tp-link | Aginet

AX3000 Whole Home Mesh Wi-Fi AP

MODEL: HX521



Overview

Advanced Mesh Powered by WiFi 6

Armed with WiFi 6 technology, HX521 provides faster speeds up to 3.0 Gbps for buffer-free 8K/4K streaming and gaming even with all smart home, mobile, and other electronic devices connected.

Whole Home Coverage

Empowered by EasyMesh technology, HX521 provides a strong WiFi signal in every corner of your home. Wireless connections and optional Ethernet backhaul work together to link each unit, providing even faster network speeds and truly seamless coverage. Want more coverage? Simply add another HX521 unit whenever you want.

AX3000 Dual Band Wi-Fi

Combined with the new Wi-Fi technology, including 1024QAM, HE160 and 4x Longer OFDMA Symbol, HX521 leads up to 574 Mbps on the 2.4GHz band and 2402 Mbps on the 5GHz band.

More Ethernet Ports for More Options

Each unit has 2 Gigabit Ethernet ports for fast and reliable wired connections. Supports Ethernet Backhaul for more stable speeds.

Support TR-069 Remote Management

ISPs can remotely configure and manage devices via their ACS (Auto-Configuration Server) system or the Aginet ACS. High-level operations are also supported thanks to compatibility with TR-181, TR-111, and TR-143 protocols.

EasyMesh Feature Supported

HX521 adopts EasyMesh technology, which has further improved and standardized Wi-Fi functions, such as Wi-Fi diagnostics, channel selection and traffic separation.

Features

Seamless Roaming with One WiFi Name

All units work together to form one unified network. Your mobile device will automatically connect to the fastest unit when you move through your home, creating a truly seamless WiFi experience.

More Connections, No More Buffering

Enhanced by WiFi 6, featuring with OFDMA and 160 MHz bandwidth, HX521 allows you to connect more devices simultaneously. Enjoy a more efficient network that loads faster without dragging down performance.

Extensive WiFi Coverage

Beamforming technology and high-performance antennas combine to adapt WiFi coverage to perfectly fit home and concentrate signal strength towards every device.

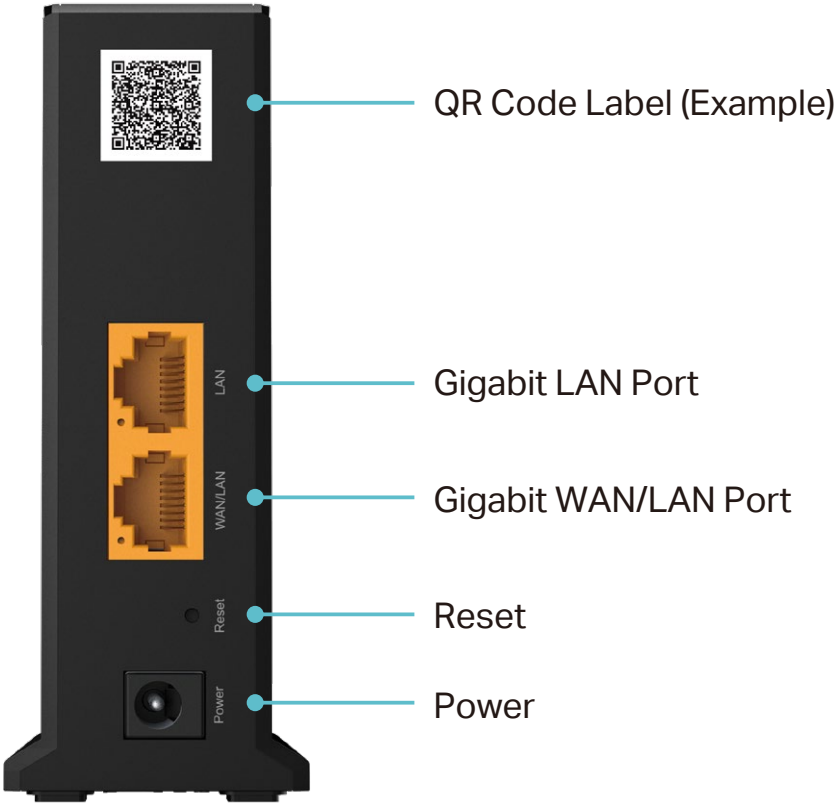
Easy to Set Up and Use

You can set up your device and network in minutes, whether you prefer the powerful Aginet app or the intuitive web interface. The Aginet app allows you to manage your network from a smartphone or tablet.

Aginet Solution: End-to-End Management System for ISPs

The Aginet solution offers ISPs powerful and flexible platforms to manage multiple devices for connected homes, such as dynamic service provisioning, zero-touch firmware upgrading, and remote troubleshooting and mesh WiFi diagnostics.

Hardware Description



Specifications

Hardware

- Interface

  1× 10/100/1000 Mbps RJ45 LAN Ports
  1× 10/100/1000 Mbps RJ45 WAN/LAN Port
- Antenna

  Internal antennas
- External Power Supply

  12VDC/1A
- Dimensions (W * D * H)

  3.96 × 1.61 × 4.27 in (100.7*41*108.5 mm)
- Button

  WPS Button, Reset Button
- CPU

  Dual-Core, 1.3 GHz

Wireless

- Wireless Standards

  IEEE 802.11a/n/ac/ax 5 GHz, IEEE 802.11b/g/n/ax 2.4 GHz
- Signal Rate

  2402 Mbps at 5GHz, 574 Mbps at 2.4GHz
- Transmit Power

  CE: <20 dBm (2.4 GHz), <30 dBm (5 GHz),
  FCC: <30 dBm
- Wireless Security

  WPA/WPA2/WPA2+WPA3-Personal
- Wireless Function

  Enable/Disable Wireless Radio, WMM, Wireless Statistics, Multi-SSID, Guest Network, TX Beamforming, Beamforming, Band Steering, Airtime Fairness
- Support EasyMesh

  Seamless Roaming, Self-healing, Support 802.11k/v/r

Software

- Working Mode

  Router Mode, AP Mode
- WAN Type

  Dynamic IP/Static IP/PPPoE/L2TP/PPTP
- Protocols

  Supports IPv4 and IPv6
- Multi SSID

  Up to 3 SSIDs for each band (including main SSID)
- Features

  Parental Control, Firewall, IPSEC VPN, IPv6, Port Forwarding, NAT Forwarding, Address Reservation, QoS(Quality of Service), CWMP, Network Diagnosis, Traffic Statistic, Cloud upgrade, 1024-QAM, OFDMA, EasyMesh
- Management

  Local management: WebGUI management, Aginet app management
  Remote management: TR-069, TR-181, TR-369, TR-111,TR-143
  Cloud management: TAUC (TP-Link Aginet Unified Cloud)
- DHCP

  Server, Client
- Firewall Security

  DoS, SPI Firewall, IP and MAC Address Binding
- Support IPTV, IGMPV2/3 and IGMP Snooping
- Schedule

  LED Schedule, Wi-Fi Schedule

Others

- System Requirements

  Microsoft Windows 98SE, NT, 2000, XP, Vista™ or Windows 7, 8, 8.1,10, MAC OS, NetWare, UNIX or Linux Internet Explorer 11, Firefox 12.0, Chrome 20.0, Safari 4.0 browers or higher.
- Certification

  CE, RoHS
- Environment

  Operating Temperature: 0°C~40°C (32°F ~104°F)
  Storage Temperature: -40°C~60°C (-40°F ~140°F)
  Operating Humidity: 10%~90% non-condensing
  Storage Humidity: 5%~90% non-condensing
- Package Contents

  AX3000 Whole Home Mesh Wi-Fi AP HX521
  1× RJ45 Ethernet Cable
  1× Power Adapter
  1× Quick Installation Guide