

AX3000 Dual-Band Wi-Fi 6 Router

Model: MR85X

// Highlights

- Ultra-Fast Wi-Fi 6 Speeds up to 3 Gbps[†]
- Beamforming with High-Gain Antennas for Wider Coverage
- Robust Dual-Core Processor to Minimize Buffering and Lag
- Latest WPA3 Wireless Encryption[▲]



// 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



Access Point Mode

Extends a wired network and makes it wireless



IPTV Supported

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



IPv6 Supported

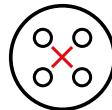
Allows you to enjoy IPv6 services provided by your ISP and visit IPv6 websites

// Crank Up Your Wi-Fi to 6

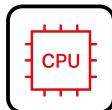
The latest Wi-Fi 6 standard applies advanced technology designed to deliver more simultaneous connections, extend Wi-Fi range, and maintain reliably fast data transmissions, satisfying demands for high-performance wireless experiences.



3 Gbps Wi-Fi 6 Speeds[†]



Connect 4x More Devices[§]



Minimize Buffering and Lag



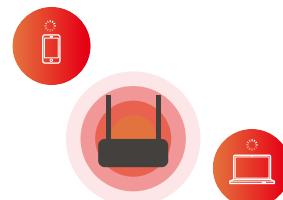
Eco-Friendly Power Saving[‡]

// 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.



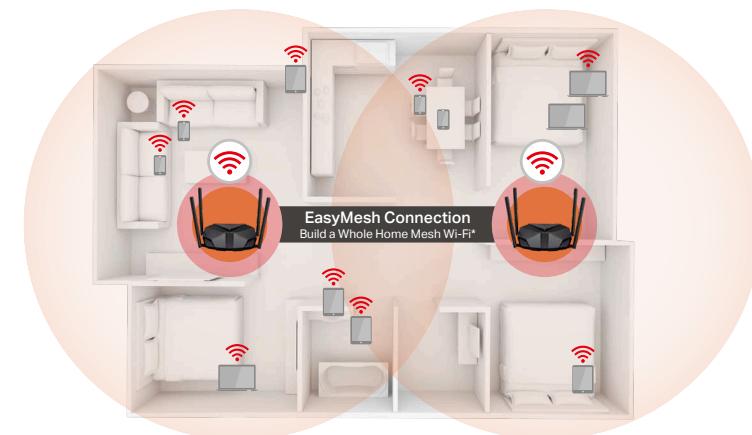
MR85X with Beamforming



Regular Router without Beamforming

// EasyMesh-Compatible

MR85X is compatible with EasyMesh for a smooth whole home mesh Wi-Fi network, preventing drops and lag when switching signals. Enjoy uninterrupted streaming while roaming your house.*



// Overall Security Protection

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



// Smart Connect

Smart Connect combines the 2.4 GHz and 5 GHz bands into a single Wi-Fi SSID, allowing your devices to automatically select the best band with the strongest signal and fastest speed. This ensures seamless performance and keeps your devices running at their best.



// Specifications

Hardware

Ports

1× 2.5 Gigabit WAN Port + 3× Gigabit LAN

Ports

Button

Reset Button

WPS Button

Dimensions (W x D x H)

209 × 171.7 × 42.4 mm
(8.2 × 6.8 × 1.7 in)

Antennas

4× 5 dBi Fixed Omnidirectional Antennas



Wireless

Wireless

2402 Mbps (5 GHz) + 574 Mbps (2.4 GHz),
compatible with 11ax/ac/a/b/g/n Wi-Fi standards[†]

- OFDMA: Allows simultaneous data transmission to and from several devices sharing one band, satisfying high network capacity demands[‡]
- MU-MIMO: Transfers data to more devices simultaneously, improving overall network efficiency[‡]
- 160 MHz Channel: Doubles the speeds offered by 80 MHz channels for faster connections[‡]
- 1024-QAM: Packs more effective data at once to achieve a 1.25× speed increase over 802.11ac 256-QAM[‡]
- Smart Connect: Intelligently chooses the best available band for each device
- Access Point Mode: Extends a wired network and makes it wireless

Wi-Fi Transmission Power

EU version: EIRP≤20dBm(2.4GHz), EIRP≤23dBm (band1/band2), EIRP≤30dBm (band3)

US version: EIRP≤30dBm(2.4GHz), EIRP≤24dBm (band2/band3), EIRP≤30dBm (band1/band4)

Wi-Fi Reception Sensitivity

2.4G:

11g 6Mbps : -97dBm
11g 54Mbps: -79dBm
11n HT20 MCS7:-78dBm
11n HT40 MCS7:-75dBm
11ax HE20 MCS11:-66.5dBm
11ax HE40 MCS11:-65.5dBm

5G:

11a 6Mbps: -95dBm
11a 54Mbps:-76.5dBm
11n HT20 MCS7:-76dBm
11n HT40 MCS7:-73dBm
11ac VHT20 MCS8:-71.5dBm
11ac VHT40 MCS9:-67dBm
11ac VHT80 MCS9:-63.5dBm
11ax HE20 MCS11:-64.5dBm
11ax HE40 MCS11:-63dBm
11ax HE80 MCS11:-58.5dBm
11ax HE160 MCS11:-56dBm

// Specifications

Wireless

Wireless Function

Enable/Disable Wireless Radio, WMM

Security Features

- Guest Network Access

- Wireless Security:

WPA-PSK/WPA2-PSK/WPA3-SAE[▲]

- Firewall Protection

- VPN Support: OpenVPN, PPTP, L2TP, and
IPSec Server and Clients

Software

WAN Type

Dynamic IP/Static IP/PPPoE/L2TP/PPTP

DHCP

Server, DHCP Client List

NAT Forwarding

Port Forwarding, Port Triggering, UPnP, DMZ

Management

Local Management, Remote Management

Security

SPI Firewall, Access Control,
IP and MAC Address Binding

Guest Network

2.4 GHz Guest Network, 5 GHz Guest Network

Others

Package Contents

- AX3000 Wi-Fi 6 Router MR85X
- 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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[†]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. 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.

[§]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.

[▲]Use of WPA3 requires clients to also support WPA3.

^{*}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. This product is compatible with standardized EasyMesh technology but has not obtained the Wi-Fi EasyMesh™ certification.

^{**}2.5 Gbps internet speeds require compatible service plans and equipment. 2.5 Gbps and Gigabit ports cannot be concurrently configured as WAN ports.

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