

PDQ244910

4-Port MIMO Directional Antenna 2400-2500 MHz/4900-5950 MHz

The Laird Connectivity's patent-pending PDQ244910 antenna is a four-port dual-band, dual polarized directional 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 provide a high-level signal density into engineered coverage areas.

FEATURES AND BENEFITS

- Ultra-thin, compact ASA UV stable white housing
- Four radiating elements optimized for indoor and outdoor 802.11n MIMO applications
- Articulating arm mount can anchor directly to a vertical surface or mast mounted and oriented for optimal signal radiation
- Horizontal and vertical polarization for multipath mitigation

APPLICATIONS

- High density Wi-Fi
- Outdoor stadiums, arenas, and convention centers
- Hotels and casinos
- Airport, bus, and train terminals
- Retail stores and indoor pedestrian malls
- Libraries and museums

ELECTRICAL SPECIFICATION		
Model Name	PDQ244910	
Number of Ports	4	
Operating Frequency (MHz)	2400-2500	4900-5950
VSWR – Avg	1.3:1	
VSWR – Max	<2.0:1	
Peak Gain – Avg. (dBi)	10.1	9.9
Peak Gain – Max. (dBi)	10.8	10.5
Max. Gain ± 30° above Horizon (dBi)	-	5.8
Port-to-Port Isolation – Avg. (dB)	26	33
Port-to-Port Isolation – Max. (dB)	20	20
Nominal Impedance (Ohms)	50	
Max Power - Ambient 25°C (W)	10	
Power Handling (W)		
Polarization	Vertical (2 ports), Horizontal (2 ports)	

ELECTRICAL SPECIFICATION		
Vertical Plane 3 dB Beamwidth – V-pol	40°	40°
Vertical Plane 3 dB Beamwidth – H-pol	50°	48°
Horizontal Plane 3 dB Beamwidth – V-pol	50°	48°
Horizontal Plane 3 dB Beamwidth – H-pol	40°	40°
Front-to-Back Ratio (dB)	>12	

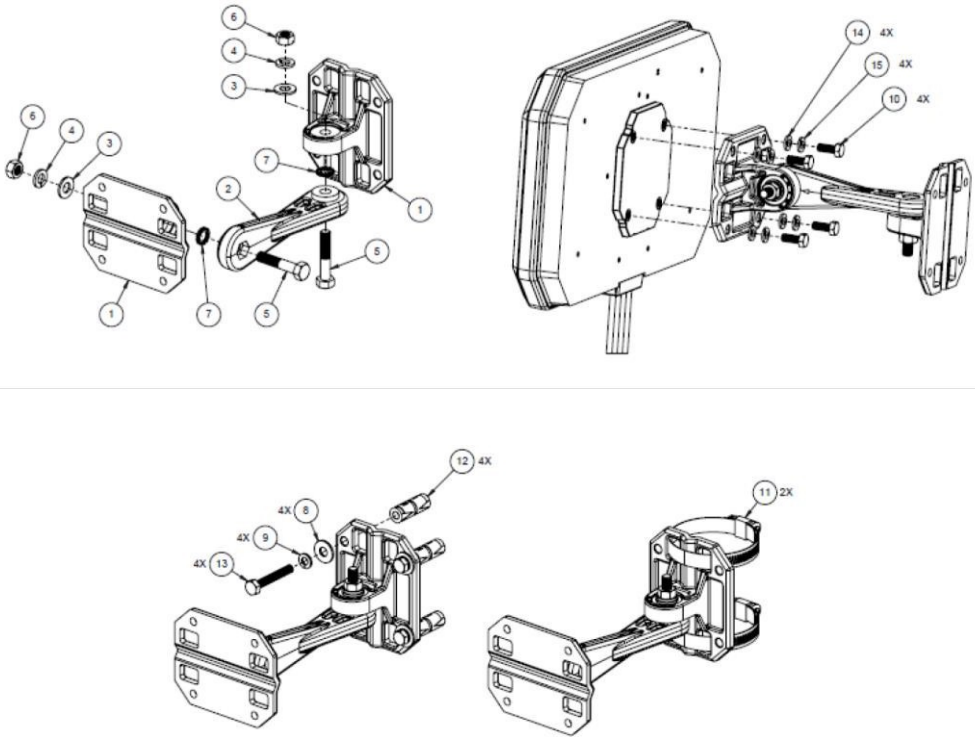
MECHANICAL SPECIFICATION	
Dimensions – mm (inches)	327.0 x 195.0 x 41.0 (12.9 x 7.7 x 1.6)
Weight – kg (lbs.)/Weight with mount kg (lbs.)	0.8 (1.8)/1.5 (3.3)
Mounting	Articulating mount, flush mount, or mast (44-57 mm)
Cable Type	Low temperature, plenum rated cable
Radome Material	ASA, White

ENVIRONMENTAL SPECIFICATION	
Operating Environment (Indoor or Outdoor)	Indoor and outdoor
Operating Temperature – °C (°F)	-40 to +70°C (-40 to +158°F)
Storage Temperature – °C (°F)	-30 to +85°C (-22 to +185°F)
Wind Survival – km/hr (mph)	160 (100)
Wind Gust Survival – km/hr (mph)	220 (136)
Ingress Protection Rating	IP67
Material Substance Compliance	RoHS

CONFIGURATION

PART NUMBER	CABLE LENGTH	CONNECTOR
PDQ244910-91NF	4x - 91 cm (3.0 ft.)	Type N Female
PDQ244910-91NM	4x - 91 cm (3.0 ft.)	Type N Male

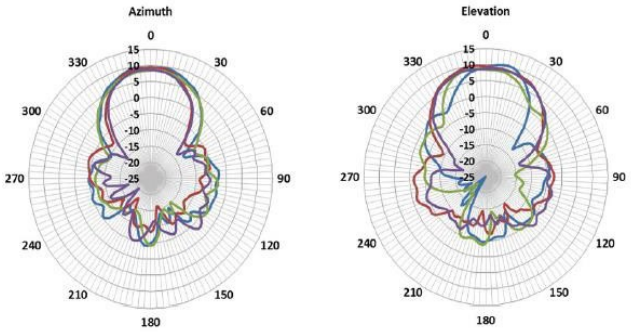
MOUNTING OPTION



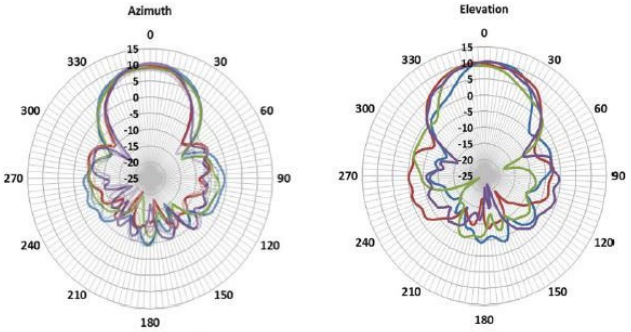
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	101-00038	WASHER, SLOCK, M6, SS, PA, DIN 127	4
2	101-00031	WASH, FLAT, M6, SS, PA	4
3	015294	SCREW, HEX, [1/4-20 x 1-3/4"], SS, PA	1
4	027871	ANCHOR, EXPANSION, DOUBLE SHELL	1
5	037860	CLAMP, HOSE, WORM-GEAR, 1-13/16" TO 2-3/4"	2
6	101-00063	BOLT, HEX, M6 x 1.0 x 16 mm, SS, PA	4
7	010084	WASHER, SPLIT-LOCK, 1/4	1
8	017868	SHER, FLAT, [1/4"], SS, PA	1
9	017845	WASHER, EXT OL SERRATED, [M8], SS, PA	2
10	010118	NUT, HEX, [5/16-18], SS, PA	2
11	017844	SCREW, HHC, [5/16-18 X 1-5/8"], SS, PA	2
12	010119	WASHER, SPLIT-LOCK, [5/16"], SS, PA	2
13	013402	WASHER, FLAT, [5/16"], SS, PA	2
14	112-00023	ARM, HDMNT	1
15	112-00022	FLANGE, HDMNT	2

RADIATION PATTERNS

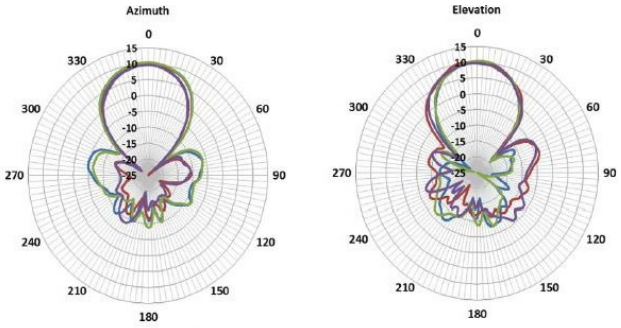
2400 MHz



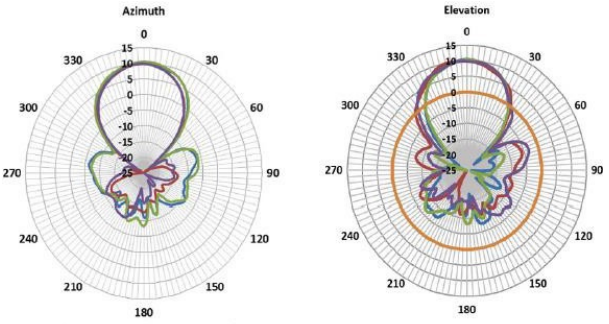
2450 MHz



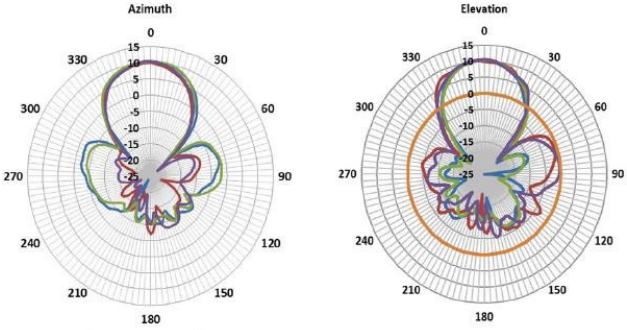
2500 MHz



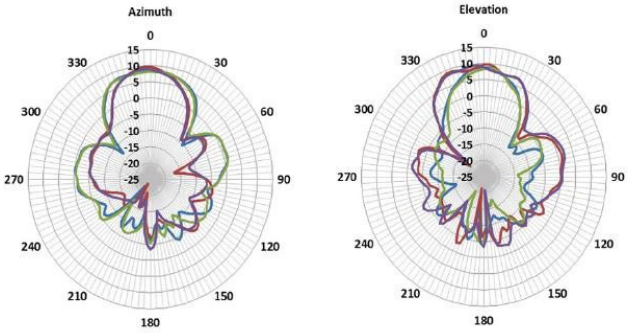
4900 MHz



5400 MHz



5950 MHz



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