



U.S. Plug

## Powerline 500 AV Nano Adapter Kit with Built-In Outlet

TPL-407E2K (v1.0R)

- Includes two TPL-407E adapters
- Networking with electrical outlets
- Never lose an electrical outlet with the built in socket
- Compact form factor saves space
- Up to 80% power savings

The Powerline 500 AV Nano Adapter Kit with Built-In Outlet, model TPL-407E2K, uses existing electrical lines to create a secure high speed network. Connect the first adapter to your network and plug the second adapter into an outlet on your electrical system for instant high speed network access. The compact form factor saves space and offers an additional electrical outlet, built into the front of the housing to power computers and other devices. A noise filter maintains optimum connection speeds when devices such as computers, televisions, and gaming consoles create electrical background noise.

This adapter automatically connects to other TRENDnet Powerline AV adapters with no installation required—TRENDnet recommends pressing the 'Sync' button to automatically change default encryption keys. Use up to 8 adapters to network devices in different rooms without running new cabling. Power Save mode reduces power consumption by up to 80%. Quality of Service technology prioritizes video, audio, and online gaming. LED displays convey device status for easy troubleshooting. Advanced 128-bit AES encryption secures your network. This adapter is ideal for use in buildings that interfere with wireless networking signals.

- Includes two TPL-407E adapters
- Compliant with IEEE 1901 and HomePlug AV standards
- High speed networking over an existing electrical system
- 1 x 10/100 Mbps Auto-MDIX Ethernet port
- 1 x built-in electrical power socket
- Adapters automatically connect using an encrypted Powerline signal
- One-touch Sync button changes encryption keys
- Three LED indicators
  - Power: on/off
  - Powerline Connection: green (best), amber (better), red (good), off (no connection)
  - Ethernet Connection: solid (connection), blinking (activity), off (no connection)
- Advanced electrical noise filter boosts performance
- Connect one Powerline AV Adapter to the Internet and then plug in up to 7\* 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
- Support for IPv6
- Supports up to 16\*\* IGMP based IPTV streams
- Power Save mode reduces electrical consumption by up to 80%
- Neighbor network support for up to 4 overlapping networks
- Network signal transmits up to 300 meters (984 ft.)
- 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

## Networking Solution



## Specifications

### Hardware

### Standards

- IEEE 1901, HomePlug® AV, IEEE 802.3, IEEE 802.3x, IEEE 802.3u

### Interface

- 1 x 10/100 Mbps Auto-MDIX RJ-45 port
- 1 x built-in electrical power socket with noise filtering
  - A: North America Type B (NEMA 5–15) (15 A max. @ 120 V AC)
  - EU: European Type F (CEE 7/7) (16 A max. @ 250 V AC)
  - FEU/FR: French Type E (CEE 7/7) (16 A max. @ 250 V AC)
  - UK: United Kingdom Type G (BS 1363) (13 A max. @ 250 V AC)
- 1 x sync/reset button
- Power prong
  - A: North America Type B (NEMA 5–15)
  - EU: European Type E/F Hybrid (CEE 7/7)
  - FEU/FR: French Type E/F Hybrid (CEE 7/7)
  - UK: United Kingdom Type G (BS 1363)

### Frequency Band

- 2 ~ 68 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 500 Mbps\*\*
- Ethernet: Up to 200 Mbps (Full Duplex mode)

### Utility OS Compatibility

- Windows® 8.1, 8, 7, Vista and XP

### Nodes

- Up to 8 (max.)

### Overlapping Powerline Networks

- Up to 4 (per electrical system)

### Coverage

- Up to 300 m (984 ft.)

### Security

- 128-Bit AES (Advanced Encryption Standard)

### LED

- Power (PWR)
- Powerline (PL) Connection
  - Green (Best)
  - Amber (Better)
  - Red (Good)
  - Off (No connection)
- Ethernet (ETH) Connection
  - Solid (connection)
  - Blinking (activity)
  - Off (no connection)

### Buttons

- Sync (3 sec.)/Reset (20 sec.)

### Dimension (L x W x H)

- A: 78 x 55 x 59 mm (3.07 x 2.17 x 2.32 in.) per unit

- EU: 78 x 55 x 77 mm (3.07 x 2.17 x 3.03 in.) per unit
- FEU/FR: 78 x 55 x 75 mm (3.07 x 2.17 x 2.95 in.) per unit
- UK: 78 x 55 x 68 mm (3.07 x 2.17 x 2.68 in.) per unit

### Weight

- A: 102 g (3.6 oz) per unit
- EU: 138 g (4.87 oz) per unit
- FEU/FR: 138 g (4.87 oz) per unit
- UK: 134 g (4.73 oz) per unit

### Power Source

- 100~250 V AC, 50~60 Hz

### Consumption

- Active mode: 3 Watts (max.)
- Standby mode: 0.5 Watts (max.)

### Temperature

- Operating: 0° ~ 40°C (32° ~ 104°F)
- Storage: -10° ~ 55°C (14° ~ 131°F)

### Humidity

- Max 95% (non-condensing)

### Certifications

- CE, FCC

### Package Contents

- 2 x TPL-407E
- Quick Installation Guide
- CD-ROM (Utility & User's Guide)
- 2 x Network cables (1.5 m / 5 ft.)

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

\*\* 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.