

Extreme AIO-DQ15021 MIMO-directional

Manufacturer: TE Connectivity Ltd.

Address: Parkmore Business Park West, Parkmore, H91VN2T Ballybrit, Galway, Ireland

The Laird Connectivity's patent pending PDQ244915 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
- Articulating arm mount can be anchored directly to a vertical surface or mast mounted and oriented for optimal signal radiation
- Four radiating elements optimized for indoor and outdoor 802.11 MIMO applications
- 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 SPECIFICATIONS

Part Number	PDQ244915	
Number of Ports	4	
Operating Frequency (MHz)	2400-2500	4900-5950
VSWR – Avg	1.5:1	2.0:1
VSWR – Max	<2.0:1	<2.0:1
Peak Gain – Max. (dBi)	11.1	15.0
Max. Gain $\pm 30^\circ$ above Horizon (dBi)	-	4.7
Port-to-Port Isolation – Avg. (dB)	>40	>39
Port-to-Port Isolation – Max. (dB)	>30	>30
Nominal Impedance (Ohms)	50	
Max Power - Ambient 25°C (W)	10	
Polarization	Vertical (2 ports), Horizontal (2 ports)	
Vertical Plane 3 dB Beamwidth – V-pol	48°	18°
Vertical Plane 3 dB Beamwidth – H-pol	47°	20°
Horizontal Plane 3 dB Beamwidth – V-pol	48°	21°
Horizontal Plane 3 dB Beamwidth – H-pol	50°	21°
Front-to-Back Ratio (dB)	>25	

MECHANICAL SPECIFICATIONS

Dimensions – mm (inches)	373.3 x 411.4 x 35.8 (14.7 x 16.2 x 1.41)
Weight – kg (lbs.)/Weight w/ mount – kg (lbs.)	1.58 (3.48)/2.28 (5.03)
Cable Type	Plenum rated, CMP rated for Plenum per NFPA 262
Mounting	Mast (44-57 mm) or Concrete Wall (HDMNT kit)
Radome/Baseplate Material	ASA, White, UV Stable

ENVIRONMENTAL SPECIFICATIONS

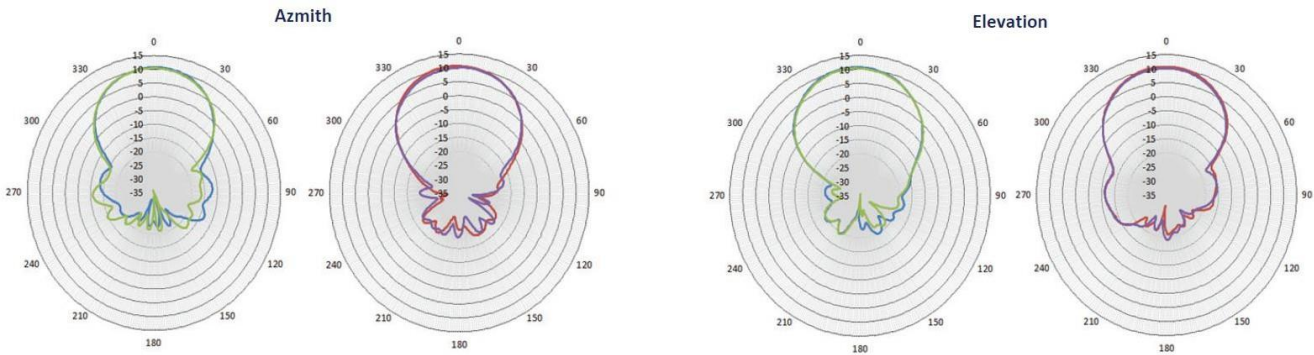
Operating Environment (Indoor or Outdoor)	Indoor and Outdoor
Operating Temperature – °C (°F)	-30 to +70°C (-22 to +158°F)
Storage Temperature – °C (°F)	-40 to +85°C (-40 to +185°F)
Ingress Protection Rating	IP67
Material Substance Compliance	RoHS

CONFIGURATION

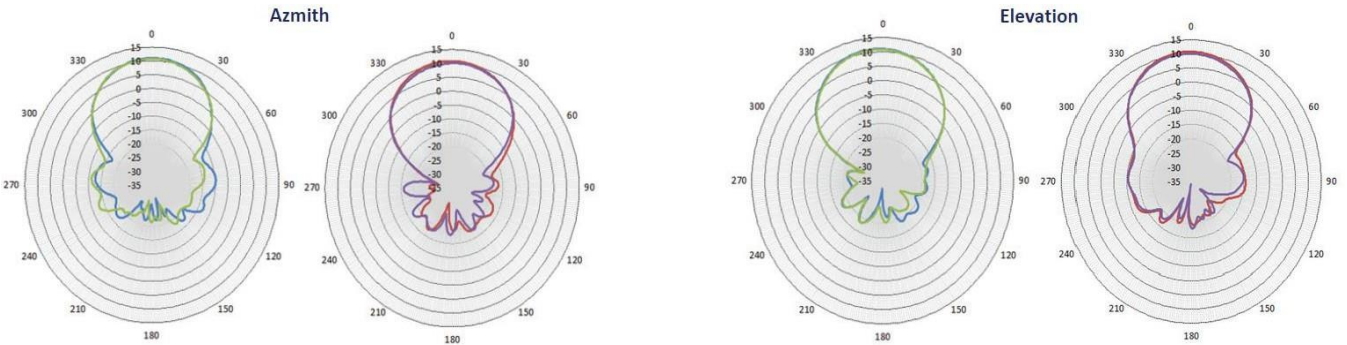
PART NUMBER	CABLE LENGTH	CONNECTOR
PDQ244915-91NF	4x- 91 cm (3.0 ft.)	4x – Type N-Female
PDQ244915-91NM	4x- 91 cm (3.0 ft.)	4x – Type N-Male
PDQ244915-FNF	N/A	4x – Type N-Female

RADIATION PATTERNS

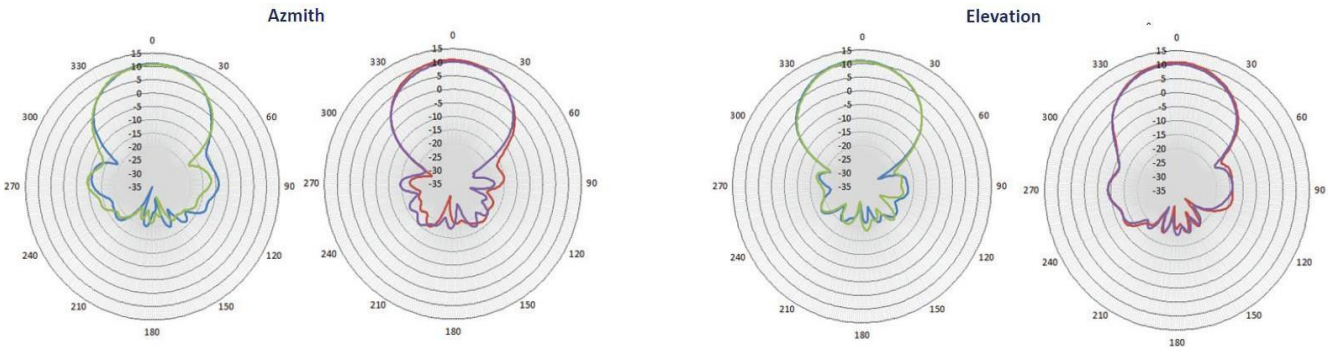
2400 MHz



2450 MHz

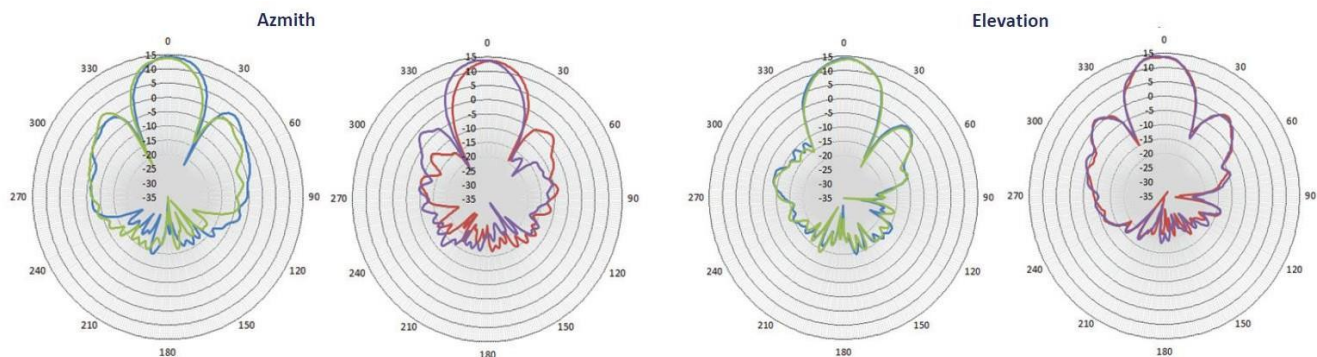


2500 MHz

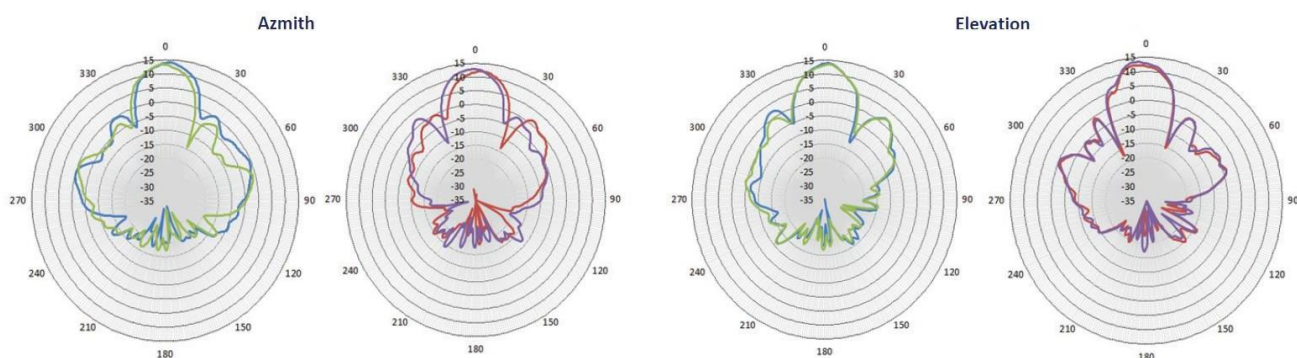


RADIATION PATTERNS

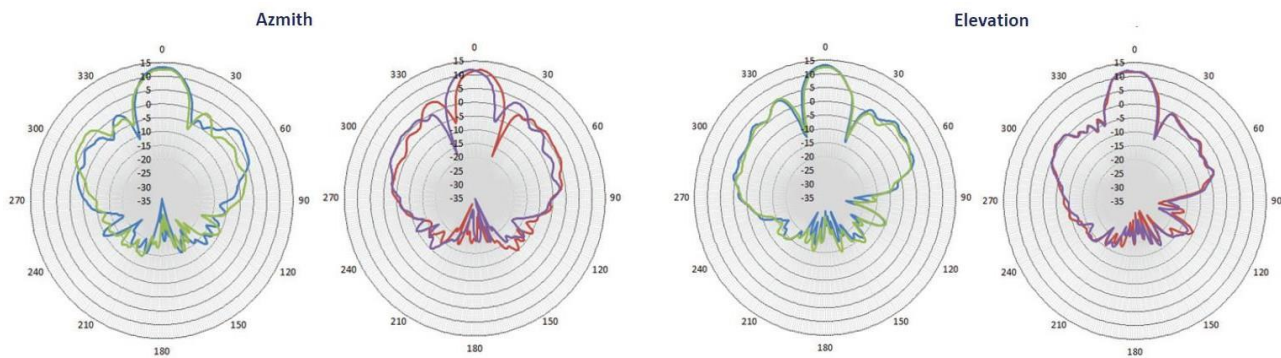
4900 MHz



5500 MHz



5950 MHz



sales@lairdconnect.com
support@lairdconnect.com
www.lairdconnect.com

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