



## 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

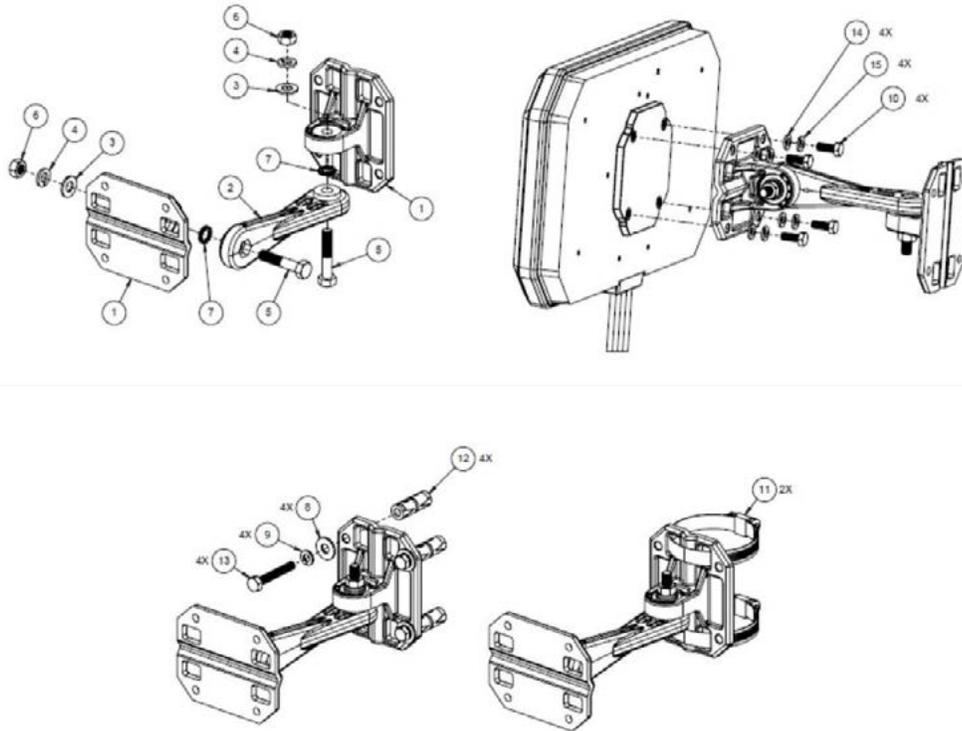
## ENVIRONMENTAL SPECIFICATION

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

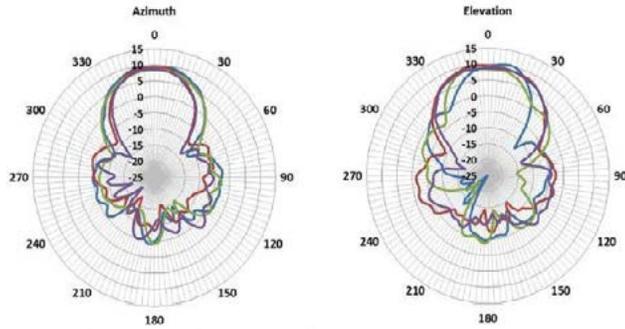
## MOUNTING OPTION



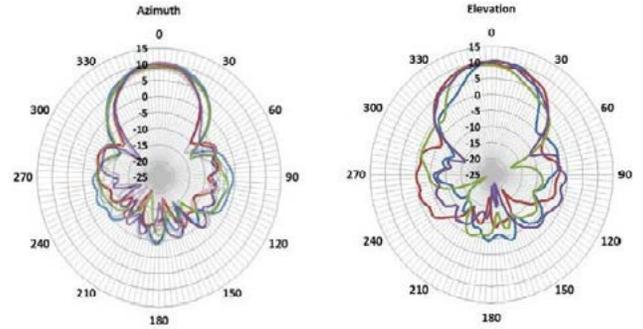
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	101-00038	WASHER, SLOCK, M6, SS, PA, DIN 127	4
2	101-00031	WASH, FLAT, M6, SS, PA	4
3	015294	SCREW, HEX, [1/4-20 x 1-3/4"], SS, PA	1
4	027871	ANCHOR, EXPANSION, DOUBLE SHELL	1
5	037860	CLAMP, HOSE, WORM-GEAR, 1-13/16" TO 2-3/4"	2
6	101-00063	BOLT, HEX, M6 x 1.0 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

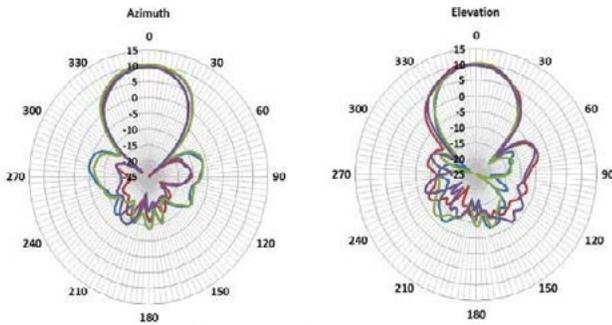
## 2400 MHz



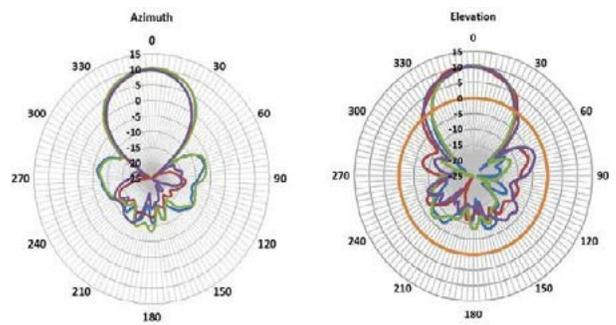
## 2450 MHz



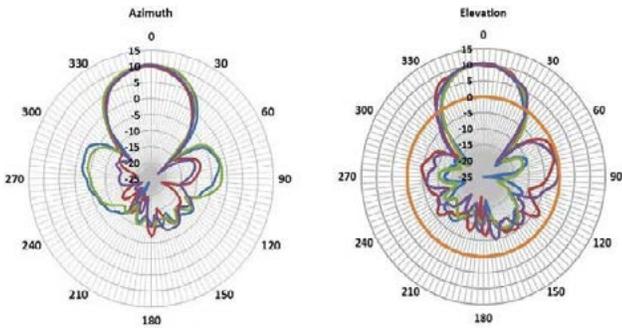
## 2500 MHz



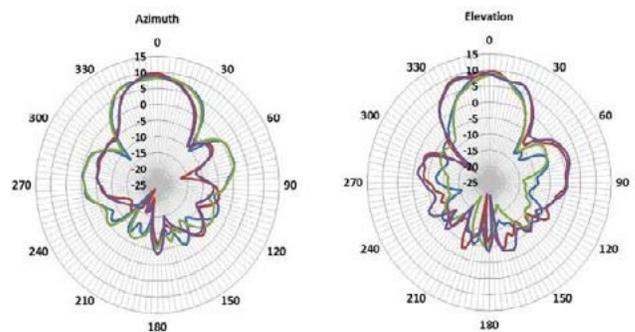
## 4900 MHz



## 5400 MHz



## 5950 MHz



### te.com

TE, and TE connectivity (logo) are trademarks owned or licensed by the TE Connectivity Ltd. family of companies. All other logos, products and/or company names referred to herein might be trademarks of their respective owners.

The information given herein, including drawings, illustrations and schematics which are intended for illustration purposes only, is believed to be reliable. However, TE Connectivity makes no warranties as to its accuracy or completeness and disclaims any liability in connection with its use. TE Connectivity's obligations shall only be as set forth in TE Connectivity's Standard Terms and Conditions of Sale for this product and in no case will TE Connectivity be liable for any incidental, indirect or consequential damages arising out of the sale, resale, use or misuse of the product. Users of TE Connectivity products should make their own evaluation to determine the suitability of each such product for the specific application.

TE Connectivity warrants to the original end user customer of its products that its products are free from defects in material and workmanship. Subject to conditions and limitations TE Connectivity will, at its option, either repair or replace any part of its products that prove defective because of improper workmanship or materials. This limited warranty is in force for the useful lifetime of the original end product into which the TE Connectivity product is installed. Useful lifetime of the original end product may vary but is not warranted to exceed one (1) year from the original date of the end product purchase.

©2022 TE Connectivity. All Rights Reserved.

08/22 Original

### TE TECHNICAL SUPPORT CENTER

USA:	+1 (800) 522-6752
Canada:	+1 (905) 475-6222
Mexico:	+52 (0) 55-1106-0800
Latin/S. America:	+54 (0) 11-4733-2200
Germany:	+49 (0) 6251-133-1999
UK:	+44 (0) 800-267666
France:	+33 (0) 1-3420-8686
Netherlands:	+31 (0) 73-6246-999
China:	+86 (0) 400-820-6015