





# 200Mbps Powerline AV Wireless N Access Point TPL-310AP (V1.0R)

The 200Mbps Powerline AV Wireless N Access Point, model TPL-310AP, allows users to create a wireless network from any outlet on their electrical system.

Connect one adapter to your network and plug in up to 15\* other adapters for high speed network access. Connect adapters quickly using the convenient onetouch 'sync' button. Advanced AES encryption provides optimum Powerline security, LED displays convey device status for easy troubleshooting, and Quality of Service technology prioritizes video, audio, and online gaming.

The built in 300Mbps\*\*\* wireless n access point offers Access Point, Client, WDS, and Mesh mode functionality. One-touch Wi-Fi Protected Setup (WPS) connects wireless clients quickly. Advanced features include 4 SSIDs, different encryption for each SSID, WMM Quality of Service data prioritization, WPA2-RADIUS encryption, MAC Access Control, and Spanning Tree support.

### Features · Powerline

- - 1 x 10/100Mbps Auto-MDIX RJ-45 Ethernet port
  - Connect one 200Mbps\*\* Powerline AV Adapter to the Internet and then plug in up to 15\* additional Powerline AV adapters for instant building connectivity
  - · One-touch Sync button networks adapters quickly
  - · Share data intensive files, play games, download music, and more at ultra fast data transfer rates
  - · Advanced 128-bit encryption (AES) ensure total network security
  - · Neighbor network support for up to 4 overlapping networks
  - Tri-color LED indicator
  - Network signal transmitted up to 300 meters (984ft.)
  - · Auto QoS support through traffic classification and multiple priority queuing
  - Optional management utility compatible with Windows 7 (32/64-bit), Vista (32/64-bit), and XP (32/64-bit) operating systems

#### Wireless

- · Integrated high performance wireless n access point
- Based on IEEE 802.11n technology and compliant with IEEE 802.11b/g standards
- High-speed data rates of up to 300Mbps\*\*\* with IEEE 802.11n
- One-touch Wi-Fi Protected Setup (WPS) button connects wireless clients quickly
- Supports Access Point or Access Point (AP) Client (wireless adapter) mode
- In Access Point mode: expand a wireless network using Repeater mode (listed as AP Mode Support), Wireless Distribution System (WDS), or Mesh mode (bridging)
- MAC filter feature for added security (AP mode only)
- Wireless security up to WPA/WPA2-RADIUS
- · Create a weekly schedule to enable or disable wireless network
- · Wi-Fi Multimedia (WMM) Quality of Service (QoS) support
- Broadcast up to 4 SSIDs with different wireless encryption
- · Web graphical user interface provides backup, configuration, and firmware management
- \* Maximum of 16 adapters (nodes) recommended for streaming video across your network. Additional adapters may decrease performance.
- \*\* 200Mbps is the maximum theoretical data rate. Actual throughput will vary depending on environment.
- \*\*\* Maximum wireless signal rates are referenced from IEEE 802.11 theoretical specifications. Actual data throughput and coverage will vary depending on interference, network traffic, building materials and other conditions.
- \*\*\*\* 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

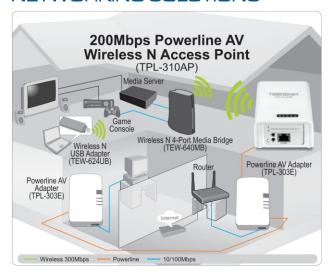
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# **SPECIFICATIONS**

Hardware	
Standards	• IEEE 802.3, IEEE 802.3x, IEEE 802.3u, IEEE 802.11n, IEEE 802.11b, IEEE 802.11g, IEEE 802.11s, IEEE 802.1d, HomePlug AV, IEEE 1901
Interface	<ul> <li>1 x 10/100Mbps Auto-MDIX RJ-45 Port</li> <li>Power prong:</li> <li>A: North America Type B (NEMA 5–15)</li> <li>EU: Euro Type C (CEE 7/16)</li> <li>FR: French Type E (CEE 7/5)</li> </ul>
Powerline Frequency	• 2 ~ 28 MHZ
Modulation	OFDM Symbol Modulation on link synchronization, 1024/256/64/8 - QAM, QPSK, BPSK, ROBO Carrier
Protocol	• TDMA, and CSMA/CA
Wired Speed	Powerline: Up to 200Mbps
Utility OS Compatibility	Windows 7 (32/64-bit), Vista (32/64-bit), XP(32/64-bit)
Nodes	Up to 64 (max.) • Recommended: Up to 16* per powerline network
Overlapping Powerline Networks	Up to 4 (per electrical system)
Powerline Coverage	• Up to 300m (984ft.)
Powerline Security	128-bit AES (Advanced Encryption Standard)
LED	<ul> <li>Power (PWR) • Wireless (WLAN) • WPS (Wi-Fi Protected Setup)</li> <li>Powerline (PL) Connection: <ul> <li>Best (Green)</li> <li>Better (Amber)</li> <li>Good (Red)</li> <li>No connection (Off)</li> </ul> </li> <li>Ethernet (ETH) Connection <ul> <li>Solid</li> <li>Blinking</li> <li>Off</li> </ul> </li> </ul>
Power Switch	On/Off power switch
Buttons	Sync, WPS, Reset
Dimension (L x W X H)	• A: 103 x 81 x 66 mm (4.1 x 3.2 x 2.6 in.) • EU/FR: 103 x 81 x 81 mm (4.1 x 3.2 x 3.2 in.)
Weight	• A: 266 g (9.4 oz) • EU/FR: 272 g (9.6 oz)
Power Source	• 100~240V AC, 50~60Hz
Consumption	• 8.4 Watts (max.)
Temperature	• Operating: 0° ~ 40° C (32° ~ 104° F) • Storage: -10° ~ 70° C (14° ~ 158° F)
Humidity	Max. 90% (non-condensing)
Certifications	CE, FCC, HomePlug® AV
Wireless	
Modulation	OFDM with BPSK, QPSK, 16QAM, and 64QAM
	OFDM with BPSK, QPSK, 16QAM, and 64QAM  Access Point (AP) Access Point (AP) Client (wireless adapter) Wireless Distribution System (WDS) Mesh  Wireless Distribution System (WDS) with Access Point (AP) Mesh with Access Point (AP) Repeater (using AP mode only)
Modulation	Access Point (AP)
Modulation  Access Point Modes	<ul> <li>Access Point (AP)</li> <li>Access Point (AP)</li> <li>Client (wireless adapter)</li> <li>Wireless Distribution System (WDS)</li> <li>Mesh with Access Point (AP)</li> <li>Repeater (using AP mode only)</li> </ul>
Modulation  Access Point Modes  Frequency Band	<ul> <li>Access Point (AP)</li> <li>Access Point (AP)</li> <li>Client (wireless adapter)</li> <li>Wireless Distribution System (WDS)</li> <li>Mesh</li> <li>Wireless Distribution System (WDS)</li> <li>Mesh with Access Point (AP)</li> <li>Repeater (using AP mode only)</li> <li>2.412GHz</li> <li>2.472GHz</li> </ul>
Modulation  Access Point Modes  Frequency Band  Data Rate***	<ul> <li>Access Point (AP)</li> <li>Access Point (AP)</li> <li>Client (wireless adapter)</li> <li>Wireless Distribution System (WDS)</li> <li>Mesh</li> <li>Wireless Distribution System (WDS)</li> <li>Mesh with Access Point (AP)</li> <li>Repeater (using AP mode only)</li> <li>2.412GHz</li> <li>2.472GHz</li> <li>802.11b: 1,2,5.5, and 11Mbps</li> <li>802.11g: 6,9,12,18,24,36,48 and 54Mbps</li> <li>802.11n: up to 300 Mbps</li> </ul>
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Modulation  Access Point Modes  Frequency Band  Data Rate***  Security  Antenna	<ul> <li>Access Point (AP) Access Point (AP) Client (wireless adapter)</li> <li>Wireless Distribution System (WDS)</li> <li>Mesh Wireless Distribution System (WDS)</li> <li>Mesh With Access Point (AP)</li> <li>Repeater (using AP mode only)</li> <li>2.412GHz ~ 2.472GHz</li> <li>802.11b: 1,2,5.5, and 11Mbps</li> <li>802.11g: 6,9,12,18,24,36,48 and 54Mbps</li> <li>802.11n: up to 300 Mbps</li> <li>64/128-Bit WEP (HEX &amp; ASCII), WPA/WPA2 RADIUS, WPA/WPA2-PSK</li> <li>2 x 2dBi internal printing dipole antenna</li> </ul>

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#### NETWORKING SOLUTIONS



#### PACKAGE CONTENTS

- TPL-310AP
- Multi-Language Quick Installation Guide
- CD-ROM (Utility and User's Guide)
- Cat. 5 Ethernet cable (1.5 m / 5 ft.)

#### RELATED PRODUCTS

TPL-304E	200Mbps Powerline AV Adapter with Bonus Outlet
TPL-305E	3-Port 200Mbps Powerline AV Adapter
TPL-401E	500Mbps Powerline AV Adapter
TEW-624UB	300Mbps Wireless N USB Adapter

#### **CONTACT INFORMATION**

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