

5G AX3000 Wireless Dual Band Router

Model: MB520-5G



Highlights

- 2402 Mbps + 574 Mbps Dual Band Wi-Fi[†]
- 2.5 Gbps Multi-Gig Wired Connection*
- Connect up to 256 Devices
- Easy App Control













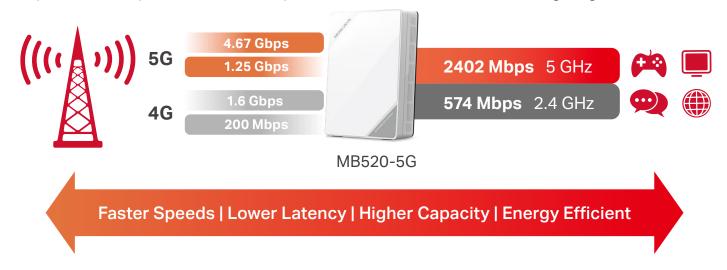






Superior 5G Speed and Wi-Fi 6 for Reliable Wi-Fi*

Working as a 5G router, MB520-5G leverages 5G technology to deliver download speeds of up to 4.67 Gbps and 1.25 Gbps upload.§ It can also share a dual band Wi-Fi network with a max speed of 2402 Mbps on 5 GHz and 574 Mbps on 2.4 GHz for Ultra HD movies, immersive gaming, and more.†



Features



2402 Mbps (5 GHz) + 574 Mbps (2.4 GHz)[†]



Connect up to 256 Devices



5G/4G External Antenna Ports



Easy App Control



SIM Card Plug and Play



5G Download Speed up to 4.67 Gbps§



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.









Share Wi-Fi with Your Friends

A remarkable number of wireless devices are compatible with MB520-5G without issue. Connect up to 256 devices simultaneously, including tablets, laptops, and mobile phones.



Connect up to 256 Devices

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.

Versatile Ports for Every Need

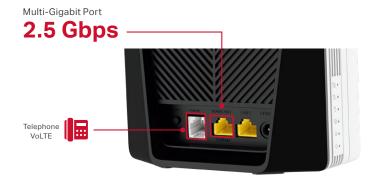
Fast 2.5G WAN/LAN Connection

With fully functional WAN/LAN ports, MB520-5G doubles as a router, supporting cable for uninterrupted connectivity.

Professional Voice Technology

MB520-5G features a phone port for landline use, enabling simultaneous calling and internet access via VoLTE.







Specifications

Hardware

- Wireless: 2402 Mbps (5 GHz) + 574 Mbps (2.4 GHz), compatible with IEEE 802.11ax/ac/a/b/g/n[‡]
- 5G: Download Speed 4.67 Gbps + Upload Speed 1.25 Gbps§
- LTE Cat19: Download Speed 1.6 Gbps + Upload Speed 200 Mbps§
- Ports: 1× Nano SIM Card Slot + 1× 2.5 Gbps WAN/LAN Port + 1× 1 Gbps LAN Port + 1× RJ11 Phone Port + 2× SMA Antenna Ports
- Buttons: 1×WPS Button + 1×Reset Button
- Dimensions: 190 × 130 × 69.7 mm (7.5 × 5.1 × 2.7 in)
- External Power Supply: 12V/2A





Wireless

• 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/N77/N78

(2100/1800/850/2600/900/800/700/2600/2300/2500/3700/3500 MHz)

FDD-LTE: B1/B3/B5/B7/B8/B20/B28(2100/1800/850/2600/900/800/700 MHz)
TDD-LTE: B38/B40/B41/B42/B43 (2600/2300/2500/3500/3700 MHz)

DC-HSDPA/HSPA+/HSPA/UMTS: B1/B5/B8 (2100/850/900 MHz)

- Frequency: 2.4 GHz, 5 GHz
- EIRP (CE):

 $2.4 \, \text{GHz} < 20 \, \text{dBm}$

5 GHz band1, 2 < 23 dBm

5 GHz band3 < 30 dBm

• Reception Sensitivity:

5 GHz:

11ax HF20: -64 dBm

11ax HF40: -61 dBm

11ax HF80: -59 dBm

11ax HE160: -56 dBm

11ac VHT20: -70 dBm

11ac VHT40: -67 dBm

11ac VHT80: -64 dBm

2.4 GHz:

11ax HF20: -66 dBm

11ax HF40: -62 dBm

11ac VHT20: -71 dBm

11ac VHT40: -67 dB

- Wireless Function: Enable/Disable Wireless Radio, Wireless Schedule, WMM, Wireless Statistics
- Wireless Security: WPA-PSK/WPA2-PSK/WPA3-SAE^a



Specifications

Software

Operating Modes:

5G/4G/3G Router, Wireless Router

• WAN Type:

Dynamic IP/Static IP/PPPoE/PPTP(Dual Access)/L2TP(Dual Access)

• 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

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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 (802.11ax) and its features including OFDMA, MU-MIMO, and 1024-QAM requires 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.

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

**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.

ASIM 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.

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 AX3000 Wireless Dual Band Router (MB520-5G)

Power Adapter

RJ45 Ethernet Cable

RJ11 Phone Cable

Quick Installation Guide