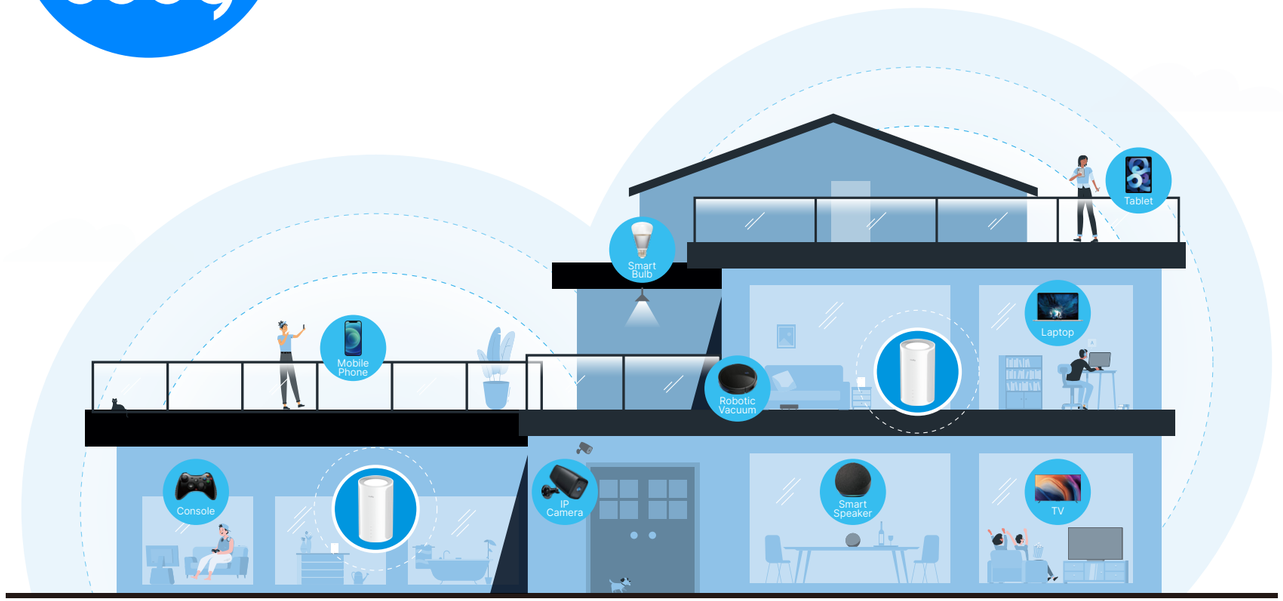
Model: M11000

BE11000

2.5G Tri-Band Mesh Wi-Fi 7 System

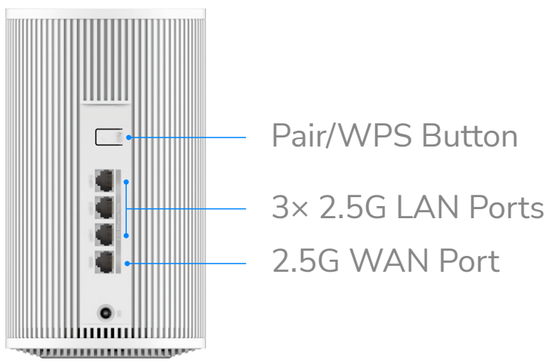
Datasheet



Powerful Wi-Fi 7 Chip for Responsive Network

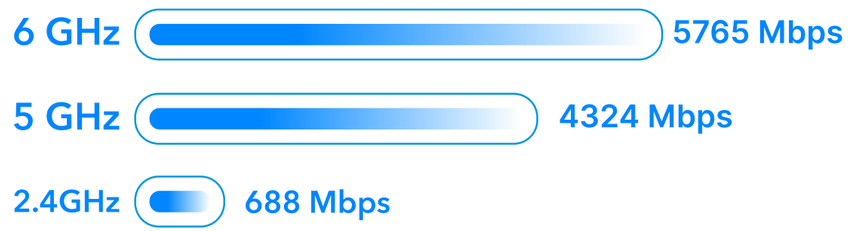
The next-gen Wi-Fi 7 Qualcomm CPU with fabulous efficiency processes more tasks instantly, keeping network super-capable and responsive.

- 1.5 GHz Quad-Core
- ARM® Cortex-A53



Tri-Band Wi-Fi. Supercharged Speed.

The M11000, featuring the latest Wi-Fi 7 technology with a brand new 6 GHz band, 320 MHz bandwidth, 4K-QAM, and Multi-RUs, boosts speeds up to 11Gbps to ensure exceptional performance in demanding environments.



MLO: Speed up to 220%, lower latency

320 MHz: Double bandwidth, double speed

4K QAM: Higher data density, better performance

Multi-RUs:Release blocked channels, higher efficiency

Versatile Management

Parental Control

Set up profiles with corresponding policies to establish a safer network for your loved ones.

VPN Client and Server

Connect and share a VPN or establish your own server to secure remote access.

IPTV

Includes Tag VLAN to support assigning IPTV/VoIP ports. IGMP snooping improves IPTV network efficiency.

IPv6

Support the IPv6 services by your ISP and browse the IPv6 websites with faster performance.

Cudy APP Control

Manage your network right on your phone. This device supports cloud remote management.

QoS

Set speed limits for certain clients to prioritize your gaming rigs and other important devices.

Highlights

A Tri-Band Wi-Fi 7 Mesh System catering to latency-sensitive, speed-demanding, and large-scale scenarios. MLO provides extraordinary Wi-Fi speed boost. Suitable for internet access up to 2.5 Gbps.

- Qualcomm 1.5 GHz Quad-Core CPU
- 6-Stream Tri-Band Wi-Fi 7
- 5.7 Gbps + 4.3 Gbps + 688 Mbps [1]
- 4× 2.5G Ethernet Ports
- 300 Connected Devices [2]
- Cudy Mesh, VPN Server and Client
- Cudy App, Cloud Control

Package Content

- Main Product
- Power Adapter
- Ethernet Cable
- Installation Guide

1 Actual wireless data throughput will vary as a result of network conditions, client limitations, and environmental factors including building layout, obstacles, and client location.

2 Actual performance for multiple devices may be affected by the types of applications used, the total available bandwidth, and the capabilities of your devices. Connecting older Wi-Fi devices (legacy standards) may reduce overall efficiency. Using efficiency features requires compatible client devices that also support those features. Find more information about supported efficiency features in the software section of the Specs spreadsheet.

Hardware Specs

CPU	Chipset	Qualcomm IPQ5322
	CPU Details	1.5 GHz Quad-Core CPU
Memory/Storage	Flash/ROM	128 MB (1 Gbit) NAND
	DDR/RAM	512 MB (4 Gbit) DDR4
Wireless	6 GHz Wi-Fi Speed	5765 Mbps
	5 GHz Wi-Fi Speed	4324 Mbps
	2.4 GHz Wi-Fi Speed	688 Mbps
	6 GHz Wi-Fi Streams	2T2R (2×2 MIMO)
	5 GHz Wi-Fi Streams	2T2R (2×2 MIMO)
	2.4 GHz Wi-Fi Streams	2T2R (2×2 MIMO)
	Wi-Fi Antennas	6× Fixed
	6 GHz Antenna Gain Max	4dBi
	5 GHz Antenna Gain Max	5dBi
	2.4 GHz Antenna Gain Max	5.5dBi
	FEM or PA/LNA	6 GHz: 2× High-Power
		5 GHz: 2× High-Power
		2.4 GHz: 2× Standard
	Beamforming	True
	Range Performance	Max: 260 m (853 ft)
		Indoor WiFi range varies depending on the layout
		and wall materials. See Wall Performance spec
		for placement suggestions.
	Wall Performance	Two wooden walls with thickness < 10 cm (4")
		One concrete wall with thickness < 20 cm (7")
		or two concrete walls with thickness < 10 cm (4")

Hardware Specs

Wireless	Indoor Coverage Reference	2 Pack: 250 m² (2700 sq ft)
		3 Pack: 350 m² (3700 sq ft)
		Applied to wireless backhaul situation. Place in the center of each floor, with a maximum of three obstacles to each room.
Interfaces	2.5G RJ45 Ports	4
	Ethernet Notes	1× WAN port, the rest are LAN ports
	LED	System
		LAN
		Wi-Fi
		Mesh
	Physical Buttons	WPS Button
		Reset Button
	Power Input	DC Jack
Power	Power Methods	DC
	DC	12V 2A
	Power Adapter	Input: 100 ~ 240 V, 50/60 Hz AC
		Output: 12V 2A DC
	Max Power Consumption (W)	22W
	Idle Power Consumption (W)	12W

Reliability	Environment	Operating Temperature: 0 °C ~ 40 °C (32 °F ~104 °F)
		Storage Temperature: -40 °C ~ 70 °C (-40 °F ~ 158 °F)
		Humidity: 10% ~ 90% non-condensing
		Storage Humidity: 5% ~ 95% non-condensing
Certifications	FCC, CE	
Mechanical	Installation	Desktop
	Dimension	Φ116×202 mm
		Φ4.57×7.95 inches

Software Specs

Wireless	Wi-Fi Standards	Wi-Fi 7
	Max Wi-Fi Modulation	4K-QAM
	Wi-Fi Efficiency	MLO
		MRU
		Puncturing
		OFDMA
		MU-MIMO
		BSS Color
	Max Capacity	768
	Recommended Client Upper Limit	300
	Max Wi-Fi Channel Width	320 MHz
	Wi-Fi Security	WPA/WPA2/WPA3
	Guest Network	2.4 GHz, 5 GHz, 6 GHz
	WPS	True
General	Operation Modes	Wi-Fi Router
		Access Point
		Range Extender
		WISP
		Client
	Mesh	Cudy Mesh
	Mesh Backhaul	Wireless Backhaul
		Wired Backhaul
	Multi-Band Backhaul	True

General	WAN Mode	DHCP
		Static IP
		PPPOE
		PPTP
		L2TP
	Internet Failover Sequence	WAN
		WISP
Network	QoS	Per-User Rate Limiting
	DHCP	Address Reservation
		DHCP Client List
		Server
	IP Versions	IPv4/IPv6
	IPv6 Protocols	Relay
		Dynamic (SLAAC/DHCPv6)
		Static (Fixed IP)
		Passthrough
		464XLAT
		MAP-E
		DS-Lite
	IPTV/VLAN	Bridge
		Tag VLAN
		VoIP VLAN
		IPTV VLAN
	TTL Customization	Extend
		Spoof
		Custom

Software Specs

Network	IGMP	IGMP Proxy
		IGMP Snooping
	Forwarding	Port Forwarding
		Port Triggering
		UPnP
		DMZ
	Firewall	SPI Firewall
		DoS Protection
		Block PING
	Application Layer Gateway	IPSec Passthrough
		L2TP Passthrough
		PPTP Passthrough
		FTP Passthrough
		TFTP Passthrough
		H323 Passthrough
		SIP Passthrough
		RTSP Passthrough
Utilities	VPN Server	WireGuard
		OpenVPN
		IPsec
		Zerotier
		PPTP
		L2TP

Utilities	VPN Client	WireGuard
		OpenVPN
		IPsec
		Zerotier
		PPTP
		L2TP
	DNS Options	DNS over TLS
		Manual DNS
		Rebind Protection
		Override Clients' DNS
	DNS over TLS Providers	Cloudflare
		Google
		Quad9
		Custom
	Wake on LAN	True
	Online Detection	True
Management	All Devices Management	Wi-Fi Time Schedule
		MAC Filter
		IP/MAC Binding
	Per-Devices Management	Internet On/Off
		VPN On/Off
		Online Time Schedule
		Device Rename
	Content Management	Domain Filter
		IP Filter

Software Specs

System	LED Control	true
	Local Control Method	Config Web Page
		App Control
	Remote Control Method	Config Page via HTTPS
		App Control
		TR069/TR098/TR111/TR181
	Firmware Upgrade	Local Update
		App (Over the Air)
		Online Update
	Reliability	Timed Reboot
		Backup and Restore
	Diagnostic Tools	Diagnosis
		Ping
		Traceroute
		NSLookup
		System Log
	Languages	• English • Bengali • Catalan • Czech
		• German • Greek • Spanish • French
		• Hebrew • Croatian • Hungarian • Italian
		• Japanese • Khmer • Korean • Dutch
		• Norwegian • Polish • Portuguese
		• Romanian • Russian • Slovak • Swedish
		• Thai • Turkish • Ukrainian • Vietnamese
		• Simplified Chinese • Traditional Chinese

Dashboard	Panel	Internet Status
		Mesh Status
		Devices Management
		WAN Status
		LAN Status
		WISP Status
		Wi-Fi Status
		VPN Status
		DHCP Server Status
		System Version
	Charts	Mesh Topology
		Internet Speed
		WISP Speed
		Wi-Fi Speed