MWR-3102-AX54

1 x 1/2.5GBase-T RJ-45 +

1 x 1000MBase-T RJ-45

Dual-Band AX5400 Mesh Wi-Fi 6 Router

Description

Connection Technology Systems (CTS) MWR-3102-AX54 is a dual-band mesh Wi-Fi router equipped with 1 x 1/2.5GBase-T and 1 x 1000MBase-T RJ-45 ports.

Fully compliant with IEEE 802.11a/b/g/n/ac/ax standard, the next-generation Wi-Fi 6 router delivers both wireless frequency bands of 2.4GHz and 5GHz. The two bands deliver less connection interference from solid obstructing objects as well as boost the data transmission rate that covers the increasing higher-bandwidth demand.

Featured with a host of up-to-date technologies, MWR-3102-AX54 utilizes a modulation scheme of 1024-QAM optimizing spectral efficiency, which translates to better throughput and strengthens the data capacity by up to 25%. The OFDMA, a modulation technique as well, makes wireless APs capable of channel partitioning and allocation, maximizing bandwidth efficiency and minimizing wireless network latency from poor resource utilization, whereas the 160 MHz Wi-Fi channel addresses the network speed insufficiency in the face of what modern-day ultra-HD streaming and gaming necessitate.

The Wi-Fi mesh system feature blankets your home with a Wi-Fi connection. Worry no more about getting caught up on network dead zones while bouncing from room to room at home. And enjoy uninterrupted wireless connectivity unlike before.

The 2.5G Ethernet port satisfies the needs of the connection speed for modern-day, bandwidth-demanding gadgets.

For management, monitoring, and Wi-Fi optimization, they can all be done remotely through CWMP TR-069/181. The centralized control fulfills task automation and remote management, simplifying firmware updates and security-breach patching.

The Wi-Fi management app available on iOS and Android systems enables users to tailor and personalize a whole-home Wi-Fi network to one's needs and facilitates the efficiency of maintenance and troubleshooting that are otherwise tricky at times.

Features

■ **Wi-Fi 6 Technology**

Incorporate Wi-Fi 6 technologies including OFDMA, MU-MIMO, 1024-QAM, and 160MHz Wi-Fi channel, which maximize bandwidth efficiency, strengthen data capacity, and boost up data transmission rate.

■ **Android/iOS Wi-Fi App**

The mobile app available on iOS and Android systems enables users to tailor and personalize a whole-home Wi-Fi network to one's needs and facilitates the efficiency of maintenance and troubleshooting that are otherwise tricky at times.

■ **Dual-Band 4x4 (5GHz) and 2x2 (2.4GHz)**

Compliant with the up-to-date Wi-Fi 6 standard, the 5GHz 4x4 + 2.4GHz 2x2 design enables the users to get up to the faster connection speed and to enjoy the extensive Wi-Fi coverage, enhancing the whole-home wireless entertainment and smart home experience.

■ **CWMP TR-069/181 Compliant**

The centralized control fulfills task automation and remote management, simplifying firmware updates and security-breach patching. For management, monitoring, and Wi-Fi optimization, they can all be done remotely through CWMP TR-069/181.

■ **High-Speed 2.5G Ethernet Port**

The 2.5G Ethernet port brings you the faster-than-1Gbps network connection for modern-day, bandwidth-demanding gadgets.

■ **Dual Image, Double Reliability**

A fail-safe mechanism that prevents the device from crashing and malfunctioning upon a firmware upgrade or update, allowing the system to switch between them in case of a corrupted image.

■ **Whole-Home Mesh System**

The mesh system blankets your home with a Wi-Fi connection. Worry no more network dead zones while bouncing from room to room at home, and enjoy uninterrupted wireless connectivity unlike before.

■ **WPA3 Security**

The Wi-Fi security protocol, WPA3, brings new capabilities to improve cybersecurity and more robust encryption of the Wi-Fi password safety, hence enhancing protection against brute-force attacks or packet-eavesdropping to safeguard your home Wi-Fi network.

Specification

■ Interface
-1 x 1000MBase-T RJ-45
-1 x 1/2.5GBase-T RJ-45
-1 x USB 2.0
-1 x WPS Button
-1 x Reset Button

■ Routing
-WAN Connection Type: DHCP, Static IP,
 PPPoE
-NAT
-IPv6/IPv4
-DHCPv6
-Dynamic DNS

■ Wi-Fi
Wi-Fi Characteristics
-IEEE 802.11ax/ac/n/a 5GHz
-IEEE 802.11ax/n/b/g 2.4GHz
-IEEE 802.11k/v
-Wireless:
 Internal Antenna 4x4 (5GHz) + 2x2 (2.4GHz)
 802.11ax (2.4GHz): Up to 574Mbps
 802.11ax (5GHz): Up to 4804Mbps
-Channel Bonding:
 20/40MHz for 2.4GHz
 40/80/160MHz for 5GHz
-1024-QAM
-OFDMA

Wi-Fi Features
-2 x SSID (Main / Guest)
-Wireless AP Mode
-Wi-Fi Multimedia (WMM)
-Airtime Fairness (ATF)
-Wi-Fi Protected Setup (WPS)
-Auto Channel Selection
-MU-MIMO and Beamforming
-Band Steering

Wi-Fi Security
-64/128-bit WPA2/WPA3 Data
 Encryption
-Firewall
-Device Access Control

■ Network
-IEEE 802.1q Tag VLAN
-Client Info

■ Management
-HTTP / HTTPS
-TR-069/181
-Android / iOS App
-Network Map
-Mesh Management
-Event Log / Syslog
-Ping / Traceroute
-Firmware Upgrade
-Dual Image

■ Parental Controls
-Time Controls
-Pause Internet

■ Power Requirement
Input Power: 12VDC, 2A
Max. Power Consumption: 24W (82BTU/h)

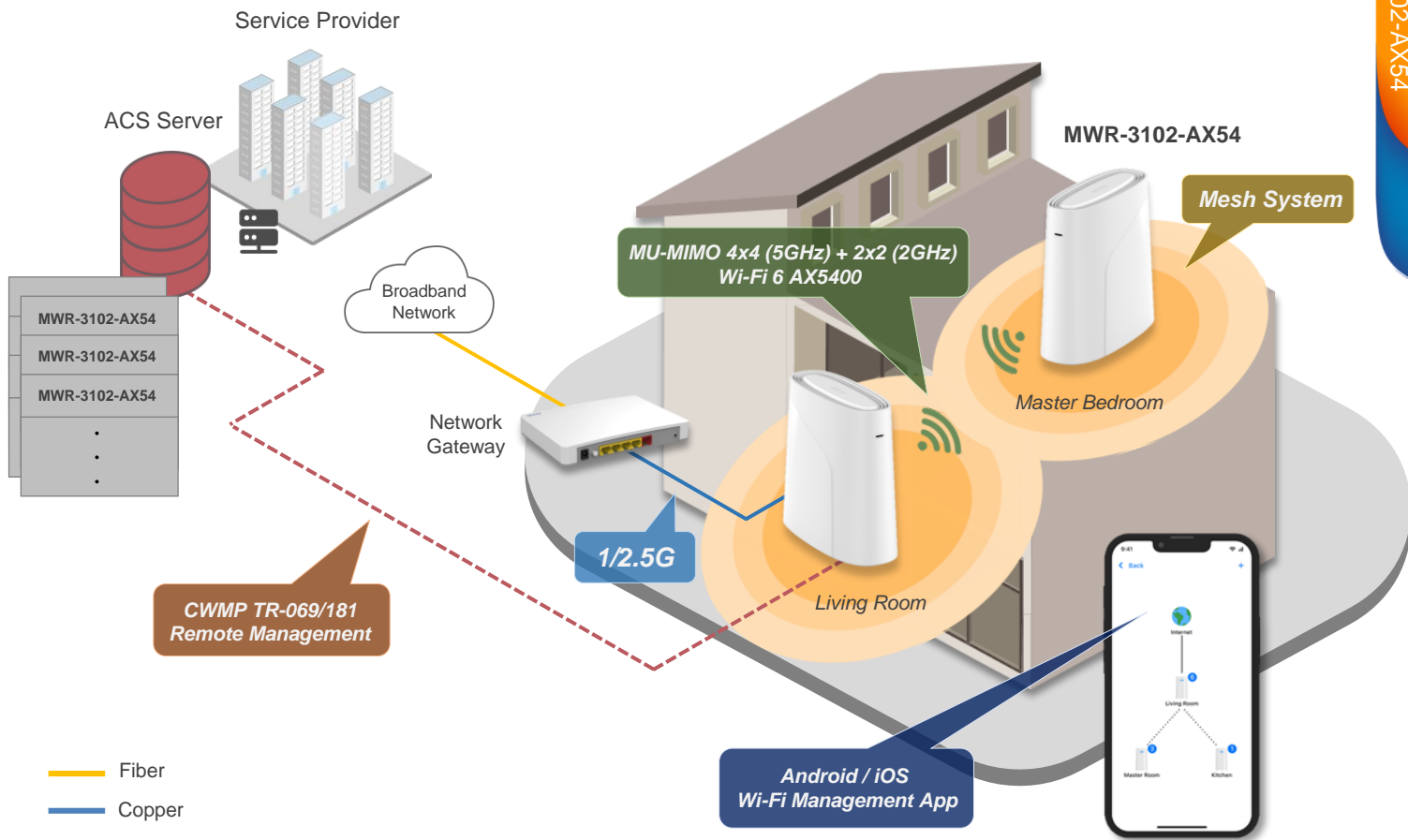## ■ Environmental Condition
Operation: 0°C ~ 40°C
Storage: -20°C ~ 70°C

■ Dimension
Size: 70 x 160 x 150mm (W x D x H)
Weight: 650g

■ EMC/Safety
-FCC Class B, CE, UKCA

Application Diagram

Service Provider

ACS Server

MWR-3102-AX54
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CWMP TR-069/181 Remote Management

Broadband Network

Network Gateway

1/2.5G

— Fiber
— Copper

MWR-3102-AX54

Mesh System

MU-MIMO 4x4 (5GHz) + 2x2 (2GHz) Wi-Fi 6 AX5400

Master Bedroom

Living Room

Android / iOS Wi-Fi Management App

Order Information

Model	TP Port		TP Port		Support Power Source
	Speed	Port	Speed	Port	
MWR-3102-AX54	1G	1	1/2.5G	1	External power adapter