



## 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

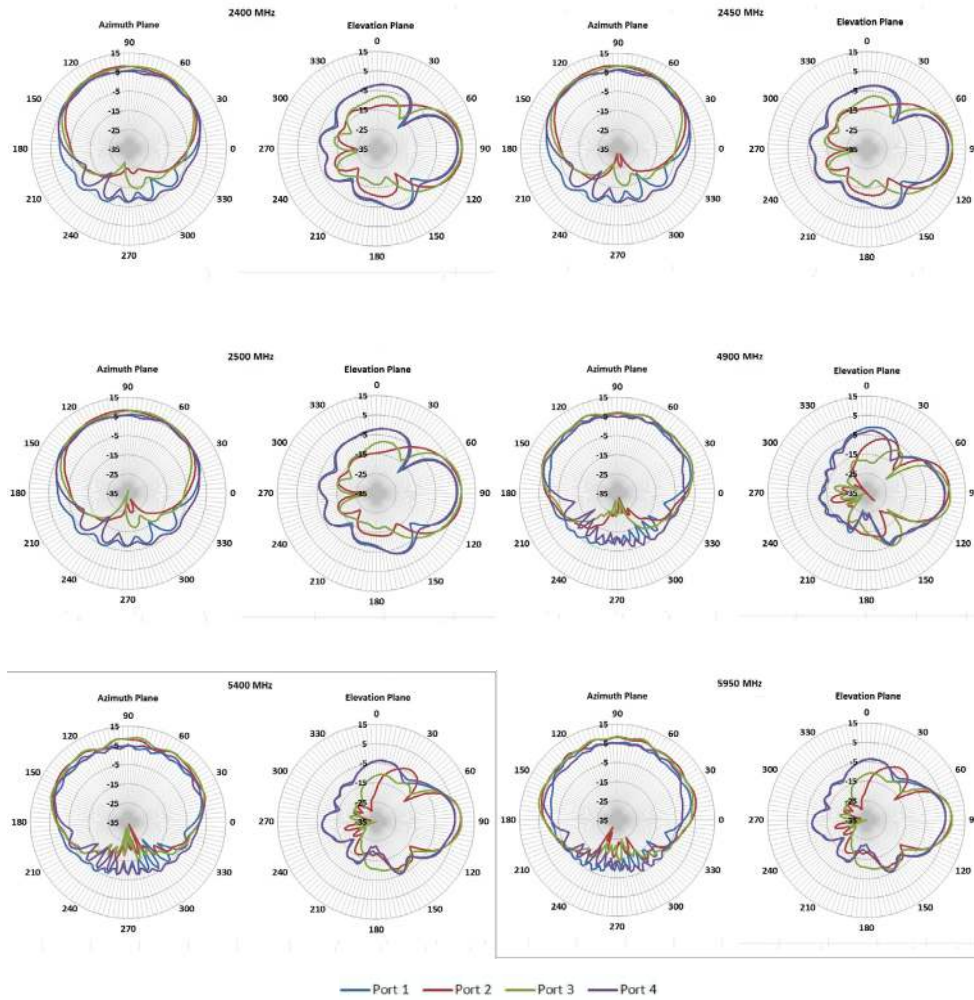
## SPECIFICATIONS

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 $\pm 30^\circ$ 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	50 $\Omega$	
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



## te.com

TE, and TE connectivity (logo) are trademarks owned or licensed by the TE Connectivity Ltd. family of companies. All other logos, products and/or company names referred to herein might be trademarks of their respective owners.

The information given herein, including drawings, illustrations and schematics which are intended for illustration purposes only, is believed to be reliable. However, TE Connectivity makes no warranties as to its accuracy or completeness and disclaims any liability in connection with its use. TE Connectivity's obligations shall only be as set forth in TE Connectivity's Standard Terms and Conditions of Sale for this product and in no case will TE Connectivity be liable for any incidental, indirect or consequential damages arising out of the sale, resale, use or misuse of the product. Users of TE Connectivity products should make their own evaluation to determine the suitability of each such product for the specific application.

TE Connectivity warrants to the original end user customer of its products that its products are free from defects in material and workmanship. Subject to conditions and limitations TE Connectivity will, at its option, either repair or replace any part of its products that prove defective because of improper workmanship or materials. This limited warranty is in force for the useful lifetime of the original end product into which the TE Connectivity product is installed. Useful lifetime of the original end product may vary but is not warranted to exceed one (1) year from the original date of the end product purchase.

©2022 TE Connectivity. All Rights Reserved.

08/22 Original

## TE TECHNICAL SUPPORT CENTER

USA:	+1 (800) 522-6752
Canada:	+1 (905) 475-6222
Mexico:	+52 (0) 55-1106-0800
Latin/S. America:	+54 (0) 11-4733-2200
Germany:	+49 (0) 6251-133-1999
UK:	+44 (0) 800-267666
France:	+33 (0) 1-3420-8686
Netherlands:	+31 (0) 73-6246-999
China:	+86 (0) 400-820-6015