



### Smart Technology. Delivered.

# 4-Port Directional Slant 45° MIMO Antenna

## 2.4-2.49 & 4.9-6.0 MHZ 5 dBi 4-PORT DIRECTIONAL MIMO ANTENNA

Laird's PSQ24495 antenna is a 4-port directional antenna for use in 802.11n MIMO applications. The antenna is an excellent choice for high density WiFi applications where adjacent antenna interference is of concern. Equipped with two sets of slant +/-45 degree ports, the antenna takes advantage of both polarization and spatial separation to mitigate multipath issues.

Enclosed in a compact/low profile ASA, UV stable, 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 a 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- 2.49 MHz and 4.9-6.0 MHz bands.



Patent Pending PSQ24495

#### **FEATURES ✓** RoHS

- 802.11n MIMO operation.
- Low profile, wide band performance.
- Two sets of slant ±45° polarized radiating elements in a single solution.
- IP67 Rated ideal for indoor and outdoor use.
- Spatial separation mitigates multipath issues.

#### **MARKETS**

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



Standard Articulating Mount

| SPECIFICATIONS                          |                                       |           |
|---|---------------------------------------|-----------|
| Number of ports                         | Four (4)                              |           |
| Frequency Bands, MHz                    | 2400-2490                             | 4900-6000 |
| Peak Gain, dBi (Typical)                | 5.5                                   | 6.0       |
| Peak Gain, dBi (Max.)                   | 6.6                                   | 7.7       |
| Max Gain <u>+</u> 30°above horizon, dBi | N/A                                   | 5.8       |
| Azimuth 3dB Beamwidth, Typ              | 85°                                   | 90°       |
| Elevation 3dB Beamwidth, Typ            | 110°                                  | 85°       |
| VSWR, Typical                           | < 1.6:1                               | < 1.9:1   |
| VSWR, Max                               | < 2.0:1                               | < 2.0:1   |
| Port-to-Port Isolation, Typical dB      | > 16 dB                               | > 21 dB   |
| Port-to-Port Isolation, Max dB          | > 15 dB                               | > 20 dB   |
| Front -to-Back Ratio                    | > 13 dB                               | > 20 dB   |
| Nominal Impedance                       | 50 Ω                                  |           |
| Polarization                            | Slant ± 45°                           |           |
| Maximum Input Power (per port)          | 10 W (ambient temp of 25°C/77°F)      |           |
| Dimensions (LxWxH)                      | 202 x 200 x 40mm (7.96"x 7.87"x 1.6") |           |
| Weight (w/o mount)                      | 698 g (1.54 lbs)                      |           |
| Mounting                                | Articulating mast/wall mount          |           |
| Cable Type                              | Low temperature Plenum rated          |           |
| Wind Survival                           | 200 km/h (125 mph)                    |           |
| Wind Gust Survival                      | 266 km/h (165 mph)                    |           |
| Ingress Protection                      | IP67                                  |           |
| Operating Temparture                    | -30°C to +70°C (-22°F to +158°F)      |           |
| Storage Temparture                      | -40°C to +85°C (-40°F to +185°F)      |           |
| Radome / Baseplate Material             | ASA LURAN S778T                       |           |
| Material Compliance                     | RoHS Compliant                        |           |

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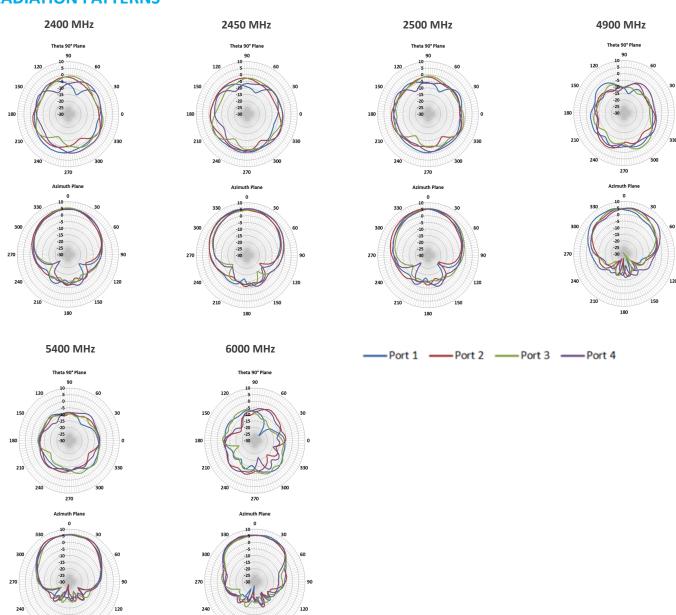
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# **CONFIGURATION**

| PART NUMBER    | CABLE LENGTH        | CONNECTOR                        |
|----------------|---------------------|----------------------------------|
| PSQ24495-91NF  | 4x- 91 cm (3.00 ft) | Type N- Female                   |
| PSQ24495-91NM  | 4x- 91 cm (3.00 ft) | Type N- Male                     |
| PSQ24495-91RSM | 4x-91cm (3.00 ft)   | Type SMA - Male Reverse Polarity |

## **RADIATION PATTERNS**



#### ANT-DS-PSQ24495 0617

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