

PDM24499

Port MIMO Antenna

2.4-2.5 AND 4.9-5.95 GHZ 9 DBI WALL/POLE-MOUNTED MIMO ANTENNA

The PDM24499 antenna is a dual-band, 4-port directional antenna for use in 802.11n MIMO applications. Equipped with two vertically-polarized ports and two horizontally-polarized ports, the antenna is designed to take advantage of both polarization and spatial separation to enhance coverage areas populated with obstructions. Housed in a compact, low-profile polycarbonate radome and equipped with an articulating arm, the antenna can be wall/pole-mounted and oriented to take full advantage of the antenna's directionality.

The radiation patterns are uniform and symmetrical, providing high levels of signal density into defined coverage zones. This antenna greatly enhances the performance of 802.11n systems where physical obstructions are anticipated. The dual-band frequency coverage means that a single type of antenna can be deployed with any MIMO radio in the 2.4-2.5 GHz and
4.9-5.95 GHz bands.

FEATURES

- Vertically and horizontally polarized radiating elements in a single solution
- Compact low-profile housing
- Equitable for both indoor and outdoor solutions
- Wide-band 2.4-2.5 GHz and 4.9-5.95 GHz performance

MARKETS

- 802.11n MIMO
- Offices, hotels, and college campuses
- Airports and hospitals
- Bus terminals and train stations
- Museums, libraries, and retail malls
- Outdoor networks

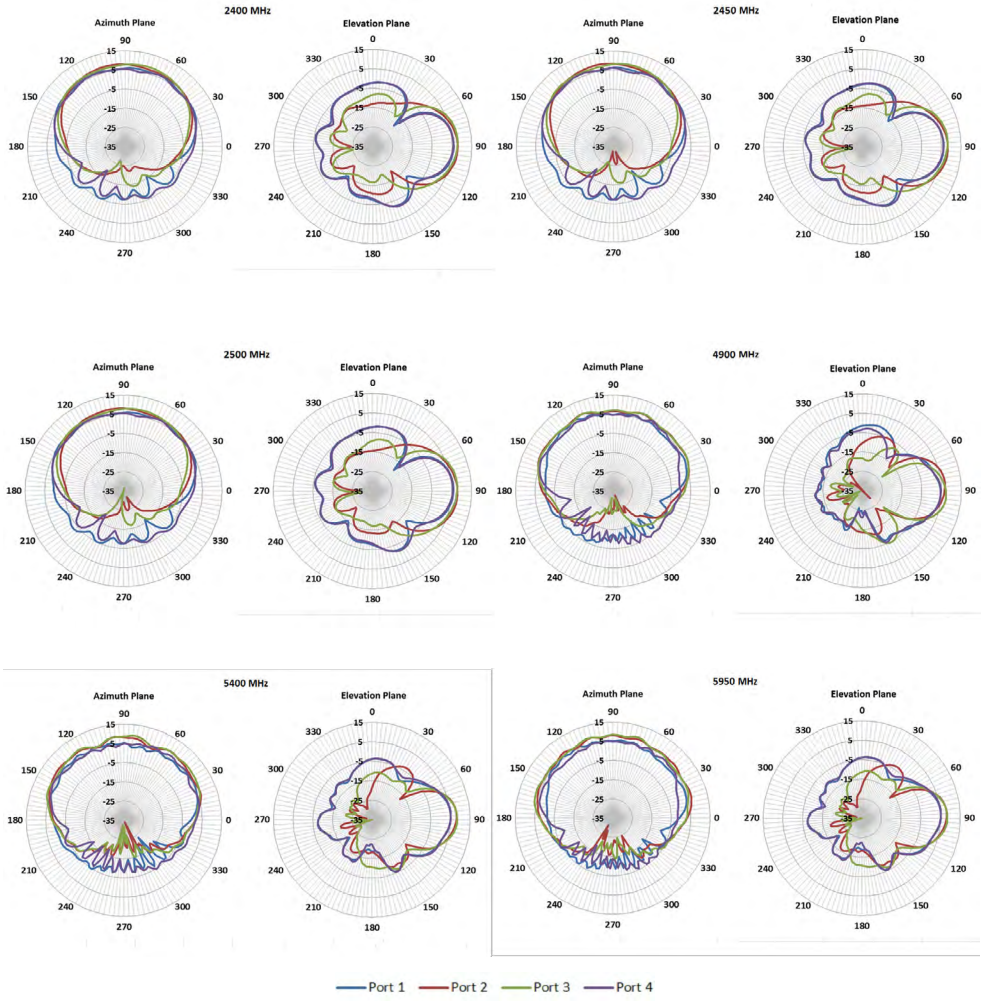
SPECIFICATIONS

PARAMETER	SPECIFICATIONS	
Antenna Model	PDM24499	
Number of Ports	Four	
Frequency Bands, MHz	2400-2500	4900-5950
Peak Gain, Avg. V-pol, dBi	8.4	8.9
Peak Gain, Avg. H-pol, dBi	6.7	6.6
Peak Gain, Max. V-pol, dBi	8.6	9.6
Peak Gain, Max. H-pol, dBi	6.9	7.1
Max Gain ± 30° above Horizon, dBi	NA	3.0
Azimuth 3 dB Beamwidth, Typ (V-pol/H-pol)	101°/142°	97°/81°
Elevation 3 dB Beamwidth, Typ (V-pol/H-pol)	43°/40°	30°/41°
VSWR (Avg)	1.3:1	
VSWR (Max)	<2.0:1	
Port-to-Port Isolation (Avg)	25 dB	35 dB
Port-to-Port Isolation (Max)	>18 dB	>24 dB
Front-to-Back Ratio V-pol	>20 dB	
Front-to-Back Ratio H-pol	>10 dB	
Nominal Impedance	50Ω	
Polarization	Two-ports vertical, two-ports horizontal	
Maximum Input Power (per port)	10 W (ambient temperature of 25°C/77°F	
Dimensions (H x L x W)	26 mm x 305 mm x 178 mm (1.0 in. x 12.0 in. x 7.0 in.)	
Weight (without mount)	0.72 kg (1.58 lbs)	
Mounting	Articulating Mount, Mast, or Flush Mount	
Wind Survival	220 km/hr (136 mph)	
Wind Operational	160 km/hr (100 mph)	
Operating Temperature	-30°C to +70°C (-22°F to +158°F)	
Storage Temperature	-40°C to +85°C (-40°F to +185°F)	
Radome	PC + ABS, UL94-V0, White	
Ingress Protection	IP67	
Material Compliance	RoHS	

CONFIGURATION

PART NUMBER	CABLE LENGTH	CONNECTOR
PDM24499-FNF	NA	Fixed Type N- female

RADIATION PATTERNS



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