



## Powerline 1200 AV2 Adapter with Built-in Outlet

TPL-421E (v1.0R)

- Extreme Powerline 1200 networking over existing electrical lines
- Never lose an electrical outlet with the built-in socket
- 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 needed to start a network

TRENDnet's Powerline 1200 AV2 Adapter with Built-in Outlet, model TPL-421E, 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. Never lose an electrical outlet with the built-in socket.



### Plug In Install

Simply plug in TRENDnet adapters! The encrypted Powerline signal auto-connects over an existing electrical system.



### For Busy Homes

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

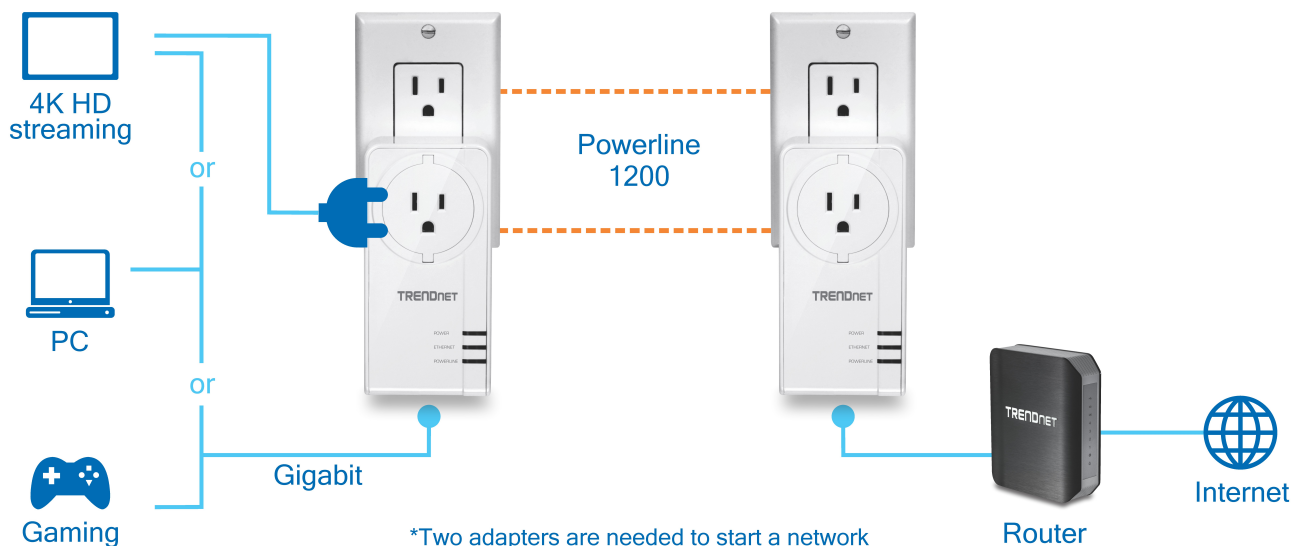


### Built-In Outlet

With so many devices needing power, you don't lose an outlet when plugged in. Plug the adapter into an outlet, then plug a power strip into the adapter.

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

## 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.)



### Built-In Outlet

Never lose an electrical outlet with the built-in socket—Plug the adapter into an outlet, then plug a power strip into the TPL-421E to power other devices



### MIMO with Beamforming Technology

Enhanced performance and range from MIMO with Beamforming technology



### Gigabit Port

Gigabit port extends high performance wired connections



### Noise Filter

Advanced electrical noise filter boosts performance



### Network Stability

Ultra-stable Powerline networking is preferred by internet service providers



### Multiple Adapters

Two adapters are needed 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



### Pre-Encrypted

For your convenience the adapter arrives pre-encrypted



### 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 1901

### Device Interfaces

- Ethernet port
- Sync / 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

- Up to 300 m (980 ft.) linear distance over electrical power lines

### Security

- 128-Bit AES (Advanced Encryption Standard)

### Optional Utility: OS Compatibility

- Windows® 10, 8.1, 8, 7, Vista, XP

### Nodes

- Up to 8 (max.)

### Overlapping Powerline Networks

- Up to 4 (per electrical system)

### Outlet Current

- 110V AC, 20A (max.)
- 220V AC, 16A (max.)

### Power

- Input: 100 – 240 V AC, 50/60 Hz
- Consumption: Active mode: 2.7 Watts (max.); Standby mode: 0.34 Watts (max.)

### Operating Temperature

- 0 – 40 °C (32 – 104 °F)

### Operating Humidity

- Max. 90 % non-condensing

### Certifications

- CE
- FCC

### Dimensions

- 112 x 68 x 40 mm (4.4 x 2.7 x 1.1 in.)

### Weight

- A: 104 g (3.7 oz.)
- EU: 190 g (6.7 oz.)
- UK: 190 g (6.7 oz.)

### Warranty

- 3 year limited

### Package Contents

- TPL-421E
- Multi-Language Quick Installation Guide
- CD-ROM (Utility & User's Guide)
- Network cable (1.5 m/5 ft.)

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

\*\* 1.2 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.

\*\*\* 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.

