

M2 Mesh Wi-Fi System TR-069 enabled

What is mesh Wi-Fi?

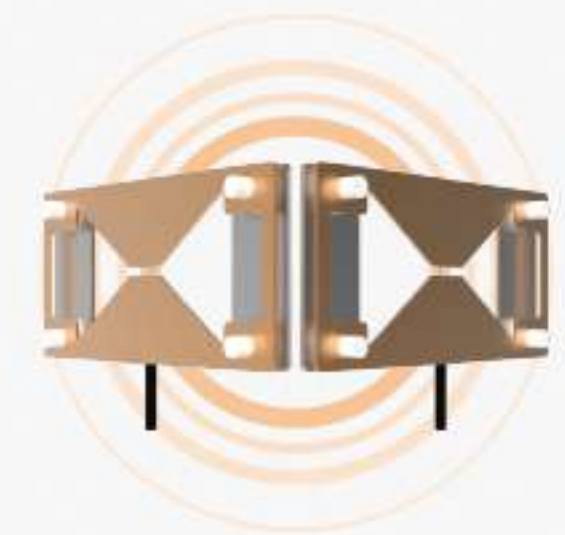
- Multiple access points (aka. mesh-nodes), throughout the premise, providing one stable Wi-Fi network throughout the home.
- Designed to find the optimal route to avoid signal jams
- Easy to expand or customize, with additional Bee and Queen nodes

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/why-mercku/hardware/

Simple Set up and Easy to Use

- 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

- 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
- 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	
# of Bee	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	22,500
	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							
	08	7,000	8,500	10,000	11,500	13,000	14,500								
	09		9,000	10,500	12,000	13,500									
	10		9,500	11,000	12,500										
	11			11,500											

* 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)



Guideline for coverage
Dorm: 1*Q (100 - 300 sq. ft)
Loft: 1*Q (300 - 1,000 sq. ft)
Condo: 1*Q (500 - 1,500 sq. ft)
Apartment: 1*Q & 2*Bs (1,500 - 2,500 sq. ft)
House: 2*Qs & 2*Bs (2,500 - 4,000 sq. ft)
Villa: 2 Swarm sets (4,000 - 6,500 sq. ft)

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

#ConnectTheWorld



FC CE IC

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Industry-leading science delivers the unparalleled consumer experience

- Fast Wi-Fi speeds – say good-bye to buffering!
- Supports up to 60 devices, with no degradation
- Stable Wi-Fi signals, no matter your home's layout

Endorsement of Mercku's technology, by the world's largest ISP, available upon request

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

