



PDM245115H

4-Port Directional H/V MIMO Antenna 2400-2500 MHz / 5150-5900 MHz

Laird Connectivity's PDM245115H antenna is a four-port directional antenna for use in 802.11n MIMO applications. Designed for low side lobe and front-to-back performance, the antenna is an excellent choice for high density Wi-Fi applications where adjacent antenna interference is of concern. Equipped with two vertically polarized ports and two Horizontally polarized ports, the antenna takes advantage of both polarization and spatial separation to mitigate multipath issues.

Enclosed in a compact/low profile polycarbonate radome and equipped with an articulating arm that can be affixed to a mast or anchored directly to a vertical surface, the antenna can be oriented to take full advantage of the antenna's directionality. Uniform and symmetrical radiation patterns provide high-level 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 5.15-5.9 GHz bands.

FEATURES AND BENEFITS

- 802.11n MIMO
- Wide band 2.4-2.5 GHz and 5.15-5.9 GHz performance
- Vertically and horizontally polarized radiating elements in a single solution
- Equitable for both indoor and outdoor solutions
- Low profile
- Multipath mitigation
- Lower adjacent antenna interference
- Frequency diplexed dual polarized radiators

APPLICATIONS

- High density Wi-Fi
- Stadiums, arenas, convention centers
- Transport terminals
- Campuses
- Outdoor networks

ELECTRICAL SPECIFICATIONS

Model Number	PDM245115H		
Number of Ports	4		
Operating Frequency (MHz)	2400-2500	5150-5700	5700-5900
VSWR – Max	<1.6:1	<2.0:1	<1.5:1
Gain (dBi)	14.0	14.5	
Nominal Impedance (Ohms)	50		
Max Power - Ambient 25°C (W)	1		

ELECTRICAL SPECIFICATIONS

Vertical Plane 3 dB Beamwidth	33°	27°
Horizontal Plane 3 dB Beamwidth	31°	31°
Sidelobes - Azimuth (dB)	-20	-20
Sidelobes - Elevation (dB)	-10	-15
Front-to-Back Ratio (dB)	35	-

MECHANICAL SPECIFICATIONS

Dimensions - mm (inches)	507.0 x 368 x 21.1 (20.0 x 14.5 x 0.8)
Weight - kg (lbs.) (no brackets)	2.3 (5.1)
Radome Material	Polycarbonate, white

ENVIRONMENTAL SPECIFICATIONS

Operating Environment (Indoor or Outdoor)	Indoor and Outdoor
Operating Temperature - °C (°F)	-40 to +70°C (-40 to +158°F)
Storage Temperature - °C (°F)	-40 to +85°C (-40 to +185°F)
Ingress Protection Rating	IP67
Flammability Rating	UL 94V0 Materials
Material Substance Compliance	RoHS
Standard for Safety: Fire and Smoke (Plenum)*	UL 2043 Certified

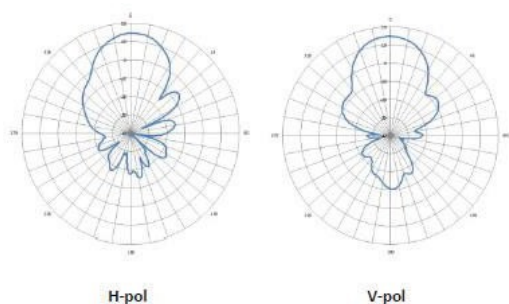
CONFIGURATION

PART NUMBER	CONNECTOR
PDM245115H-FNF	Type N Female (x4)

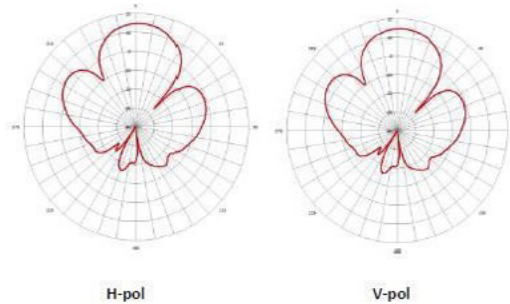
RADIATION PATTERNS

2450 MHz

Azimuth

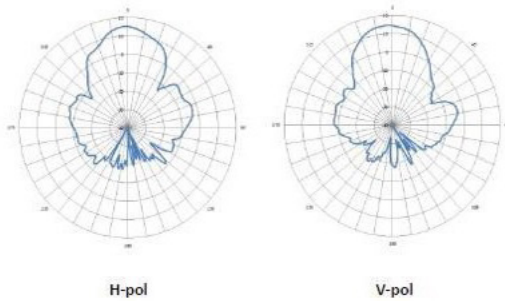


Elevation

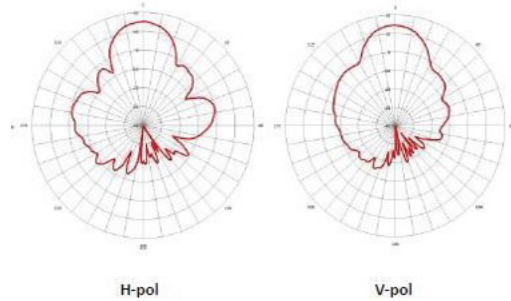


5550 MHz

Azimuth



Elevation



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08/22 Original