

### Smart Technology. Delivered.

# 2400 to 2500 MHz/4900 to 5950 MHz 4-port MIMO Directional Antenna

### 4-PORT MIMO DUAL-BAND, DUAL POLARIZED DIRECTIONAL ANTENNA

The Laird patent pending PDQ24499 antenna is a 4-port dual-band, dual polarized directional panel antenna for use in 802.11n MIMO indoor and outdoor applications. The antenna is an excellent choice for high density Wi-Fi applications where adjacent interference is of concern. The dual-band frequency coverage means that a single type of antenna can be deployed with any MIMO radio in the 2400-2500 MHz and 4900-5950 MHz bands. In addition, the uniform and symmetrical radiation patterns will provide a high-level signal density into engineered coverage areas.



- Ultra thin, compact ASA UV stable white housing.
- Four radiating elements optimized for indoor & outdoor 802.11n or 802.11ac MIMO applications.
- Articulating arm mount can anchored directly to a vertical surface or mast mounted and oriented for optimal signal radiation.
- Both horizontal & vertical polarization for multipath mitigation.
- IP67 Rated and RoHS compliant.

### **MARKETS / APPLICATIONS**

- High density WiFi
- Sports Entertainment- outdoor stadiums, arenas & convention centers
- Hospitality hotels & casinos
- Transportation airport, bus, & train terminals
- Retail stores & indoor pedestrian malls
- Education libraries & museums



Patent Pending PDQ24499



Standard Articulating Mount

**PARAMETERS SPECIFICATIONS** Number of Ports Four (4) Frequency Bands, MHz 2400-2500 4900-5950 Peak Gain, Typical dBi 8.2 8.3 Peak Gain, Max dBi 8.6 94 Max Gain ± 30o above Horizon, dBi N/A 7.4 Azimuth 3 dB Beamwidth, Typ (V-pol/H-pol) 75°/62° 62°/57° 62°/73° Elevation 3 dB Beamwidth, Typ (V-pol/H-pol) 50°/65° VSWR, Typical < 1.6:1 < 1.8:1 VSWR, Max < 2.0:1 < 2.0:1 Port-to-Port Isolation, Typical > 34 dB > 34 dB Port-to-Port Isolation, Maximum > 30 dB > 30 dB Nominal Impedance 500 Polarization 2-Ports Vertical, 2-Ports Horizontal Front-to-Back Ratio Maximum Input Power (per port) 10 W (ambient temp of 25°C/77°F) Dimensions 254 x 254 x 41 mm (10" x 10" x 1.6") Weight (without mount) 1.14 kg (2.50 lbs) Mounting Articulating Mount, Mast or Flush Mount Cable Type Low Temperature Plenum Rated Cable Wind Survival 200 km/h (125 mph) Wind Gust Survival 266 km/h (165 mph) IP67 Ingress Protection Operating Temperature -30°C to +70°C (-22°F to +158°F) -40°C to +85°C (-40°F to +185°F) Storage Temperature Radome/Baseplate Material Polycarbonate, UL94-V0, UV Stable White Material Compliance RoHS Compliant

 PART NUMBER
 CABLE LENGTH
 CONNECTOR

 PDQ24499-FNF
 N/A
 4x- Fixed Type N-female

 PDQ24499-91NF
 Dual- 91 cm (3.00 ft)
 4x- Type N- female

 PDQ24499-91NM
 Dual- 91 cm (3.00 ft)
 4x- Type N- male

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## **RADIATION PATTERNS**

## 2400 MHz 2450 MHz **Azimuth Radiation Pattern Elevation Radiation Pattern Azimuth Radiation Pattern Elevation Radiation Pattern** 210 180 180 2500 MHz 4900 MHz **Elevation Radiation Pattern Azimuth Radiation Pattern Elevation Radiation Pattern** Azimuth Radiation Pattern 5400 MHz 5950 MHz Azimuth Radiation Pattern **Elevation Radiation Pattern Azimuth Radiation Pattern Elevation Radiation Pattern** 210 210 210 150 210 180 180 180 180

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#### ANT-DS-PDQ24499 0216

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