



## *airMAX* **ae** Sector

2x2 MIMO BaseStation Sector Antenna

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

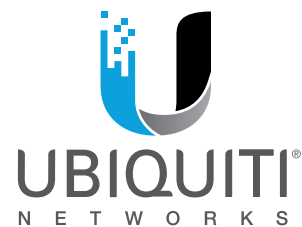
Advanced Noise Immunity

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Superior Beam Performance

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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.

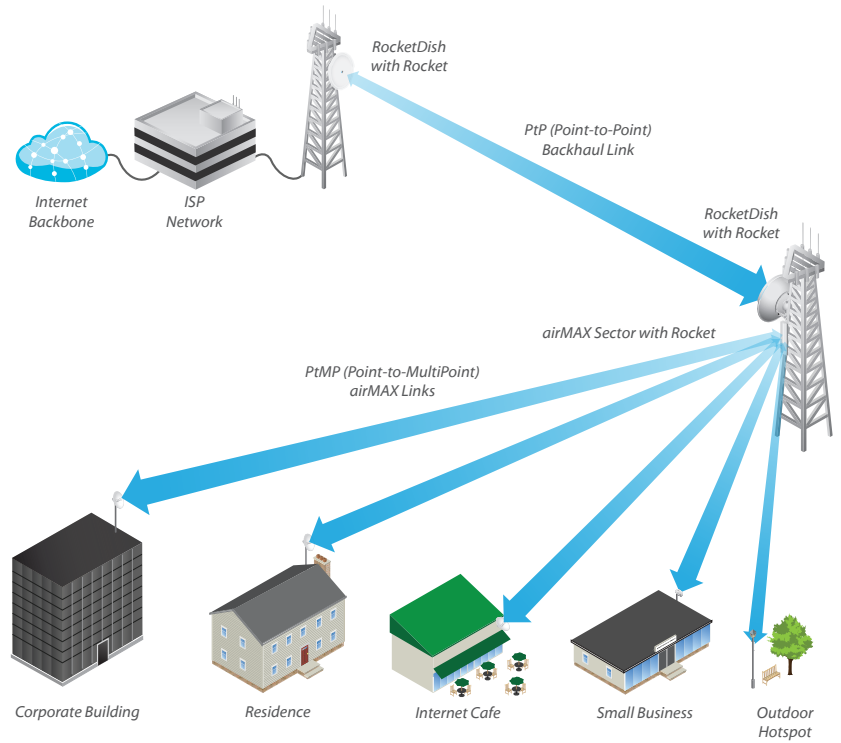
## Breakthrough Performance

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).

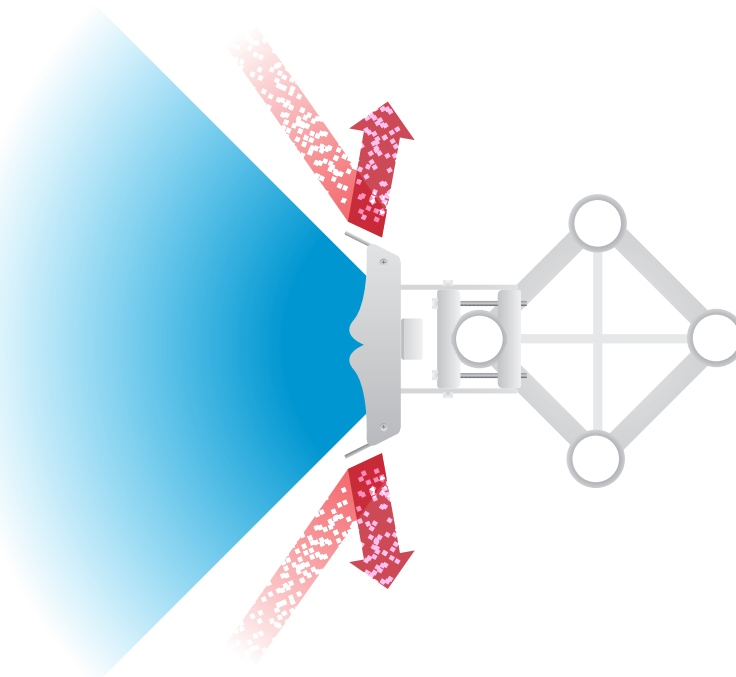
Due to innovative design, the airMAX ac Sector Antennas provide higher gain and superior beam performance for high-capacity, multipoint networks.

## 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

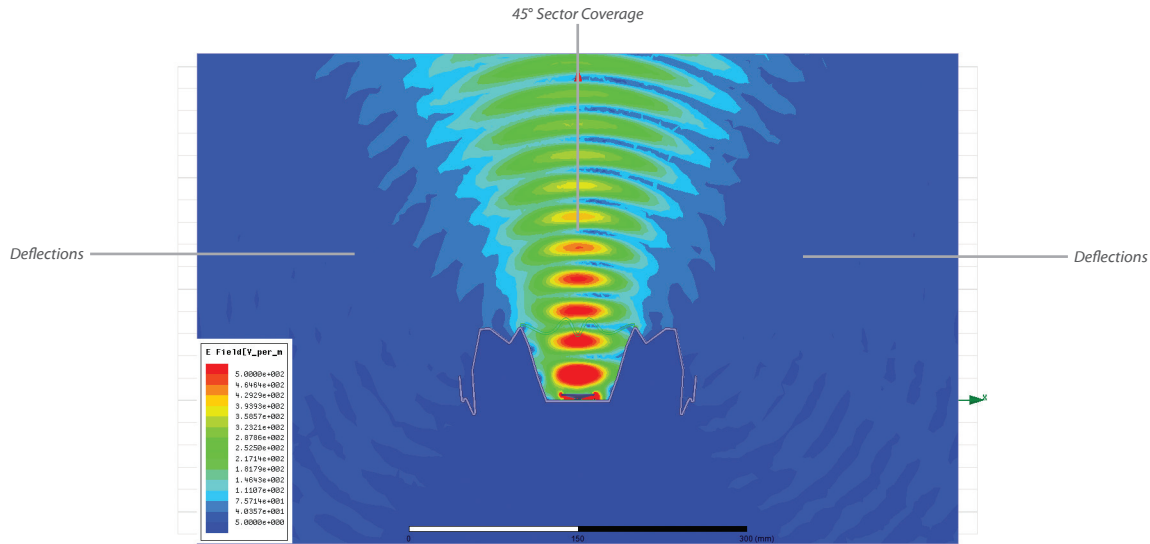


The airMAX ac Sector Antennas are engineered to reject interference and provide enhanced scalability, higher gain, and superior beam performance in PtMP networks.

# 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.)

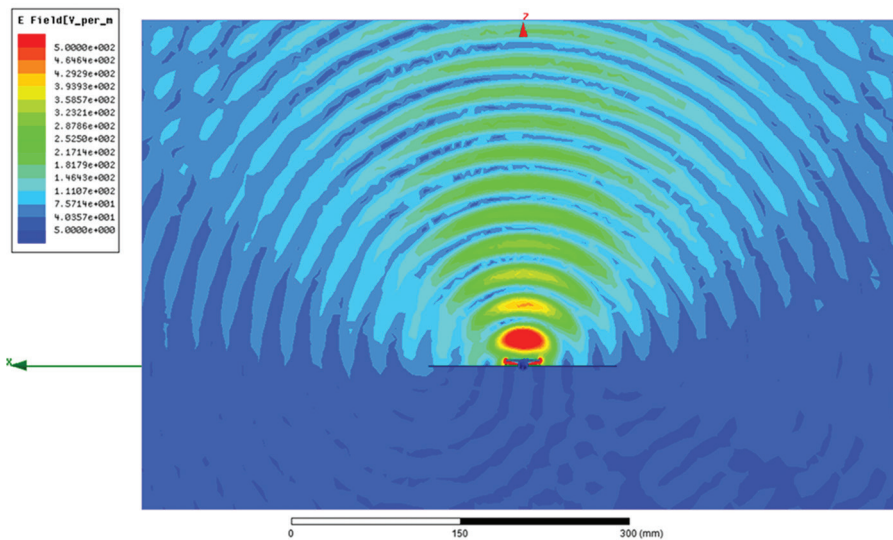
## Near Field of AM-5AC22-45 (displayed in watts)



The strength of the electromagnetic field is color-coded.

- Red: Highest strength
- Green: Medium strength
- Indigo: Weakest strength

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



The strength of the electromagnetic field is color-coded.

- Red: Highest strength
- Green: Medium strength
- Indigo: Weakest strength

# Hardware Overview

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



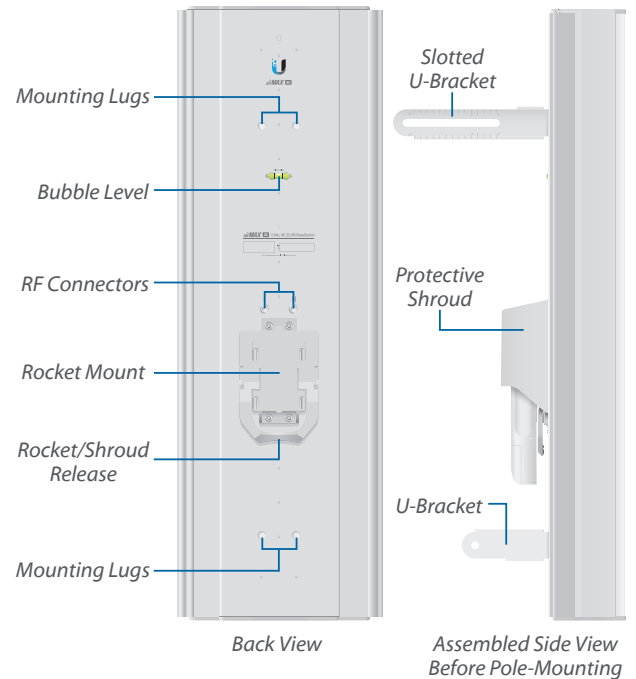
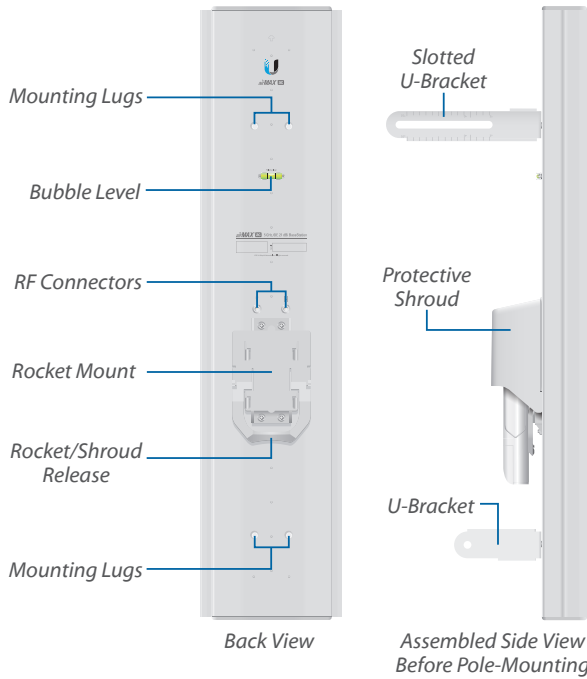
airMAX ac Sector

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



airMAX ac Sector

Model	Frequency	Gain	Beamwidth
AM-5AC22-45	5 GHz	22 dBi	45°

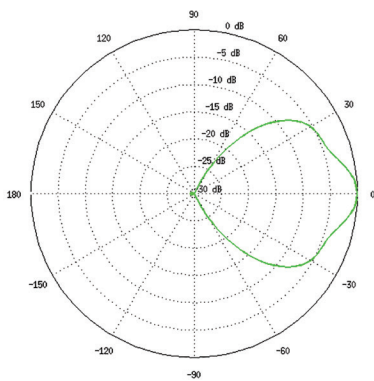


# Specifications

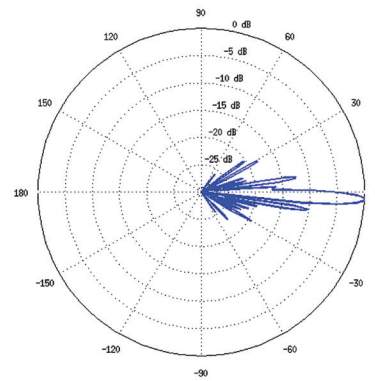
AM-5AC21-60 Antenna Characteristics	
Dimensions*	750 x 173 x 78 mm (29.53 x 6.81 x 3.07")
Weight†	4.8 kg (10.58 lbs)
Frequency Range	5.10 - 5.85 GHz
Gain	21 dBi
HPOL Beamwidth	60° (6 dBi)
VPOL Beamwidth	60° (6 dBi)
Electrical Beamwidth	4°
Electrical Downtilt	2°
Max. VSWR	1.5:1
Wind Survivability	200 km/h (125 mph)
Wind Loading	391 N @ 200 km/h (88 lbf @ 125 mph)
Polarization	Dual-Linear
Cross-Polarization Isolation	25 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)

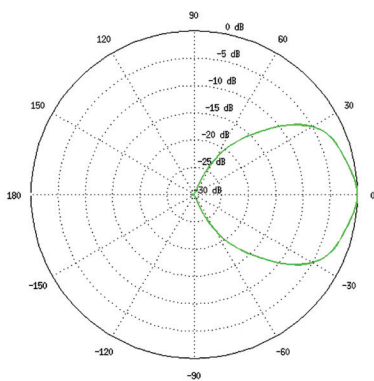
Vertical Azimuth



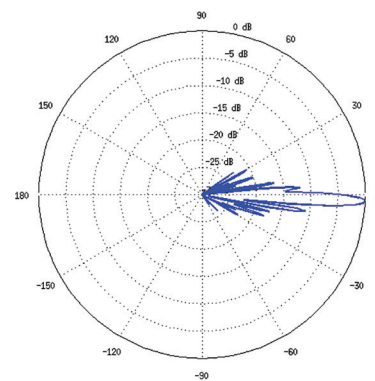
Vertical Elevation



Horizontal Azimuth



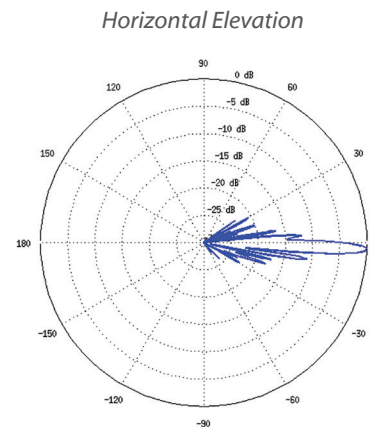
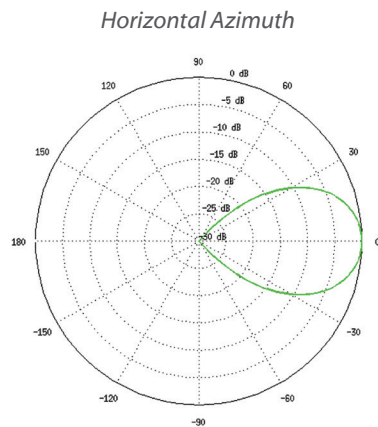
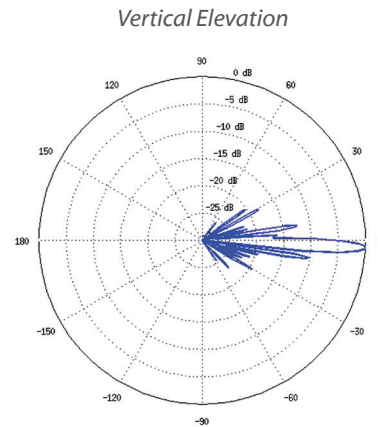
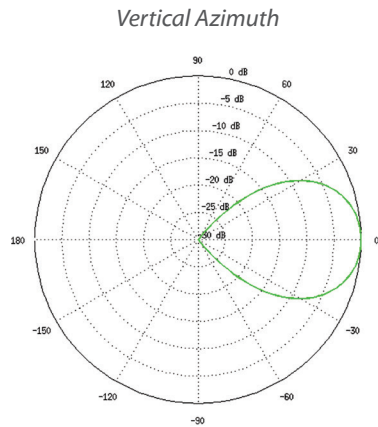
Horizontal Elevation



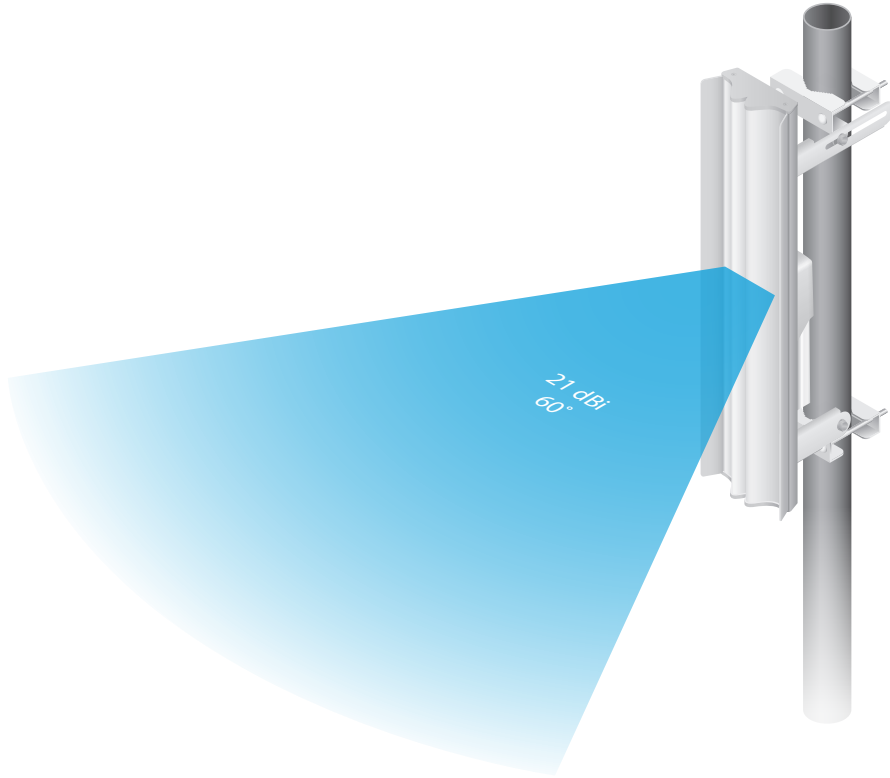
# Specifications

AM-5AC22-45 Antenna Characteristics	
Dimensions*	750 x 215 x 94 mm (29.53 x 8.47 x 3.70")
Weight†	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

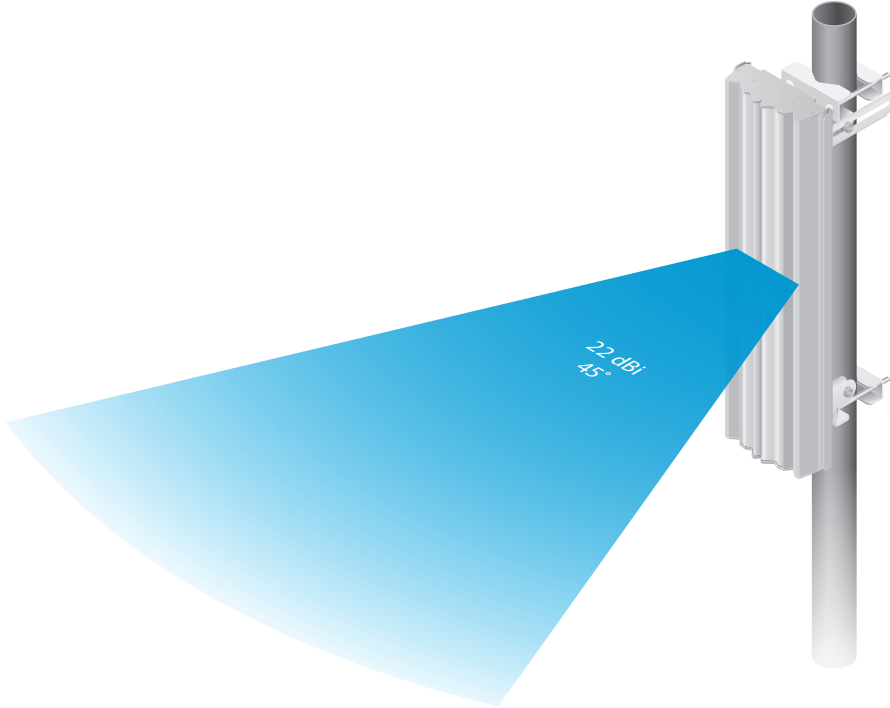
\* Dimensions exclude pole mount and Rocket radio (Rocket sold separately)  
 † Weight includes pole mount and excludes Rocket radio (Rocket sold separately)



# 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](http://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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