

# AX1500 Wi-Fi 6 Router

Model: MR1500X

# Highlights

- 1.5 Gbps Wi-Fi Speed -1201 Mbps + 300 Mbps Dual-Band Wi-Fi<sup>†</sup>
- 4× More Capacity Connect more Wi-Fi devices with OFDMA and MU-MIMO<sup>§</sup>
- Wi-Fi that Goes Farther Four powerful high-gain antennas with Beamforming
- Gigabit Wired Connections Full Gigabit Ports for PCs, IPTVs, and game consoles
- Easy App Control Set up and manage Wi-Fi with the MERCUSYS App









## Applications





## Features



### **Parental Controls**

Establish appropriate policies to protect children with responsible, safe internet access



### **Guest Network**

Provides a separate network for guests to ensure your security and privacy



## **Quality of Service**

Prioritizes devices you select to perform better



## **Smart Connect**

Intelligently chooses the best available band for each device



## **IPTV** Support

Supports IGMP Proxy/Snooping, Bridge, and Tag VLAN to optimize IPTV streaming



## IPv6 Support

Allows you to visit IPv6 websites and enjoy IPv6 services provided by your ISP



## Expansive Wi-Fi Range

Four powerful high-gain antennas armed with advanced wireless technology provide strong signals throughout your home. Beamforming detects your connected devices and concentrates wireless signal strength towards them, making your connections more stable.



MR1500X with Beamforming



The latest security standard, WPA3, provides improved comprehensive Wi-Fi protection to defend your devices and private information against brute-force attacks.<sup>4</sup>





Regular Router without Beamforming

## Smart Connect

Smart Connect combines the 2.4 GHz and 5 GHz bands into a single Wi-Fi SSID and helps your devices intelligently choose the best available band that has the stronger signal and faster speed, keeping your devices always running optimally.





## // Crank Up Your Wi-Fi to 6

The latest Wi-Fi 6 standard applies advanced technology designed to deliver more simultaneous connections, extend Wi-Fi range, and maintain reliably fast data transmissions, satisfying demands for high-performance wireless experiences.



Faster Speeds | Lower Latency | Higher Capacity | Energy Efficient



## 1.5 Gbps Wi-Fi Speeds

Featuring 1024-QAM, MR1500X offers dramatically fast wireless connections up to 1.5 Gbps. Experience smooth large-file downloads and uploads, stutter-free VR, and stunning 4K streaming without lag.<sup>†</sup>



#### Connect 4× More Devices

With MU-MIMO and OFDMA, MR1500X transmits data to and from multiple devices at the same time for 4× more capacity, greatly reducing lag and increasing transmission efficiency under the same conditions.§



### Minimize Buffering and Lag

Powered by a robust CPU, MR1500X handles massive data throughput, allowing numerous bandwidth-intensive tasks to run smoothly at the same time.



### **Eco-Friendly Power Saving**

Target Wake Time reduces power consumption for your mobile and IoT devices during data transmissions to extend battery life<sup>‡</sup>

## Specifications

## Hardware

#### Ports

1× Gigabit WAN Port + 2× Gigabit LAN Ports

#### **Button**

Reset/WPS Button

### Dimensions (W x D x H)

 $6.9 \times 6.2 \times 1.8 \text{ in}$ 

 $(175.6 \times 157.2 \times 45 \text{ mm})$ 

#### Antennas

4× High-Gain Antennas



## Wireless

#### Wireless

1201 Mbps (5 GHz, 11ax) + 300 Mbps (2.4 GHz, 11n)<sup>†</sup>

- OFDMA: Allows simultaneous data transmission to and from several devices sharing one band, satisfying high network capacity demands<sup>‡</sup>
- MU-MIMO: Transfers data to more devices simultaneously, improving overall network efficiency<sup>‡</sup>
- 1024-QAM: Packs more effective data at once to achieve a 1.25× speed increase over 802.11ac 256-QAM<sup>‡</sup>
- Long OFDM Symbol: Delivers 4× more data subcarriers to increase range, stability, and speed<sup>‡</sup>
- Target Wake Time (TWT): Reduces power consumption for your mobile and IoT devices during data transmissions<sup>‡</sup>
- BSS Color: Minimizes interference from neighboring signals to improve transmission efficiency<sup>‡</sup>

#### **EIRP**

2.4 GHz < 20dBm (EIRP)

5 GHz < 23dBm (EIRP)

### Reception Sensitivity

11g 6Mbps: -97dBm

11g 54Mbps: -79dBm

11n HT40 MCS7:-74dBm

11n HT20 MCS7:-78dBm

11a 6Mbps:-94dBm

11a 54Mbps:-78dBm

11ac VHT20 MCS8:-74dBm

11ac VHT40 MCS8:-70dBm

11ac VHT80 MCS8:-65dBm

#### Wireless Function

WMM, Enable/Disable Wireless Radio

## Security Features

- Guest Network Access
- Firewall Protection
- Wireless Security: WPA-PSK / WPA2-PSK
  / WPA3 wireless encryption



## Specifications

## Software

**WAN Type** 

Dynamic IP/Static IP/PPPoE/L2TP/PPTP

**DHCP** 

Server, DHCP Client List

**NAT Forwarding** 

Port Forwarding, Port Triggering, UPnP, DMZ

Management

Access Control

Local Management

Remote Management

Firewall Security

SPI Firewall, IP and MAC Address Binding

**Guest Network** 

2.4 GHz Guest Network, 5 GHz Guest Network

## Others

Package Contents

- AX1500 Wi-Fi 6 Router MR1500X
- Power Adapter
- Quick Installation Guide
- RJ45 Ethernet Cable

Environment

- Operating Temperature: 0°C~40°C (32°F~104°F)
- Operating Humidity: 10%~90% Non-Condensing
- Storage Humidity: 5%~90% Non-Condensing

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<sup>†</sup>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, MU-MIMO, 1024-QAM, BSS Color, and Target Wake Time requires clients to also support the corresponding features. Actual power reduction by Target Wake Time may vary as a result of network conditions, client limitations, and environmental factors.

§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.

<sup>a</sup>Use of WPA3 requires clients to also support WPA3.

This router may not support all the mandatory features as ratified in Draft 3.0 of IEEE 802.11AX specifications.

\*\*Further software upgrades for feature availability may be required.