



The Laird Connectivity PSQ24495 antenna is a four-port directional antenna for use in 802.11n MIMO applications. The antenna is an excellent choice for high density Wi-Fi 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 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 2400-2490 MHz and 4900-6000 MHz bands.

FEATURES AND BENEFITS

- 802.11n MIMO operation
- Low profile, wide band performance
- Two sets of slant $\pm 45^\circ$ polarized radiating elements in a single solution
- Ideal for indoor and outdoor use
- Spatial separation mitigates multipath issues

APPLICATIONS

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

ELECTRICAL SPECIFICATIONS

Model Name	PSQ24495	
Number of Ports	4	
Operating Frequency (MHz)	2400-2490	4900-6000
VSWR – Avg	<1.6:1	<1.9:1
VSWR – Max	<2.0:1	<2.0:1
Peak Gain – Avg. (dBi)	5.5	6.0
Peak Gain – Max. (dBi)	6.6	7.7
Max. Gain $\pm 30^\circ$ above Horizon (dBi)	N/A	5.8
Port-to-Port Isolation – Typ. (dB)	>16	>21
Port-to-Port Isolation – Max. (dB)	>15	>20
Nominal Impedance (Ohms)	50	
Max Power - Ambient 25°C (W)	10	
Polarization	Slant $\pm 45^\circ$	
Vertical Plane 3 dB Beamwidth	85°	90°
Azimuth Plane 3 dB Beamwidth	110°	85°
Front-to-Back Ratio (dB)	>13	>20

MECHANICAL SPECIFICATIONS

Dimensions – mm (inches)	202 x 200 x 40 (7.96 x 7.87 x 1.6)
Weight (without mount) – kg (lbs.)	0.698 (1.54)
Mounting	Articulating mast/wall mount
Cable Type	Low temperature plenum rated
Radome/Baseplate Material	ASA LURAN S778T

ENVIRONMENTAL SPECIFICATIONS

Operating Environment (Indoor or Outdoor)	Indoor or outdoor
Operating Temperature – °C (°F)	-30 to +70°C (-22 to +158°F)
Storage Temperature – °C (°F)	-40 to +85°C (-40 to +185°F)
Wind Survival – km/hr (mph)	200 (125)
Wind Gust Survival – km/hr (mph)	266 (165)
Ingress Protection Rating	IP67
Material Substance Compliance	RoHS

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 – 91 cm (3.00 ft.)	Type SMA – Male Reverse Polarity

RADIATION PATTERNS

— Port 1 — Port 2 — Port 3 — Port 4

