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# PDM245115H 4-Port Directional H/V MIMO Antenna



## 2.4-2.5 & 5.15-5.9 GHz 14 dBi 4-PORT DIRECTIONAL H/V MIMO ANTENNA

Laird's PDM245115H antenna is a 4-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 WiFi 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 will greatly enhance 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

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

### MARKETS

- High Density WiFi
- Stadiums, Arenas, Convention Centers
- Transport Terminals
- Campuses
- Outdoor Networks

### SPECIFICATIONS

ELECTRICAL		
Model Number	PDM245115H	
Frequency	2400-2500 MHz	5150-5900 MHz
Peak Gain	14.0 dBi	14.5 dBi
Nominal Impedance	50Ω	
VSWR (H,V)	<1.6:1	<2.0:1 (5150-5700 MHz) <1.5:1 (5700-5900 MHz)

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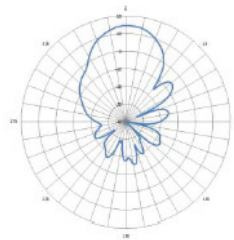
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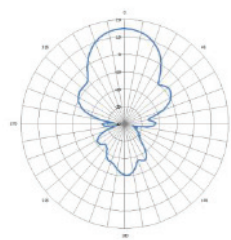
ELECTRICAL		
Azimuth Co-Polar First Sidelobe	-20 dB	-20 dB
Elevation Co-Polar First Sidelobe	-10 dB	-15 dB
F/B Ratio	35 dB	
Azimuth Plane 3-dB Beamwidth (Typ.)	31°	31°
Elevation Plane 3-dB Beamwidth (Typ.)	33°	27°
Power	1 Watt	
RF Connector	Type N, Female (4x)	
Radome	Polycarbonate, White	
Operational Temperature	-40°C to +70°C	
Storage Temperature	-40°C to +85°C	
Dimensions	507 x 368 x 21.1 mm (20 x 14.5 x 0.8 in)	
Weight (no brackets)	2.3 kg (5.1 lbs)	
Water/Foreign Body Ingress	IP67	
RoHS Compliance	Yes	
Standard for Safety: Fire and Smoke (Plenum)*	UL 2043 Certified	
Flammability Rating (Radome)	UL94V0 Materials	

**AZIMUTH PATTERNS: 2450 MHZ**

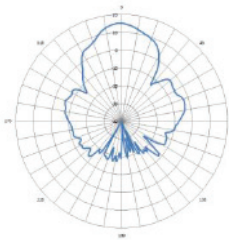
**AZIMUTH PATTERNS: 5550 MHZ**



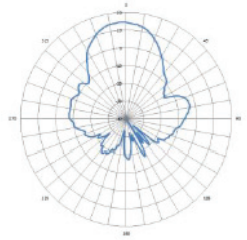
H-pol



V-pol



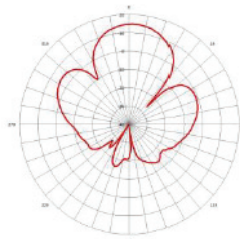
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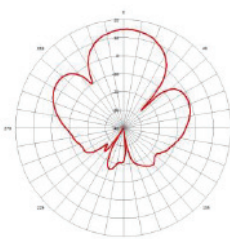
V-pol

**ELEVATION PATTERNS: 2450 MHZ**

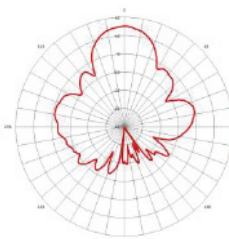
**ELEVATION PATTERNS: 5550 MHZ**



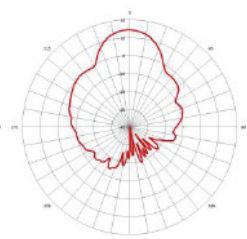
H-pol



V-pol



H-pol



V-pol

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