

**MERCUSYS®**

**Wi-Fi 6**

# 5G

## **AX1500 Wireless Dual Band Gigabit Router**

Model: MB510-5G

1201 Mbps + 300 Mbps  
Dual Band Wi-Fi†

Full Gigabit  
Ports\*

EasyMesh-Compatible  
Seamless Wi-Fi★

Easy App  
Control



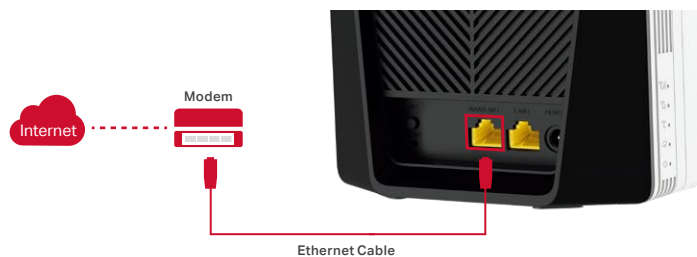
## Superior 5G Speed and Wi-Fi 6 for Reliable Connectivity<sup>‡</sup>

The MB510-5G functions as a high-performance 5G router, delivering download speeds of up to 2.9 Gbps and upload speeds of 1.25 Gbps.<sup>§</sup> It also features the Wi-Fi 6 technology, with maximum speeds of 1201 Mbps on the 5 GHz band and 300 Mbps on the 2.4 GHz band, ensuring seamless streaming of ultra-HD movies, lag-free gaming, and more.<sup>†</sup>



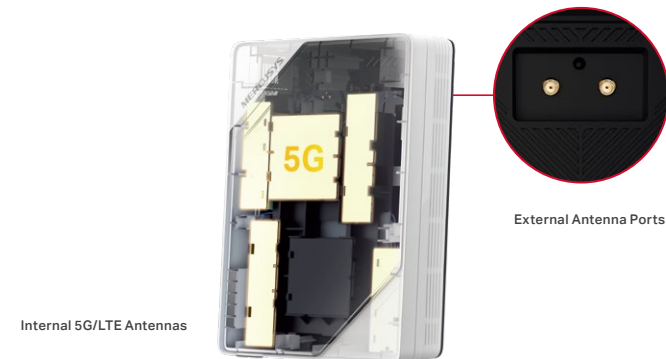
## Available WAN Connection Backup

The gigabit WAN/LAN port allows the MB510-5G to work as a traditional wireless router, compatible with cable, fiber, and DSL modems. When set as a wireless router, its 5G/LTE connection serves as a backup, providing a sustained and reliable internet connection.\*



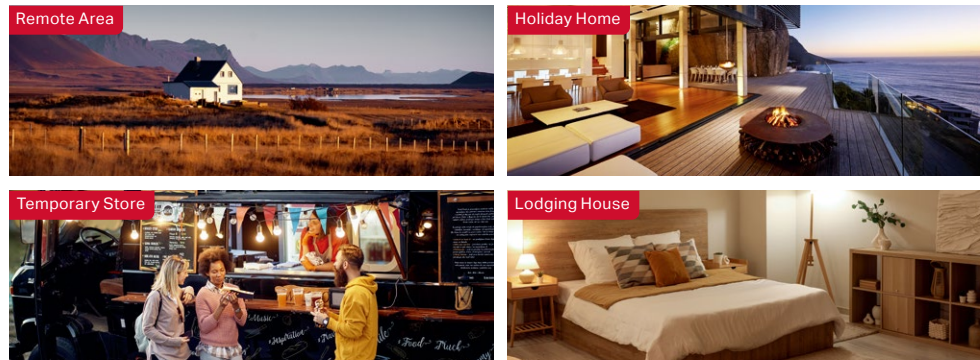
## Designed for Maximum Network Coverage

Advanced internal 5G/LTE antennas deliver fast, stable connections for all your devices, while external ports support additional antennas for extended range.



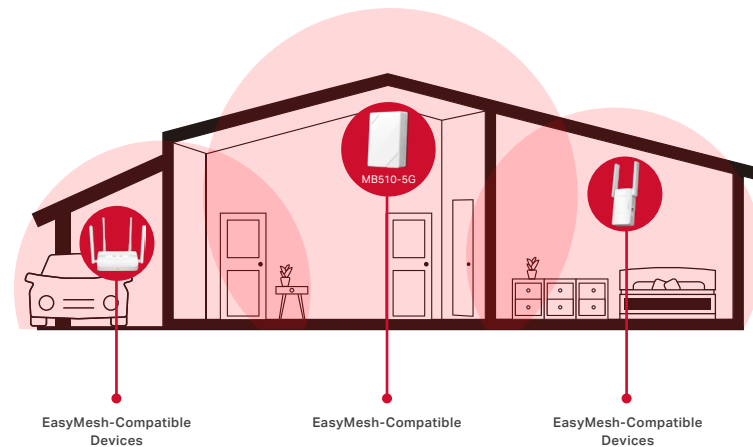
## Unmatched Convenience and Versatility

Ideal for homes without fiber, this device offers fast, stable Wi-Fi with no rewiring required—just insert a SIM card and power on. Perfect for both home and remote work setups.



## EasyMesh-Compatible Networking ☆

Mesh networking delivers smooth, fast, and stable roaming. Eliminate Wi-Fi dead zones, expand your network, and fill your entire home with high-speed Wi-Fi.



## // Specifications

### Hardware

**Ports:** 1 x Nano SIM Card Slot + 1 x Gigabit WAN/LAN Port + 1 x Gigabit LAN Port + 2 x SMA Antenna Ports

**Buttons:** 1 x WPS Button + 1 x Reset Button

**Dimensions:** 190 x 130 x 69.7 mm (7.5 x 5.1 x 2.7 inches)

**External Power Supply:** 12V/2A



### Software

**Operating Modes:** 5G/4G/3G Router, Wireless Router

**WAN Type:** Dynamic IP/Static IP/PPPoE/PPTP/L2TP

**DHCP:** Server, DHCP Client List, Address Reservation

**Port Forwarding:** ALG, Virtual Server, Port Triggering, UPnP, DMZ

**Dynamic DNS:** DynDns, NO-IP

**Security:** IPv4 SPI Firewall, IPv6 Firewall, IP and MAC Address Binding

**Protocols:** IPv4, IPv6

**Management:** Local Management, Remote Management

**Administration:** Upgrade Firmware, Factory Default, System Log, Diagnostic Tools

**Guest Network:** 2.4 GHz Guest Network, 5 GHz Guest Network

### Others

**Certification:** CE, RoHS

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

Nano SIM Card

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

**Package Contents:** 5G AX1500 Wireless Dual Band Gigabit Router (MB510-5G)  
Power Adapter  
RJ45 Ethernet Cable  
Quick Installation Guide

## // Specifications

### Wireless

Wireless: 1201 Mbps (5 GHz) + 300 Mbps (2.4 GHz), compatible with IEEE 802.11 ax/ac/a/b/g/n†

5G: Download Speed 2.9 Gbps (ENDC) + Upload Speed 1.25 Gbps (SA)§

LTE: Download Speed 600 Mbps + Upload Speed 150 Mbps§

#### Network Type (EU):

Compatible with most of mobile operators and supports 5G/4G/3G

5G: N1/N3/N5/N7/N8/N20/N28/N38/N40/N41/N66/N77/N78

(2100/1800/850/2600/900/800/700/2600/2300/2500/1700/3700/3800 MHz)

FDD-LTE: B1/B2/B3/B4/B5/B7/B8/B20/B28/B66

(2100/1900/1800/1700/850/2600/900/800/700/1700 MHz)

TDD-LTE: B38/B40/B41 (2600/2300/2500 MHz)

UMTS: B1/B2/B5/B8 (2100/1900/850/900 MHz)

Frequency: 2.4 GHz, 5 GHz

#### EIRP (CE):

2.4 GHz < 20 dBm

5 GHz band1, 2 < 23 dBm

5 GHz band3 < 30 dBm

#### Reception Sensitivity

##### 5 GHz:

11ax HE20: -64 dBm

11ax HE40: -61 dBm

11ax HE80: -59 dBm

11ax HE160: -56 dBm

11ac VHT20: -70 dBm

11ac VHT40: -67 dBm

11ac VHT80: -64 dBm

##### 2.4 GHz:

11g 54M: -74 dBm

11n HT20: -73 dBm

11n HT40: -70 dBm

**Wireless Function:** Enable/Disable Wireless Radio, Wireless Schedule, WMM, Wireless Statistics

**Wireless Security:** WPA-PSK/WPA2-PSK/WPA3-SAE\*\*



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†Maximum wireless signal rates are the physical rates derived from IEEE Standard 802.11 specifications. Actual wireless data throughput and wireless coverage, and quantity 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 Wi-Fi 6 (802.11 ax) and its features including OFDMA, MU-MIMO, 1024-QAM require clients to also support the corresponding features.

§Maximum 5G/4G download speeds depend on external factors such as the local 5G/4G network coverage, data plan, real-time network capacity, client limitations, and environmental factors. Actual supported frequency bands may vary slightly in different regions due to certification.

☆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.

\*\*Use of WPA3 requires clients to also support WPA3.

△SIM card sold separately. This device requires an activated SIM card without a PIN lock. If the SIM is locked, please consult the Quick Installation Guide for unlocking instructions.