





Extend Your Home Power Lines to the Whole-home Wireless Network



- Easily extends home networks wirelessly through the existing powerline network
- Plug-and-play, compact design
- Improve performance for up to 60% with the IEEE 1901 500 Mbps technology*
- Backward-compatible with the 200 Mbps HomePlug AV standard
- Simple setup with the easy-to-use wizard and WPS button
- QoS enhances media streaming quality
- Power on/off switch enables easy energy saving
- Multi-color LED identifies powerline network signal quality

The ZyXEL PLA4231 500 Mbps Powerline Wireless N Extender provides not only a stable networking environment to stream high-definition videos, music and other multimedia, but also extends the wireless network to every room in the house.

Benefits

Easily extends network range to cover wireless devices

Compatible with 802.11 b/g/n wireless networks, the ZyXEL PLA4231 can extend the coverage to connect your wireless devices throughout the house over the existing powerline network. Just plug powerline adapters and PLA4231 into electric outlets in different rooms, then you can easily extend your powerline home network like a wireless network. You can easily stream videos, enjoy games and surf Web sites on tablets, laptops or smartphones anywhere at home, even at the hard-to-reach places. The two Ethernet ports on the device make it easy to provide Internet access for HDTVs, Blu-ray™ players, DVRs, PCs and game consoles.

Enjoy stable HD videos and gaming

Powered by IEEE1901 500 Mbps technology*, the ZyXEL PLA4231 can improve network performance for up to 60% comparing to the 200 Mbps powerline technology.** The advanced Quality of Service (QoS) features also improve the streaming quality of multimedia applications. You can have stable high-performance network and enjoy multiple HD streaming, multiplayer gaming and Web surfing simultaneously.

Green products reduce energy consumption

The ZyXEL PLA4231 features a power on/off button that allows you to easily turn off the device when it's not in use, so you can also do your part to save energy for a more eco-friendly environment.

Easy security setup

ZyXEL's PLA4231 features an easy setup wizard and a WPS button that allows you to set up the extender and connect to wireless devices easily and quickly. Data transmission is protected by the 128-bit Advanced Encryption Security (AES) mechanism to provide a secure connection to the Internet. Encryption can be configured through a simple button press on the powerline adapters and PLA4231—no complicated setup or software is required.



PLA4231 500 Mbps Powerline Wireless N Extender







Specifications

System Specifications

- 802.11 b/g/n compliant with data transfer rates of up to 300 Mbps*
- Compliant with IEEE 1901 with data transfer rate of up to 500 Mbps*
- Compatible with HomePlug AV standard

Access Methods

- Wireless: CSMA/CA Powerline: CSMA/CA
- Ethernet: CSMA/CD

Range

- Wireless: Max. range up to 300 meters
- Powerline: Max. range up to 300 meters

Security

- Wireless: 64/128 bit WEP, WPA-PSK/WPA2-PSK
- Powerline: 128-bit AES encryption

Quality of Service (QoS)

- · Wireless:
- Wi-Fi Multimedia (WMM)
- · Powerline:
- ToS
- Support up to 4-level type QoS
- Support up to 8-level VLAN priority field

System Requirements

• Utility software OS Support: Microsoft Windows XP/Vista/7/8 (32-bit/64-bit) Mac OS X v10.6/ v10.7/ v10.8/v10.9

WLAN Features

- Wi-Fi Protected Setup (WPS)
- Wi-Fi Multimedia (WMM)
- MAC address filtering

Hardware Specifications

- Ethernet interface: Two 10/100 Mbps RJ-45 connectors with auto MDI/MDIX support
- LED indicators:
- Power on/off
- Wireless/WPS activity/on/off
- Powerline network quality
- Green: Best; Amber: Better; Red: Good
- Ethernet 1 link/activity
- Ethernet 2 link/activity
- · Button/Switch:
- Power on/off button
- WPS button
- Encrypt/Reset button
- Power rating: 100 240 V AC, 50/60 Hz
- Power consumption
- Full operation: 8 watt max.
- · Wireless link/activity
- Plug type:



■ EU type: Two pins for EU 220 V - 230 V



US type: Two pins for US 120 V



• UK type: Three pins for UK 240 V

Physical Specifications

- Item dimensions (WxDxH): 99 x 60 x 37 mm (3.9" x 2.36" x 1.46")
- Item weight: 126 g (0.28 lb.)
- Packing dimensions (WxDxH): 180 x 135 x 98 mm (7.08" x 5.31" x 3.86")
- Packing weight: 390 g (0.86 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

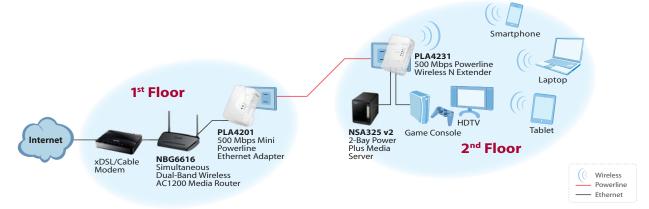
EMC

· CE, FCC, IC

Package Contents

- Powerline Wireless N Extender
- Ethernet cable
- Ouick start guide
- Support CD
- Warranty card
- *The theoretical maximum channel data transfer rate is derived from IEEE Standard 802.11 and IEEE 1901 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. Ethernet connection will operate at the maximum of 100 Mbps.
- ** Average throughput gain in typical homes.

Application Diagram



























Upgrade Your Home Network for Data Streaming with No New Wires!

- · Compact Plug-and-play design
- Upgrade powerline networks with data transfer rates of up to 500 Mbps*
- IEEE 1901-compliant and HomePlug AV-compatible
- QoS for media streaming quality enhancements
- Power-saving mode reduces energy waste
- Encrypt button for easy security setup
- 128-bit AES encryption for network security
- Multi-color LED indicates powerline network quality

The ZyXEL PLA4201 Series 500 Mbps Mini Powerline Ethernet Adapter can improve network performance by up to 60% comparing with 200 Mbps powerline technology** for stable HD media streaming. Just plug a pair of PLA4201 Series into electric outlets, connect your router to one of the pair and any network device to the other to immediately enjoy HD media streaming, multiplayer gaming and other network applications simultaneously in any room.

Benefits

Plug-and-play, compact design for easy setup

ZyXEL's stylish mini-size PLA4201 Series gives you the installation flexibility to turn home electric lines into a network without blocking power outlets. The PLA4201 Series features plug-and-play installation and upward-facing ports for easy, effortless installation. Add two or more units to easily extend your home network to enable Internet access from HDTVs, Blu-ray™ players, DVRs, PCs and game consoles.

Enjoy stable HD videos and gaming

Powered by the IEEE 1901 technology, the ZyXEL PLA4201 Series provides a stable high-performance network to take full advantage of all entertainments the Internet has to offer.

QoS-enhanced media streaming quality

The advanced Quality of Service (QoS) feature improves the quality of multimedia streaming applications such as triple-play services by traffic prioritizing, HD video streaming, high-speed Internet access and VolP.

Energy-saving green design

When there is no active Ethernet link, the ZyXEL PLA4201 Series will enter a power-saving mode consuming only 0.5 watt of power to reduce energy consumption by more than 88% comparing to adapters without this function.

Easy home network security setup

Data transmission through the ZyXEL PLA4201 Series is protected by 128-bit Advanced Encryption Security (AES) to provide a secure connection to the Internet. The encryption mechanism can be configured with a simple button press—no complicated setup or additional software required.



PLA4201 Series 500 Mbps Mini Powerline Ethernet Adapter





PLA4201 Series 500 Mbps Mini Powerline Ethernet Adapter



Specifications

System Specifications

- Compliant with IEEE 1901 with data transfer rate of up to 500 Mbps data rate*
- · Compatible with HomePlug AV standard

Access Methods

• CSMA/CA channel-access schemes

• Max. range up to 300 meters (984 feet) over power line

Power Saving Mode

• If link is inactive for a period (default setting: 60 seconds)

Security

• 128-bit AES encryption

Quality of Service (QoS)

- Supports up to 4-level type QoS
- Supports up to 8-level VLAN priority field

Frequency Band

• 2 MHz to 67.5 MHz

Dynamic Neighbor Network Support IGMP

• IGMP snooping for multicast to multiple unicast mapping

System Requirements

- Deployment requirements:
- Devices with 10/100 or 10/100/1000 Mbps Ethernet port
- Operating system independent
- Utility Software OS support:
- Microsoft Windows XP/Vista/win 7

Hardware Specifications

- Ethernet interface: One 10/100 Mbps RJ-45 connector with auto MDI/MDIX support
- LED indicators:
- Power on/off
- Powerline network quality
- Green: Best; Amber: Better; Red: Good
- Ethernet link/activity
- · Button: Encrypt/Reset button
- Power rating: 100 240 V AC, 50/60 Hz
- Power consumption:
- Full operation: 4 watt max.
- Power-saving mode: 0.5 watt max.
- Plug type:



• EU type: Two pins for EU 220 V - 230 V



• US type: Two pins for US 120 V



UK type: Three pins for UK 240 V

Physical Specifications

- Item dimensions (WxDxH): 50 x 25 x 70 mm (1.97" x 0.98" x 2.75")
- Item weight: 77 g (0.17 lb.)
- Packing dimensions (WxDxH): 148 x 118 x 81 mm (5.83" x 4.65" x 3.19")
- · Packing weight:
- Single pack: 267 g (0.59 lb.)
- Starter kit pack: 344 g (0.76 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
- EMC: CE, FCC

Packing Contents

- Powerline Ethernet Adapter
- Ethernet cable
- Quick start guide
- Support CD
- · Warranty card
- *The theoretical maximum channel data transfer rate is derived from IEEE 1901 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
- ** Average throughput gain in typical homes

