



# **Powerline 1200 AV2 Adapter**

# TPL-420E (v1.0R)

- Extreme Powerline 1200 networking over existing electrical lines
- Enhanced performance and range from MIMO with Beamforming technology
- Simply plug in the adapters—TRENDnet adapters auto-connect out of the box
- Pre-encrypted for your convenience
- · Gigabit port maintains high performance wired networking
- Connects over electrical lines for homes up to 465 sq. m (5,000 sq. ft.)
- Two adapters are needs to start a network

TRENDnet's Powerline 1200 AV2 Adapter, model TPL-420E, creates an extreme performance Powerline 1200 network using an existing electrical system. Two adapters are needed to start a network. No CD installation required—encrypted TRENDnet adapters auto-connect out of the box. Plug in the first adapter and network it to your existing router. Plug in other adapters on the same electrical system and they auto-connect to the first adapter for immediate internet access.

# TRENDIET



# Plug In Install

Simply plug in TRENDnet adapters! They autoconnect out of the box over an encrypted Powerline signal.



# For Busy Homes

Powerline 1200 technology and a Gigabit port deliver incredibly fast and stable networking to seamlessly connect devices and stream 4K video.

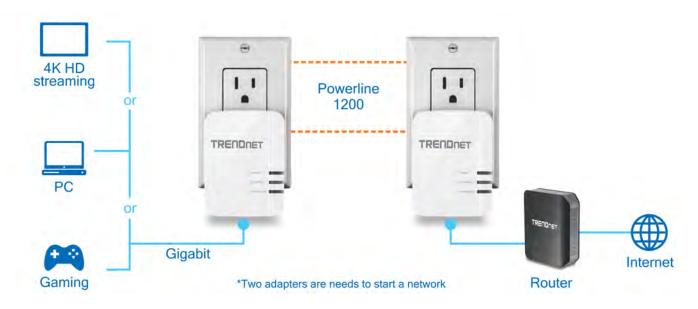


# Whole Home +

Multiple Input Multiple Output (MIMO) Powerline technology connects adapters over the same electrical system for homes up to 5,000 sq. ft. (465 sq. m).

	Powerline 500/600	Powerline 1200
Speed	Up to 500/600 Mbps	Up to 1.2 Gbps
Pre-encrypted security	<b>✓</b>	✓
Cross compatible	<b>✓</b>	✓
Home coverage	<b>✓</b>	✓
HD streaming	<b>✓</b>	✓
4K HD Streaming	<b>✓</b>	✓
MIMO with Beamforming technology (Uses multiple electrical lines to improve speed and coverage)		<b>✓</b>

# **Networking Solution**







### Powerline 1200

Extreme Powerline networking over existing electrical lines use all three electrical wires: the live, neutral, and ground wires to achieve ground breaking networking throughput speeds\*\*



# Whole Home Coverage

Connects over electrical lines for homes up to 465 sq. m (5,000 sq. ft.) or over an electrical power line for a linear distance of 300 m (980 ft.)



# MIMO with Beamforming Technology

Enhanced performance and range from MIMO with Beamforming technology



# **Gigabit Port**

Gigabit port extends high performance wired connections



# **Network Stability**

Ultra-stable Powerline networking is preferred by internet service providers



# **Multiple Adapters**

Two adapters are needs to start a network—use up to 8 adapters to network an entire home



# No CD Installation

Simply plug in the adapters—TRENDnet adapters auto-connect out of the box



# **Cross Compatible**

Backward compatible with all Powerline 600, 500, and 200 adapters



### Compact

Compact form factor saves space around a crowded electrical outlet



# **Pre-Encrypted**

For your convenience the adapter arrives preencrypted



# **Sync Button**

Press the Sync button to change existing encryption keys



# **Energy Savings**

Power Save mode reduces electrical consumption by up to 80%



# **Specifications**

#### Standards

- IEEE 802.3
- IEEE 802.3u
- IEEE 802.3x
- IEEE 802.3ab
- IEEE 1901

#### **Device Interfaces**

- · Gigabit Ethernet port
- Sync (changes encryption key)/reset button
- Status LEDs
- · Power plug
  - ∘ 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 - 68 MHz

### **Data PHY Rate**

• Up to 1200 Mbps

### **Networking Distance**

• 5,000 sq. ft. home or 300 m (980 ft.) linear distance over electrical power lines

#### Security

• 128-Bit AES (Advanced Encryption Standard)

# Optional Utility: OS Compatibility

• Windows® 8.1, 8, 7, Vista, XP

### **Nodes**

• Up to 8 (max.)

#### **Power**

- Input: 100 240 V AC, 50 /60 Hz
- Consumption: Active mode: 3.6 Watts (max.); Standby mode: 0.5 Watts (max.)

### **Operating Temperature**

• 0 - 40 °C (32 - 104 °F)

### **Operating Humidity**

• Max. 90 % non-condensing

### Certifications

- CE
- FCC

### **Dimensions**

- A: 58 x 75 x 65 mm (2.3 x 3.0 x 2.6 in.)
- EU: 58 x 75 x 75 mm (2.3 x 3.0 x 3.0 in.)
- UK: 58 x 75 x 68 mm (2.3 x 3.0 x 2.7 in.)

### Weight

- A: 104 g (3.7 oz.)
- EU: 118 g (4.2 oz.)
- UK: 114 g (4.0 oz.)

### Warranty:

• 3 year limited

### **Package Contents**

- TPL-420E
- · Multi-Language Quick Installation Guide
- CD-ROM (Utility & User's Guide)
- Network cable (1.5 m/5 ft.)



<sup>\*</sup> Maximum of 8 adapters (nodes) recommended for streaming video across your network.

<sup>\*\* 1.2</sup> Gbps is the maximum theoretical Powerline data rate when connected to another Powerline 1200 device. Data throughput may vary by circuit wire conditions. If an electrical system does not have a grounded connection, the theoretical networking speed is reduced to 600 Mbps.

<sup>\*\*\*</sup> Powerline communication works on a single electrical system. (Usually controlled by a single distribution panel). Power strip, GFCI outlets, and AFCI circuit breakers may degrade Powerline network signals.