°F)
- Humidity: 10% to 90% (Non-condensing)

### Storage Environment

- Temperature: -30°C to 70°C (-22°F to 158°F)
- Humidity: 10% to 95% (Non-condensing)

## Certification

- Safety: CE-LVD, BSMI
- EMC: CE, FCC, ICES, BSMI

## Package Contents

- G.hn powerline Ethernet adapter
- Quick start guide
- Safety warning and DoC
- Ethernet cable

## Ordering Information

- US SKU: PLA6456-US0201F

\*<sup>1</sup> The theoretical maximum channel data transfer rate is derived from G.hn Wave-2 Powerline specifications. Actual data transfer rate will vary from network environment including: distance, network traffic, noise on electrical wires, quality of electrical installation and other adverse conditions.

\*<sup>2</sup> Actual range will vary from network environment including: distance, network traffic, noise on electrical wires, quality of electrical installation and other adverse conditions.

For more product information, visit us on the web at [www.zyxel.com](http://www.zyxel.com)

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