tp-link

Wi-Fi 6

EasyMesh
— Compatible —

AX1800 Dual Band Wi-Fi 6 Router

Explore the New Era of Wi-Fi

Archer AX1800

- Faster Speeds with Wi-Fi 6
- Reduced Latency
- Connect More, Stay Fast
- Secure Remote Access Anywhere
- Full Gigabit Ports

Highlights

Wi-Fi 6 Upgrade Everything with Wi-Fi 6

The Archer AX1800, based on the next generation 802.11ax Wi-Fi technology, takes your Wi-Fi to the next level while being backwards compatible with 802.11a/b/g/n/ac Wi-Fi standards.

Next-Gen Wi-Fi Speeds

Enjoy a faster and more stable network for streaming and gaming with lower latency and speeds up to 1.8 Gbps using newer mobile devices.†

Smooth Streaming

OFDMA allows clients to transmit both on uplink and downlink sharing one band at one time, which cuts the latency and jittering.‡

Refined Security

The latest Wi-Fi security protocol,
WPA3, keeps you safe by enhancing protection against brute-force attacks and reinforcing Wi-Fi password safety.*

Backwards Compatible

Take your Wi-Fi to the next level while being backwards compatible with existing 802.11a/b/g/n/ac Wi-Fi standards.

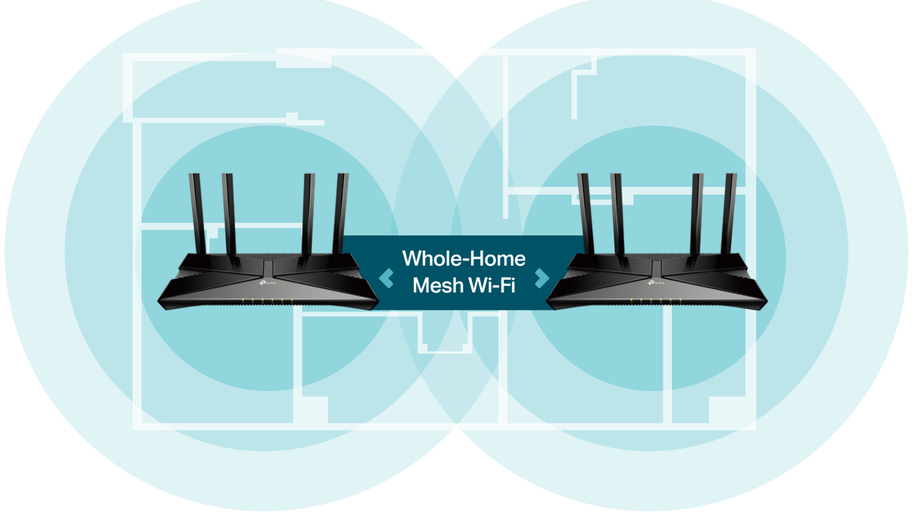
4× Larger Capacity for Non-Stop Entertainment§

OFDMA and 4-Stream technology greatly improve network efficiency and capacity to connect more devices simultaneously, satisfying your diverse networking needs ranging from extremely low traffic to highly bandwidth intensive.

Highlights

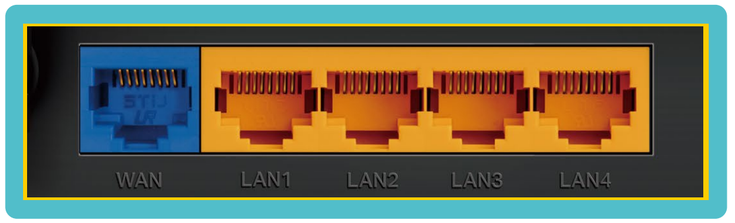
Flexible Whole-Home Wi-Fi

Four high-performance antennas and Beamforming deliver broad coverage. Furthermore, Archer AX1800 is compatible with EasyMesh to form seamless whole home mesh Wi-Fi, preventing drops and lag when moving between signals.****



Gigabit Internet Access

Take full advantage of your broadband with speed up to 1 Gbps with a Gigabit WAN port. Plug your PCs, smart TVs and game consoles into one of the four Gigabit LAN ports for fast and reliable wired connections.△

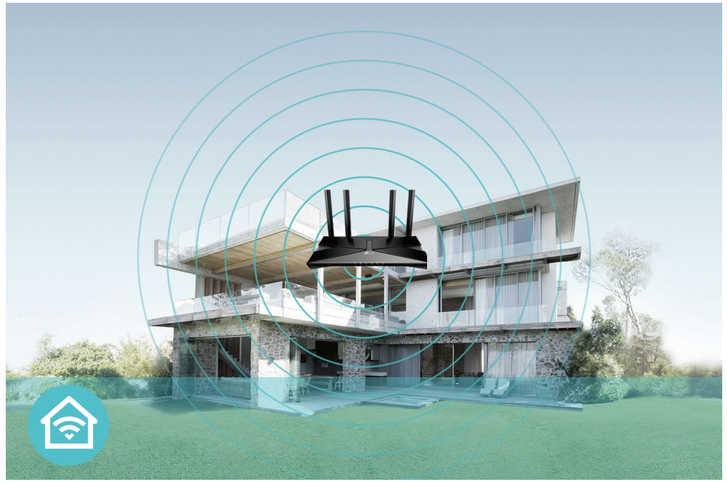


Gigabit Ports

Features

Speed

- Wi-Fi 6 Technology – The new era of Wi-Fi with speeds up to 1.8 Gbps[†]
- OFDMA – Provides 4× greater capacity for more simultaneous connections.[§]
- Next-Gen Wireless Speed – 574 Mbps on 2.4 GHz (802.11ax) + 1201 Mbps on 5 GHz (802.11ax)[†]



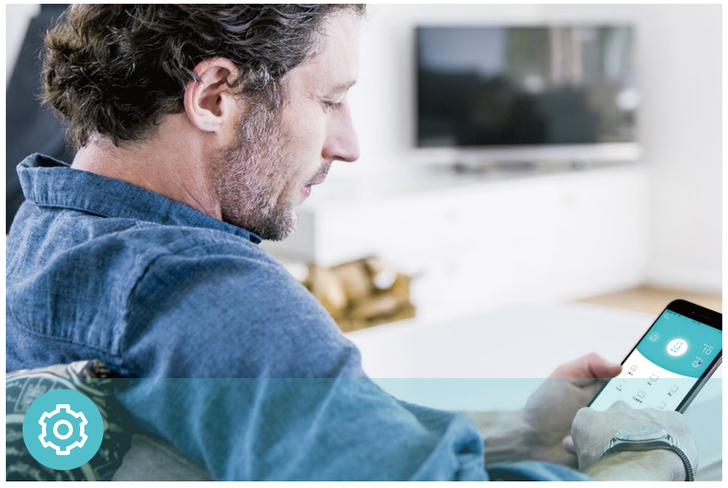
Wi-Fi Range

- Ultimate Range Wi-Fi – Four high-gain external antennas deliver a Wi-Fi signal to every corner of your home, making all of your connections more efficient and stable.
- Beamforming Technology – Concentrates Wi-Fi signals towards individual devices to ensure stronger connections

Reliability

- VPN Clients and Server Supported – With VPN client support, AX1800 allows specified devices in your home network to access remote VPN servers without needing to install VPN software on every device.
- Airtime Fairness – Balances bandwidth of connected devices to improve overall throughput and efficiency
- Smart Connect – Intelligently switches each device's connection to the optimum available Wi-Fi band

Features



Ease of Use

- Intuitive Web UI – Ensures quick and simple installation without hassle
- WPS (Wi-Fi Protected Setup) – Help you to quickly and securely connect your devices to the router's network with a tap
- Easy On/Off – Turn on/off wireless radio using the Wi-Fi button.
- Power On/Off – Conveniently power on or off your router as required
- Hassle-free Management with Tether App – Network management is made easy with the TP-Link Tether app, available on any Android and iOS device

Security

- Parental Controls – Manage when and how connected devices can access the internet
- Guest Network – Provides separate access for guests to secure the home network
- Access Control – Establishes a whitelist or blacklist to allow or restrict certain devices to access the internet
- Encryptions for Secure Network – WPA/WPA2, WPA2/WPA3 encryptions provide active protection against security threats

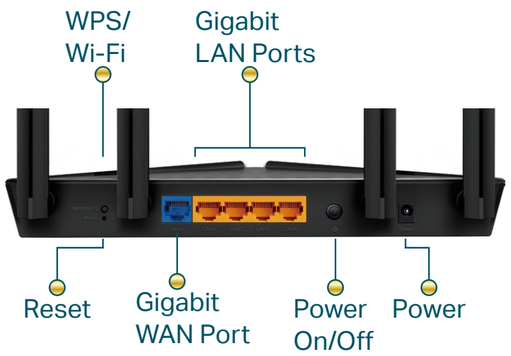
Specifications

Wireless

- Standards: IEEE 802.11ax/ac/n/a 5 GHz, IEEE 802.11ax/n/b/g 2.4 GHz
- Wi-Fi Speeds: 5 GHz: 1201 Mbps (802.11ax), 2.4 GHz: 574 Mbps (802.11ax)
- Wi-Fi Range: 4 High-Performance Antennas, Beamforming
- Wi-Fi Capacity: Dual-Band, OFDMA, Airtime Fairness, 4 Streams
- Working Modes: Router Mode, Access Point Mode

Hardware

- Processor: Dual Core CPU
- Ethernet Ports: 1× Gigabit WAN Port, 4× Gigabit LAN Ports
- Buttons: WPS/Wi-Fi Button, Reset Button, Power On/Off Button
- Power: 12 V/1.5A



Security

- Wi-Fi Encryption: WPA2, WPA3, WPA/WPA2-Enterprise (802.1x)
- Network Security: SPI Firewall, Access Control, IP & MAC Binding, Application Layer Gateway
- Guest Network: 1× 5 GHz Guest Network, 1× 2.4 GHz Guest Network
- VPN Server: OpenVPN, PPTP, L2TP, Wireguard VPN Server
- VPN Client: OpenVPN, PPTP, L2TP, Wireguard VPN Client

Software

- Protocols: IPv4, IPv6
- EasyMesh: Supported
- Parental Controls: URL Filtering, Time Controls
- WAN Types: Dynamic IP, Static IP, PPPoE, PPTP, L2TP
- Quality of Service: QoS by Device
- Cloud Service: Auto Firmware Upgrade, TP-Link ID, DDNS
- NAT Forwarding: Port Forwarding, Port Triggering, DMZ, UPnP, Virtual Server
- DDNS: TP-Link, NO-IP, DynDNS

Specifications

Physical

- Dimensions (W×D×H): 10.2 × 5.3 × 1.6 in (260.2 × 135 × 41.6 mm)
- Package Contents:

  Wi-Fi Router Archer AX1800

  Power Adapter

  RJ45 Ethernet Cable

  Quick Installation Guide

Other

- System Requirements:

  Internet Explorer 11+, Firefox 12.0+, Chrome 20.0+, Safari 4.0+, or other JavaScript-enabled browser

  Cable or DSL Modem (if needed)

  Subscription with an internet service provider (for internet access)
- Certifications: FCC, RoHS
- Environment:

  Operating Temperature: 0°C~40°C (32°F ~104°F)

  Operating Humidity: 10%~90% non-condensing

Test Data

- Wi-Fi Transmission Power:

  FCC: <30 dBm (2.4GHz & 5.15GHz~5.25GHz & 5.725GHz~5.825GHz)
- Wi-Fi Reception Sensitivity:

  2.4GHz:

  11g 6Mbps: -96 dBm, 11a 54Mbps: -75 dBm, 11ac VHT20_MCS0: -95 dBm,

  11ac VHT20_MCS8: -72 dBm, 11ac VHT40_MCS0: -92 dBm, 11ac VHT40_MCS9: -67 dBm,

  11ax HE20_MCS0: -95 dBm, 11ax HE20_MCS11: -65 dBm, 11ax HE40_MCS0: -92 dBm,

  11ax HE40_MCS11: -62 dBm

  5GHz:

  11a 6Mbps: -96 dBm, 11a 54Mbps: -75 dBm, 11ac VHT20_MCS0: -95 dBm,

  11ac VHT20_MCS8: -71 dBm, 11ac VHT40_MCS0: -92 dBm, 11ac VHT40_MCS9: -66 dBm,

  11ac VHT80_MCS0: -89 dBm, 11ac VHT40_MCS9: -62 dBm, 11ax HE20_MCS0: -95 dBm,

  11ax HE20_MCS11: -64 dBm, 11ax HE40_MCS0: -92 dBm, 11ax HE40_MCS11: -60 dBm,

  11ax HE80_MCS0: -89 dBm, 11ax HE80_MCS11: -59 dBm

†Maximum wireless signal rates are the physical rates derived from IEEE Standard 802.11 specifications. Actual wireless data throughput, wireless coverage and number of connected devices are not guaranteed and will vary as a result of network conditions, client limitations, and environmental factors, including building materials, obstacles, volume and density of traffic, and client location.
‡Use of 802.11ax (Wi-Fi 6), and features including OFDMA and 1024-QAM requires clients to also support corresponding features.
§The 802.11ax white paper defines standardized modifications to both the IEEE 802.11 physical layers (PHY) and the IEEE 802.11 Medium Access Control (MAC) layer as enabling at least one mode of operation capable of supporting improvement of at least four times the average throughput per station (measured at the MAC data service access point) in a dense deployment scenario.
▵1,000 Mbps internet speeds require compatible service plans and equipment.
*Use of WPA3 requires clients to also support WPA3.
**This router may not support all the mandatory features as ratified in the IEEE 802.11AX specification.
***Further software upgrades for feature availability may be required.
**** This product is compatible with standardized EasyMesh technology but has not obtained the Wi-Fi EasyMeshTM certification. TP-Link EasyMesh-compatible products can network with other devices that use EasyMesh. Failed connections may be due to firmware conflicts of different vendors. The EasyMesh-Compatible function is still being developed on some models and will be supported in subsequent software updates.
Actual network speed may be limited by the rate of the product's Ethernet WAN or LAN port, the rate supported by the network cable, Internet service provider factors and other environmental conditions.