# DATASHEET



2x2 MIMO BaseStation Sector Antenna

Models: AM-5AC21-60, AM-5AC22-45

**Advanced Noise Immunity** 

**Superior Beam Performance** 

Enhanced Scalability of airMAX® Networks



### **Overview**

As the next generation of 2x2 MIMO sector antennas from Ubiquiti Networks, the airMAX® ac Sector Antennas feature significant advances in scalability, noise isolation, and beam performance to complement the Rocket™5ac radios.

They are also compatible with RocketM5 models; however, optimal performance requires the Rocket5ac.

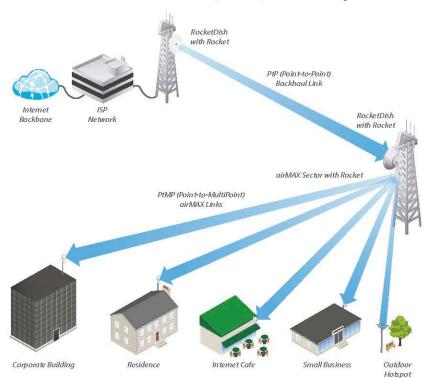
#### **Breakthrough Performance**

The airMAX ac Sector Antennas are highly resistant to noise interference in co-location deployments. The innovative deflector design, together with the reduced sidelobes and backlobes, reject interference from other transmitters in the area – potentially on the same tower.

Improved Signal-to-Noise Ratio (S/N or SNR) allows a higher-order modulation to be used, for example, 256QAM rather than 16QAM. This increases the number of bits per second for a fixed bandwidth (or data rate).

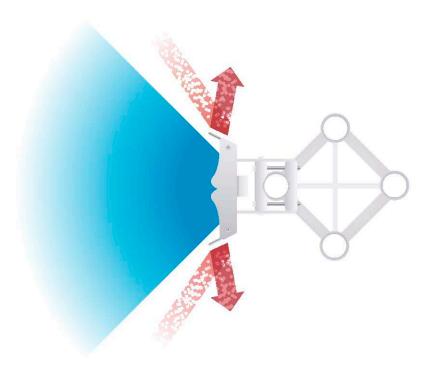
Due to innovative design, the airMAX ac Sector Antennas provide higher gain and superior beam performance for high-capacity, multipoint networks.

#### Point to Multi-Point (PtMP) Link Example



The airMAX ac Sector Antennas provide sector-wide coverage and utilize airMAX technology to provide carrier-class performance and power.

#### **Innovative Deflector Design**

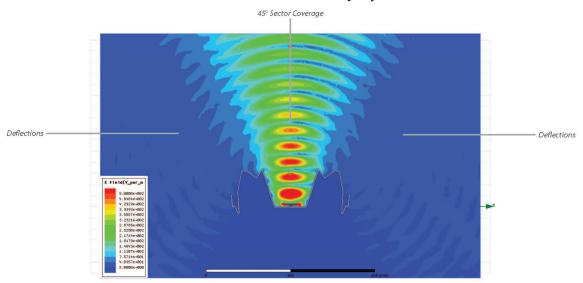


The airMAX ac Sector Antennas are engineered to reject interference and provide enhanced scalability, higher gain, and superior beam performance in PtMP networks.

## **Market-Leading Isolation Performance**

The airMAX ac Sector Antennas are designed to provide advanced noise isolation performance. Compare the diagram of the AM-5AC22-45 to the diagram of a standard sector antenna, and note the superior noise immunity and beam performance of the AM-5AC22-45. (Both diagrams use a linear scale.)

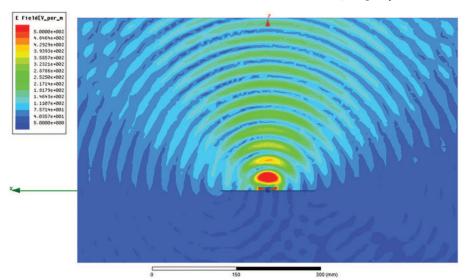
#### Near Field of AM-5AC22-45 (displayed in watts)



The strength of the electromagnetic field is color-coded.

Red: Highest strengthGreen: Medium strengthIndigo: Weakest strength

#### Near Field of Standard Sector Antenna (displayed in watts)



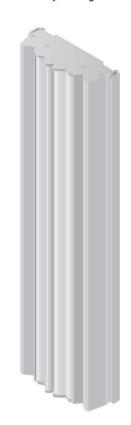
The strength of the electromagnetic field is color-coded.

Red: Highest strengthGreen: Medium strengthIndigo: Weakest strength

### **Hardware Overview**

The airMAX ac Sector Antenna features robust construction for industrial-strength durability during outdoor use.



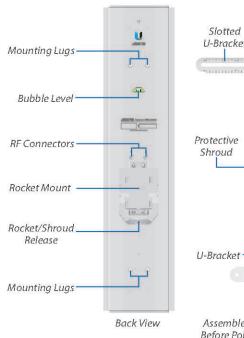


airMAX ac Sector

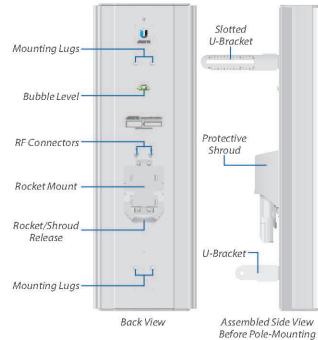
airMAX ac Sector

Model	Frequency	Gain	Beamwidth
AM-5AC21-60	5 GHz	21 dBi	60°

Gain	Beamwidth	Model	Frequency	Gain	Beamwidth
21 dBi	60°	AM-5AC22-4	15 5 GHz	22 dBi	45°
			<u> </u>		





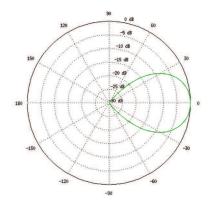


## **Specifications**

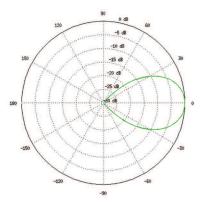
AM-5AC22-45 Antenna Characteristics		
Dimensions*	750 x 215 x 94 mm (29.53 x 8.47x 3.70")	
Weight <sup>†</sup>	6 kg (13.23 lbs)	
Frequency Range	5.10 - 5.85 GHz	
Gain	22 dBi	
HPOL Beamwidth	45° (6 dBi)	
VPOL Beamwidth	45° (6 dBi)	
Electrical Beamwidth	4°	
Electrical Downtilt	2°	
Max. VSWR	1.5:1	
Wind Survivability	200 km/h (125 mph)	
Wind Loading	347 N @ 200 km/h (78 lbf @ 125 mph)	
Polarization	Dual-Linear	
Cross-Polarization Isolation	30 dB Min.	
ETSI Specification	EN 302 326 DN1	
Mounting	Universal Pole Mount, Rocket Bracket, and Weatherproof RF Jumpers Included	

\* Dimensions exclude pole mount and Rocket radio (Rocket sold separately)
† Weight includes pole mount and excludes Rocket radio (Rocket sold separately)

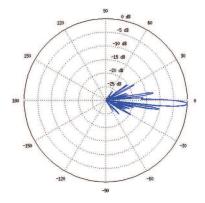
#### Vertical Azimuth



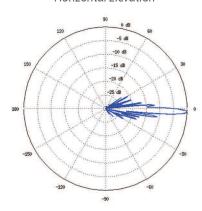
Horizontal Azimuth



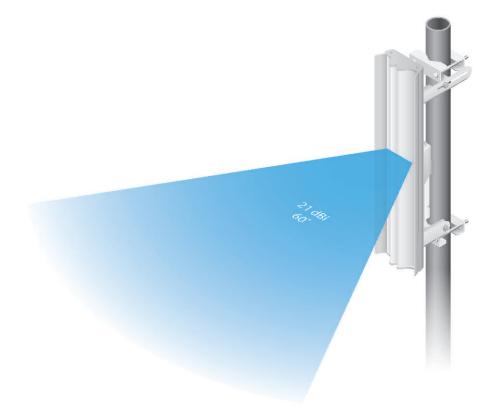
Vertical Elevation



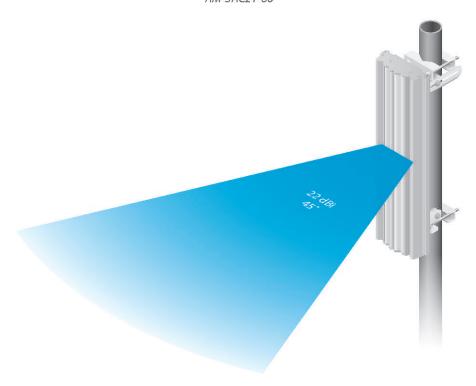
Horizontal Elevation



## **Beamwidth**



AM-5AC21-60



AM-5AC22-45

Specifications are subject to change. Ubiquiti products are sold with a limited warranty described at: www.ubnt.com/support/warranty
The limited warranty requires the use of arbitration to resolve disputes on an individual basis, and, where applicable, specify arbitration instead of jury
trials or class actions.

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