

M2 Mesh Wi-Fi System (TR-069 enabled)

What is mesh Wi-Fi?

- Multiple access points (aka. mesh-nodes), throughout the premise, providing one stable Wi-Fi network throughout the home.
- Designed to find the optimal route to avoid signal jams
- Easy to expand or customize, with additional Bee and Queen nodes

What makes Mercku unique?



Ground-Breaking Transceiver

Maximizes the utility of chips, resulting in 100x performance of industry average



Proprietary WHEMS Antenna

Reduced 'transmission loss' from low signal distortions; MU-MIMO throughput



Internal Noise Reduction

Mercku improved on 1978 Nobel Prize Theory in Physics (Penzias & Benson) *Recognized by the Canadian Academy of Engineers

*To learn more about Mercku's scientific edge visit: mercku.tech/whv-mercku/hardware/

Simple Set up and Easy to Use

- o Plug and Play easy set up of your mesh network with Mercku's App and automatic connections with mesh
- Easily add new nodes to customize deployment
- Remote control via Mercku App *Mercku app or webpage: mywifi.mercku.tech

Secure Your Network

- o Guest Network keeps your network secure by creating a separate network for friends and visitors
- Access Control can limit certain devices access to the internet
- Parental Control restricts internet access time, contents and bandwidth for children's devices
- o VPN Server PPTP VPN and Open VPN are supported, making it easy to set up a secure connection between your private network and the internet
- Encryptions for Secure Networks WPA PSK and WPA2 PSK encryptions to protect your network

M2 Router Specs & Features										
Wi-Fi	2.4G - 300Mbps / 5G - 867Mbps	Flash	1Gb							
2.4GHz Wi-Fi	2T x 2R(IEEE 802.11a/b/g/n)	AP	Yes							
5GHz Wi-Fi	2T x 2R(IEEE 802.11a/n/ac)	MESH	Yes							
Antenna	High performance WHEMS antenna	USB	2.0 x 1							
CPU	1GHz	Power	1.2V / 1.5A							
WAN	1000 Base - T Ethernet x 1	Queen Size	100 x 100 x 125.5mm							
LAN	1000 Base - T Ethernet x 1	Bee Size	60 x 60 x 66mm							
RAM	128 MB DDR2									
Features	Firewall Security, DHCP, DMZ, Port Forwarding, Parental Control, Time/Bandwidth Limit, Speed Test, uPnP, QoS, DDNS, VPN Passthrough/Client, Networking Monitoring, Channel Management (Channel width selection, Channel size reduction), Automatic channel switching, smart roaming, automatic firmware upgrade, scheduled LED switching, IPv6									
ISP Exclusive	TR-069 remote management, Import configuration files via TFTP, Telnet, Web WAN Access									

Mercku M2 Mesh Wi-Fi Open-space Coverage (sq. ft)															
*Open-Space Coverage (sq. ft)		# of Queen													
		01	02	03	04	05	06	07	08	09	10	11	12	13	14
	00	3,000	4,500	6,000	7,500	9,000	10,500	12,000	13,500	15,000	16,500	18,000	19,500	21,000	22,50
# of Bee	01	3,500	5,000	6,500	8,000	9,500	11,000	12,500	14,000	15,500	17,000	18,500	20,000	21,500	
	02	4,000	5,500	7,000	8,500	10,000	11,500	13,000	14,500	16,000	17,500	19,000	20,500		,
	03	4,500	6,000	7,500	9,000	10,500	12,000	13,500	15,000	16,500	18,000	19,500		,	
	04	5,000	6,500	8,000	9,500	11,000	12,500	14,000	15,500	17,000	18,500		,		
	05	5,500	7,000	8,500	10,000	11,500	13,000	14,500	16,000	17,500		,			
	06	6,000	7,500	9,000	10,500	12,000	13,500	15,000	16,500						
	07	6,500	8,000	9,500	11,000	12,500	14,000	15,500	Guideline for coverage						
	08	7,000	8,500	10,000	11,500	13,000	14,500		Dorm: 1*Q (100 - 300 sq. ft)						
	09		9,000	10,500	12,000	13,500	Loft: 1*Q (300 - 1,000 sq. ft) Condo: 1*Q (500 - 1,500 sq. ft)								
	10		0.500	11.000	12 500	Apartment: 1*Q & 2*Bs (1,500 - 2,500 sq. ft)									
	10		9,500	11,000	12,500	House: 2*Qs & 2*Bs (2,500 - 4,000 sq. ft) Villa: 2 Swarm sets (4,000 - 6,500 sq. ft)									
	11			11,500							Villa: 2	Swarm se	ets (4,000	- 6,500 si	q. ft)

^{*} Obstacles will cause Wi-Fi deterioration

Signal and speed deterioration by most common materials: Concrete or metal: 86% | Glass: 72% | Wood or plastics: 29%

Interpretation: If a concrete wall is obstructing a Mercku access point, ~14% of Wi-Fi signal & speed will penetrate through!

Network speed & coverage, impacted by # of mesh nodes (Q/B)



Powering Wi-Fi in homes, across 45+ countries around the world!

#ConnectTheWorld



















Industry-leading science delivers the unparalleled consumer experience

- Fast Wi-Fi speeds say good-bye to buffering!

Every home is unique... Modular and custom combinations of the Queen and Bee form a fast, stable network

- Tailor your network, with Mercku's convenient form-factor: Tower or Wall-plug-ins
- Expand your coverage, and eliminate dead-spots!

The Queen & Bee, form a powerful mesh Wi-Fi network (300 – 1,500 + sq.m), while accounting for home's build materials like concrete, wood, and glass







Anytime, anywhere ... manage your home's network!

Mercku puts the power back in your hands: parental control, device prioritization, block unwanted users, and much more... Mercku app available for iOS & Android.

Keep your M2 up to date, with the over-the-air, via the app/webpage













