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.

TRENDnet®

Plug In Install

Simply plug in TRENDnet adapters! They auto-connect 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.
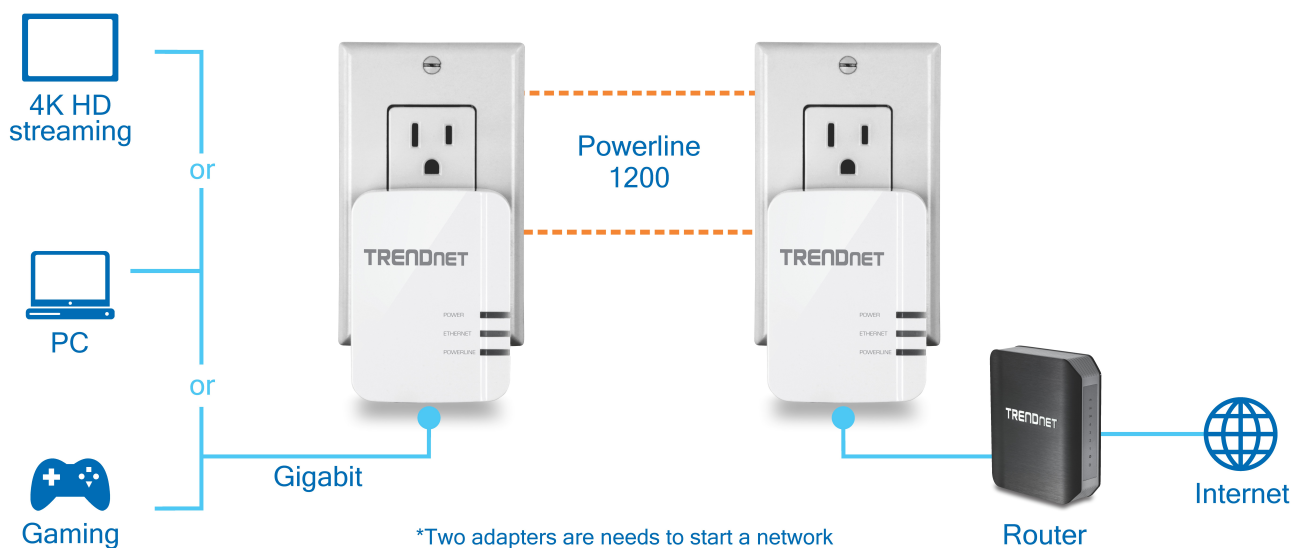
Whole Home +

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	✔	✔
Cross compatible	✔	✔
Home coverage	✔	✔
HD streaming	✔	✔
4K HD Streaming	✔	✔
MIMO with Beamforming technology (Uses multiple electrical lines to improve speed and coverage)		✔

Networking Solution

4K HD streaming

or

PC

or

Gaming

Gigabit

Powerline 1200

*Two adapters are needs to start a network

Router

Internet

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 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 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.)

* 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.

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