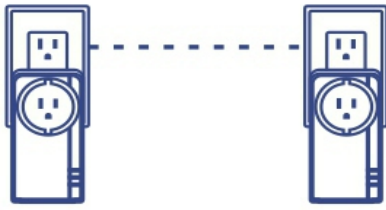# TRENDnet®

Powerline 1300 AV2 Adapter with Built-in Outlet

TPL-423E (v1.0R)

- Powerline 1300 networking over existing electrical lines
- Built-in electrical outlet
- Powerline noise filter minimizes interference from powered devices
- Enhanced Powerline performance and coverage from MIMO with Beamforming technology
- Encrypted TRENDnet adapters auto-connect out of the box
- Gigabit port for high-speed connectivity
- Powerline range up to 300m (984 ft.)
- Two Powerline adapters are required to start a network
- Cross compatible with Powerline 1200, 600, 500, and 200 adapters

TRENDnet's Powerline 1300 AV2 Adapter with Built-in Outlet, model TPL-423E, creates a high-speed Powerline 1300 network using your home's existing electrical system. Two adapters are needed to start a network. TRENDnet adapters are protected with 128-bit AES encryption. Plug in the first adapter and network it to your existing router. Plug in other adapters on the same electrical system and they will auto-connect to the first adapter for instant internet access. Avoid losing a power outlet by using the built-in electrical outlet to power other devices.
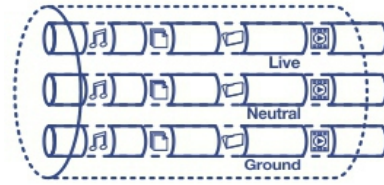
TRENDNET®

Built-in Outlet
Avoid losing a power outlet by using the built-in electrical outlet to power other devices.
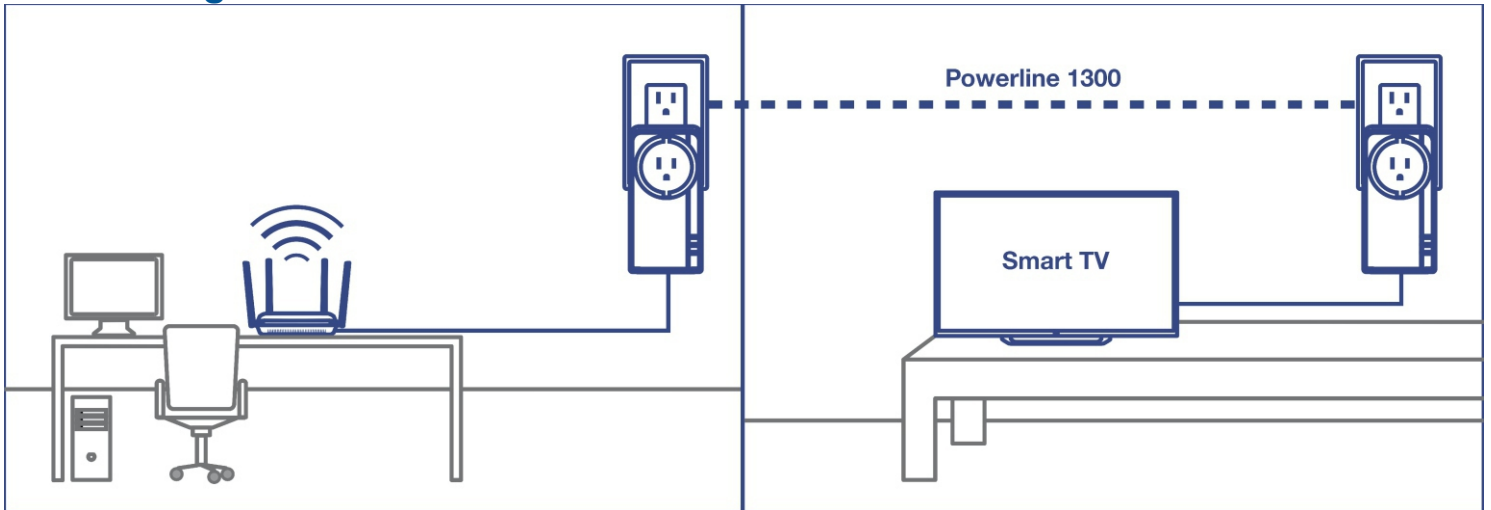
High-Speed Powerline 1300
Powerline 1300 technology and a gigabit port deliver fast and stable networking to seamlessly connect devices and stream 4K video.

MIMO Technology
Multiple Input Multiple Output (MIMO) with Beamforming technology uses live, neutral, and ground wires to increase performance between adapters.

Networking Solution

Powerline 1300

Smart TV

Sync Button
Press the Sync button to change existing Powerline encryption keys

Cross Compatibility
Cross compatible with Powerline 1200, 600, 500, and 200 adapters

Easy Installation
TRENDnet adapters auto-connect out of the box

Powerline 1300
Powerline 1300 technology delivers fast and stable networking to seamlessly connect devices and stream 4K video.

128-bit AES Encryption
Powerline communication is protected with 128-bit AES encryption

MIMO with Beamforming Technology
Multiple Input Multiple Output (MIMO) with Beamforming technology uses live, neutral, and ground wires to increase performance between adapters.

Gigabit Port
Gigabit port for computers, smart TVs, or other network enabled devices

Expandable
Use up to 8 adapters on a single Powerline network

TRENDnet®

Specifications

Standards	• IEEE 802.3 • IEEE 802.3u • IEEE 802.3x • IEEE 802.3ab • IEEE 1901
Device Interface	• 1 x Gigabit LAN port • Sync button • Reset button • LED indicators • Built-in electrical power socket with noise filter 　North America Type B (NEMA 5–15) (10A max. @ 120V AC)
Power plug	• North America Type B (NEMA 5–15)
Frequency Band	• 2 – 67.5MHz
Modulation/ Protocol	• OFDM, 4096/1024/256/64/16/8-QAM, QPSK, BPSK, ROBO, HS-ROBO, Mini-ROBO • CSMA/CA
Data PHY Rate	• Up to 1300Mbps
Networking Distance	• Powerline: Up to 300m (980ft.) linear distance over electrical power lines***
Encryption	• 128-Bit AES (Advanced Encryption Standard)
Powerline Nodes	• Up to 8 (max.)
Overlapping Powerline Networks	• Up to 4 (per electrical system)

Special Features	• Built-in power socket • Auto-connects to other TRENDnet Powerline adapters • IPv6 support • IGMP / MLDv2 Streams
Optional Utility: OS Compatibility	• Windows® 10, 8.1, 8, 7, Vista, XP
Power	• Input: 100 - 240V AC, 50-60Hz • Consumption: Active mode: 4W (max.); Standby mode: 0.5W (max.)
Operating Temperature	• 0 – 50°C (32 – 122°F)
Operating Humidity	• Max. 90 % non-condensing
Certifications	•FCC • IC • ETL
Dimensions	•120 x 60 x 65mm (4.73 x 2.4 x 2.6 in.)
Weight	•176g (6.2 oz.)
Warranty	•3 year

PACKAGE CONTENTS

• TPL-423E
• 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.

** 1.3 Gbps is the maximum theoretical Powerline data rate when connected to another Powerline 1300 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 650 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.

Do not use this unit with a power strip that is powering other devices. Max voltage cannot exceed 120V AC, 10A.