

Horizontally-Polarized Omnidirectional Antenna for Wi-Fi 6E/7 Applications

Wi-Fi Antennas

MHO497107-H Series



Description

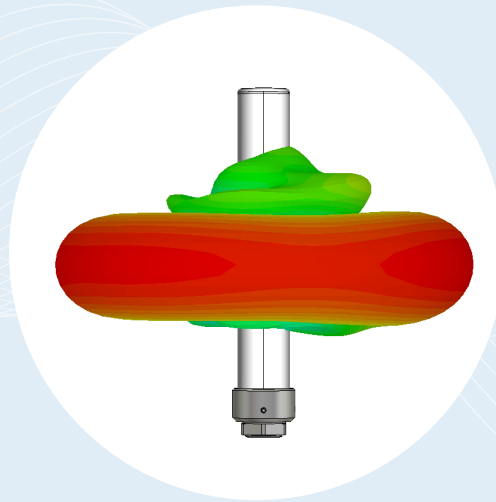
High performance omnidirectional antenna having high sidelobe suppression

Technologies

- Wi-Fi
- 4.9 GHz Public Safety

Features

- Supports wireless applications ranging from 4.94 - 7.125 GHz
- Engineered for low sidelobe level and maximum coverage at the horizon
- Slender yet rugged housing (OD 1" = 25.4 [mm])
- IP-67 rated
- White UV-resistant radome protects the antenna elements from environmental stressors



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MHO497107 is a high-performing omnidirectional antenna series optimized for high sidelobe suppression over the UNII-1, UNII-5, and UNII-7 frequency bands. The antennas exhibit highly omnidirectional radiation patterns that are stable over the full frequency range. MHO497107NM-H is roughly 7.5" in length and 1" in diameter and terminates in an N-type male connector at the base. An N-type female version is also available and is accomplished through the use of an adapter.

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Applications

- Industrial Communication
- Automated factories
- Industrial IoT
- Intelligent Transportation
- Smart Cities
- Smart Warehouses
- Agriculture

Certifications



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Wi-Fi Antennas

Electrical Specifications – All Models

	4.9 GHz	5 GHz	6 GHz	7 GHz
Frequencies	4940 – 4990 MHz	5150 – 5875 MHz	5925 – 6875 MHz	6875 – 7125 MHz
Nominal Input Impedance	50Ω			
Polarization	Horizontal			
VSWR	2:1			2.5:1
Peak Gain	6 dBi			
Typical Azimuth Plane Ripple	4 dB	3 dB	2 dB	2.5 dB
Elevation Plane Beamwidth	29°	26°	22°	20°
Peak Side Lobe Level ≥ 30° Off the Horizon	-14 dB	-14 dB	-14 dB	-13 dB

Mechanical and Environmental Specifications

Part Number	MHO497107NM-H	MHO497107NF-H
Connector	Type N Male	Type N Female
Dimensions (D x H)	1.36" x 7.68" (34.5 x 195 mm)	1.36" x 8.66" (34.5 x 220 mm)
Weight	~0.31 lbs (~140g)	~0.42 lbs (~190g)
Material	White UV-Stable ASA	
Rated Wind	126 MPH (200 km/h)	
Temperature Range	-40°F to +176°F (-40°C to +80°C)	
Ingress Protection	IP67	
Certifications	RoHS compliant	

Accessories

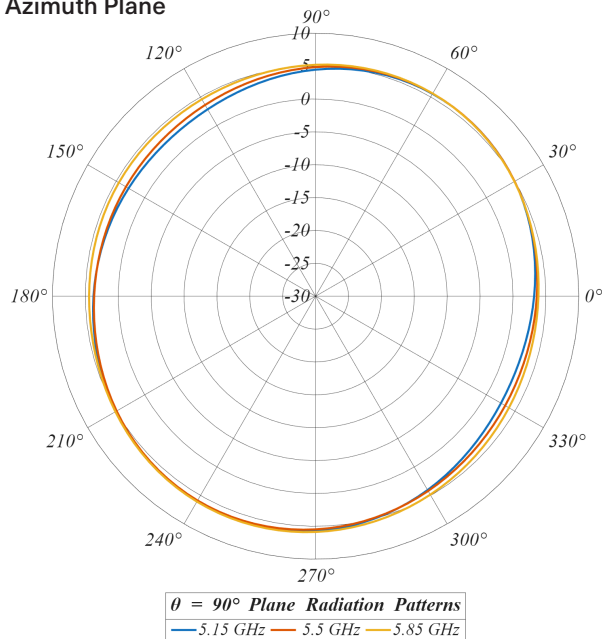
Part Number	
BAM-1009	The BAM-1009 base station aluminum mount kit (for masts up to 2.4 inches in diameter) is sold separately. An N-female bulkhead cable assembly is sold separately for antennas terminated in an N-male connector.

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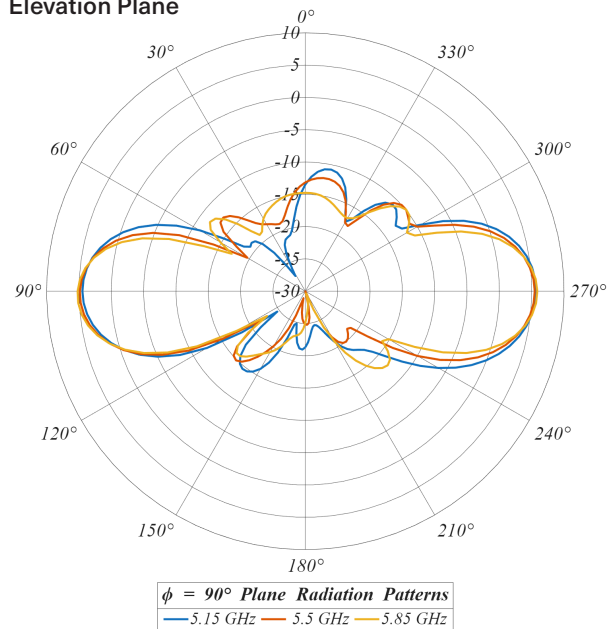
Wi-Fi Antennas

5 GHz Radiation Patterns

Azimuth Plane

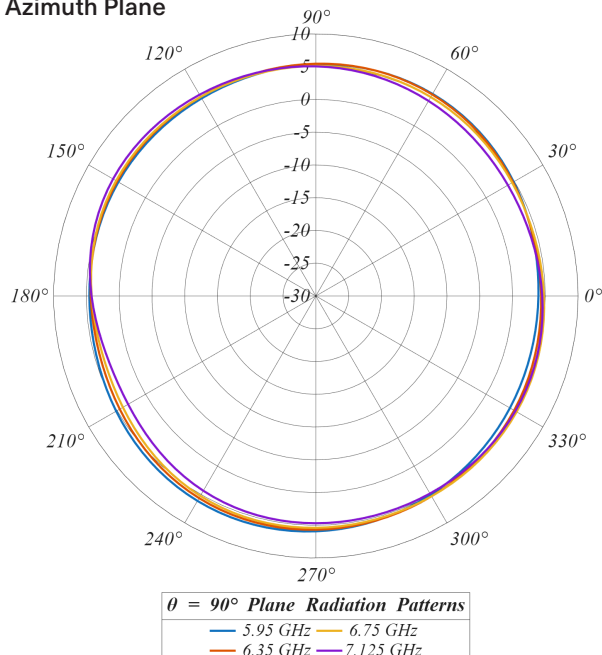


Elevation Plane

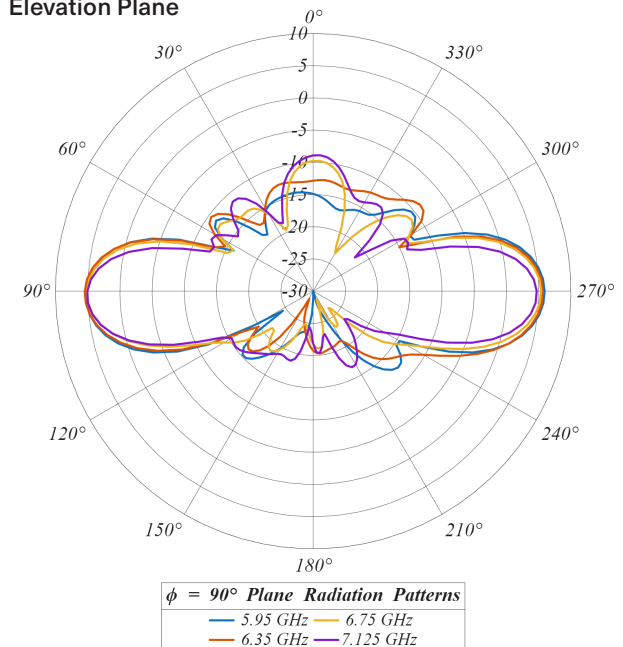


6 GHz Radiation Patterns

Azimuth Plane



Elevation Plane



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this product contact us

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Solving Complex Wireless Challenges

PCTEL, an Amphenol company, is a leading global provider of wireless technology solutions, including purpose-built Industrial IoT devices, antenna systems, and test and measurement products. Trusted by our customers for decades, we solve complex wireless challenges to help organizations stay connected, transform, and grow.



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