



Patent pending
AIO-DQ15021

Patent pending AIO-DQ15021 w/
standard articulating mount

This patent pending 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

Model Name	AIO-DQ15021	
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 -Avg. (dBi)	10.7	13.4
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

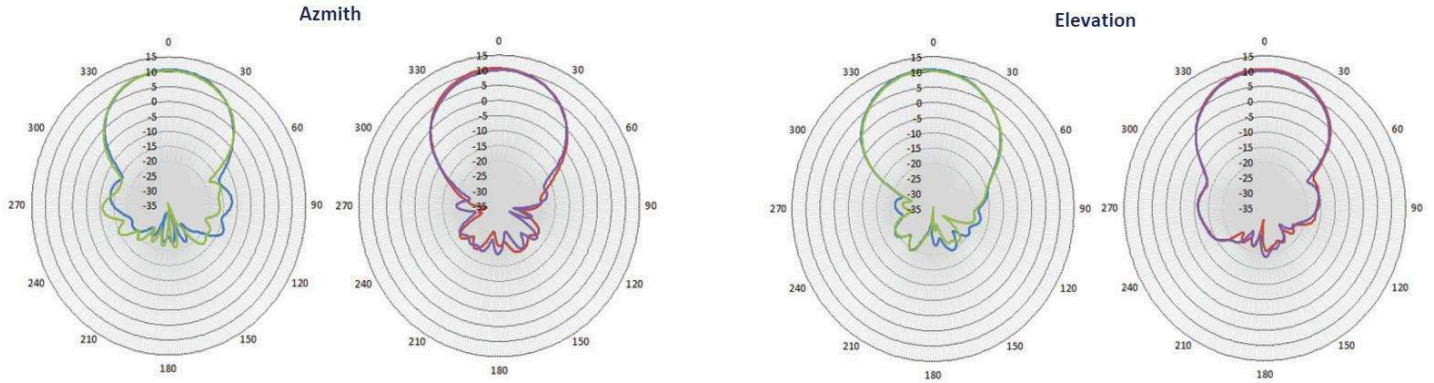
Operating Environment (Indoor or Outdoor)	Indoor and Outdoor
Operating Temperature -° C (° F)	-30 to +70° C (-22 to +158°F)
Storage Temperature -° C (° F)	-40 to +85° C (-40 to +185°F)
Ingress Protection Rating	IP67
Material Substance Compliance	RoHS

CONFIGURATION

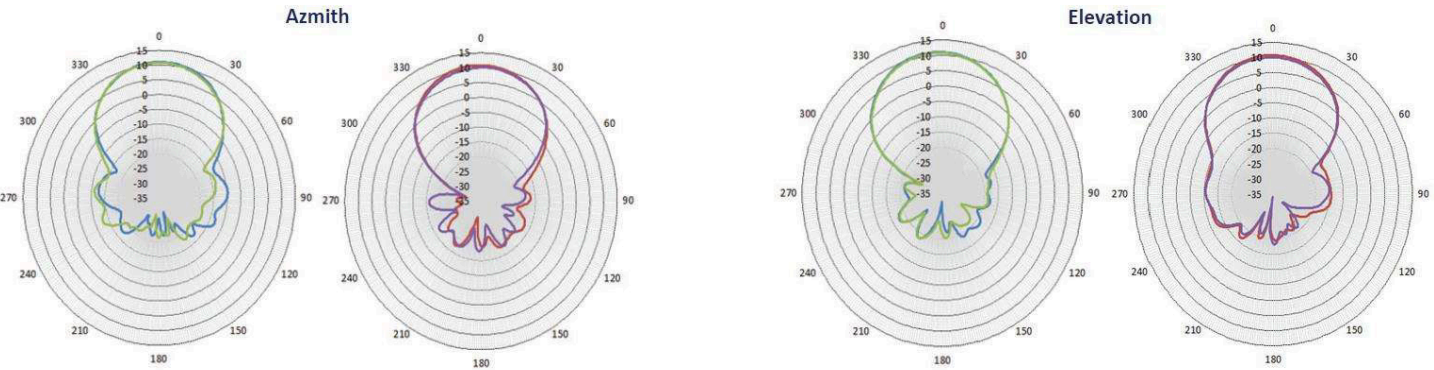
PART NUMBER	CABLE LENGTH	CONNECTOR
AIO-DQ15021-N	4x- 91 cm (3.0 ft.)	4x - Type N-Male
AIO-DQ15021-RPSMA	4x- 91 cm (3.0 ft.)	4x - Type RPSMA

RADIATION PATTERNS

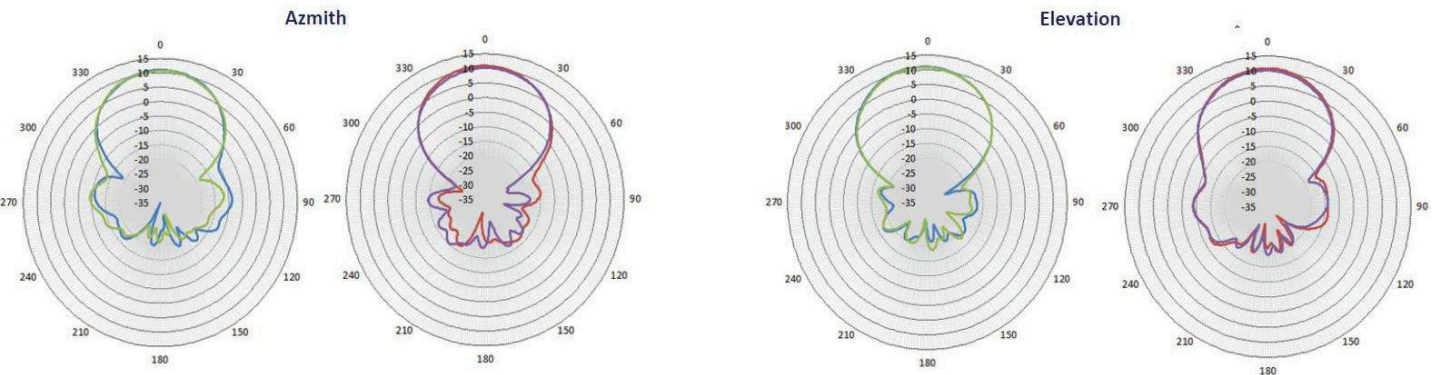
2400 MHz



2450 MHz



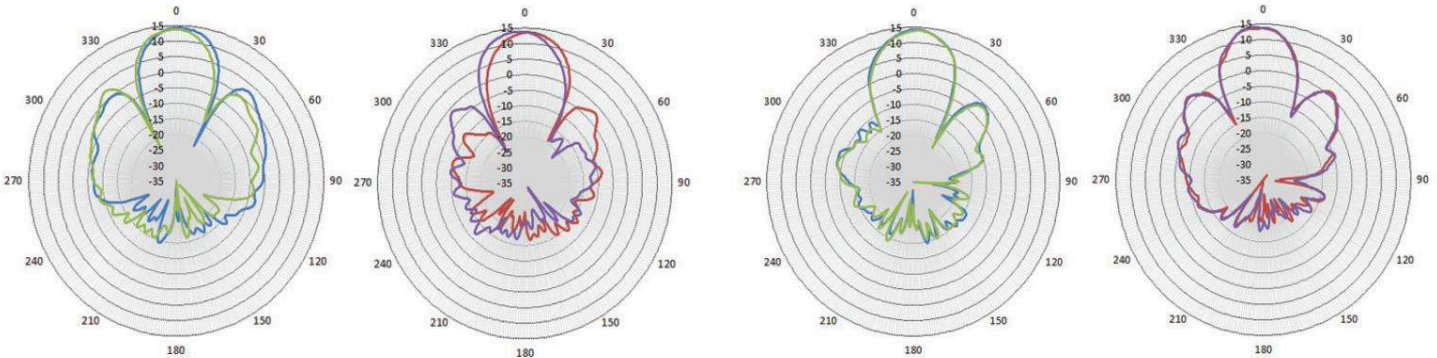
2500 MHz



4900 MHz

Azimuth

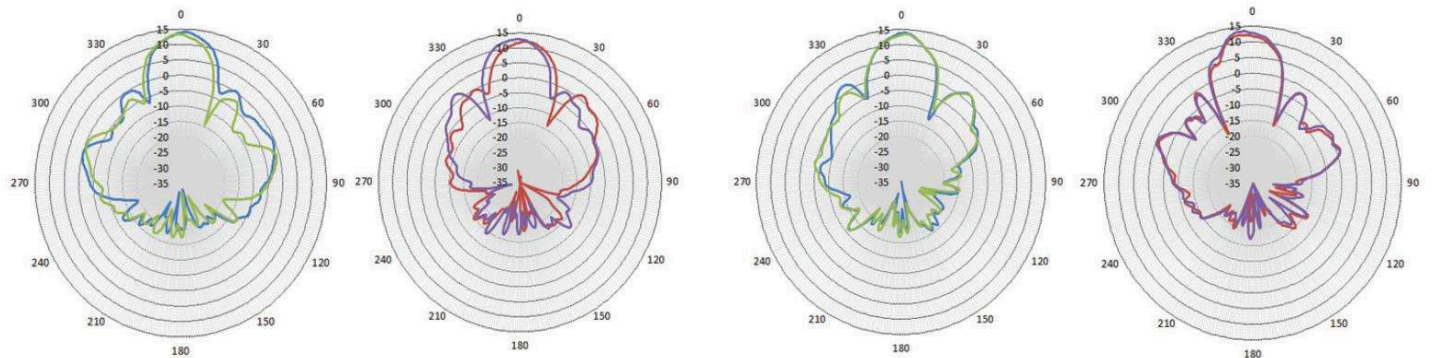
Elevation



5500 MHz

Azimuth

Elevation



5950 MHz

Azimuth

Elevation

