



# 4-Port Powerline 500 AV Adapter

## TPL-405E (v1.0R)

- · Network media center devices such as gaming consoles, media players, televisions, and DVRs to the four Gigabit ports
- Stream HD video over a high speed Powerline connection
- · Advanced AES data encryption
- Power Save mode reduces electrical consumption by 80%

TRENDnet's 4-Port Powerline 500 AV Adapter, model TPL-405E, uses any electrical outlet to create a secure high speed network. Connect one adapter to your network (such as TRENDnet's TPL-401E) and plug in the TPL-405E at your media center to stream HD video through the four Gigabit ports to gaming consoles, networked televisions, DVRs, and computers.

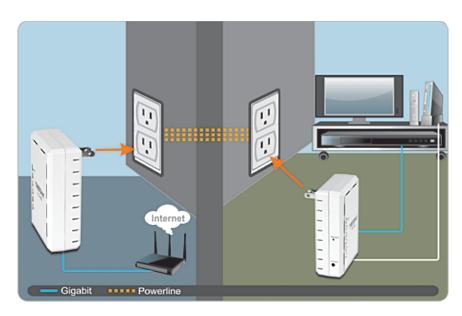
This adapter will automatically connect to other TRENDnet Powerline AV adapters with no installation required—TRENDnet recommends pressing the 'Sync' button to automatically change default encryption keys. Power Save mode reduces electrical consumption by up to 80%. Quality of Service technology prioritizes video, audio, and online gaming. LED displays convey device and port status for easy troubleshooting. Advanced AES encryption secures your network. This adapter is ideal for use in buildings that interfere with wireless networking signals.



- Compliant with IEEE1901 and HomePlug AV standards
- High speed networking over an existing electrical system
- 4 x 10/100/1000Mbps Auto-MDIX Gigabit ports
- · One-touch Sync button networks adapters quickly
- Three LED indicators: Power (on/off), Powerline Link (green (best), amber (better), red (good), off(no connection)), Ethernet Link (solid, blinking, off)
- Connect one Powerline AV Adapter to the Internet and then plug in up to 15\* additional Powerline AV adapters for instant connectivity
- Share data intensive files, play games, download music and more at faster data transfer rates

- Advanced 128-bit AES encryption to ensure total network security
- Power Save mode reduces electrical consumption by 80%
- Neighbor network support for up to 4 overlapping networks
- Network signal transmits up to 300 meters (984ft.)
- Auto QoS support through traffic classification and multiple priority queuing
- Optional management utility compatible with Windows® 8.1, 8, 7, Vista and XP
- 3-year limited warranty
- \* Maximum of 16 adapters (nodes) recommended for streaming video across your network. Additional adapters may decrease performance
- \*\* 500Mbps is the maximum theoretical Powerline data rate. Actual throughput will vary depending on environment
- \*\*\* Networked Powerline devices need to be plugged into power outlets that are on the same electrical system
- \*\*\*\* GFCI outlets and AFCI circuit breakers may degrade Powerline network signals

## **Networking Solution**





# **Specifications**

## **Hardware**

### **Standards**

• IEEE 1901, HomePlug® AV, IEEE 802.3, IEEE 802.3x, IEEE 802.3u, IEEE 802.3ab

### Interface

- 4 x 10/100/1000Mbps Auto-MDIX RJ-45 ports
- · Power prong
- A: North America Type B (NEMA 5-15)
- ∘ EU: Euro Type C (CEE 7/16)
- ∘ UK: United Kingdom Type G (BS 1363)

### **Frequency Band**

• 2 ~ 50 MHz

### Modulation

 OFDM Symbol Modulation on link synchronization, 1024/256/64/8 - QAM, QPSK, BPSK, ROBO Carrier

### **Protocol**

· TDMA, and CSMA/CA

#### Speed

Powerline: up to 500Mbps\*\*

## **Utility OS Compatibility**

· Windows® 8.1, 8, 7, Vista and XP

#### **Nodes**

- Up to 64 max.
- Recommended: up to 16\* per Powerline network

## **Overlapping Powerline Networks**

• Up to 4 (per electrical system)

## Coverage

• Up to 300m (984ft.)

## Security

• 128-Bit AES (Advanced Encryption Standard)

## LED

- Power (PWR)
- Powerline (PL) with Connection Quality Indication

- · Best (Green)
- · Better (Amber)
- · Good (Red)
- No connection (Off)
- Gigabit Ethernet Connection (1-4) Solid
- Blinking
- ∘ Off

## **Buttons**

· Sync, Reset

## Dimension (L x W X H)

- A: 105 x 75 x 57 mm (4.1 x 3.0 x 2.2 in.)
- EU: 105 x 75 x 73 mm (4.1 x 3.0 x 2.87 in.)
- UK: 105 x 75 x 65 mm (4.1 x 3.0 x 2.56 in.)

## Weight

- A: 147 g (5.2 oz)
- EU: 170 g (6.0 oz)
- UK: 159 g (5.6 oz)

#### **Power Source**

• 100~240V AC, 50~60Hz

## Consumption

- · Active mode: 6.4 Watts (max.)
- Standby mode: 0.97 Watts (max.)

### **Temperature**

- Operating: 0° ~ 40°C (32° ~ 104°F)
- Storage: -20° ~ 70°C (-4° ~ 158°F)

## Humidity

• Max. 90% (non-condensing)

## Certifications

• CE, FCC, HomePlug® AV

## **Package Contents**

- TPL-405E
- · Quick Installation Guide
- CD-ROM (Utility & User's Guide)
- Network cable (1.5 m / 5 ft.)

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