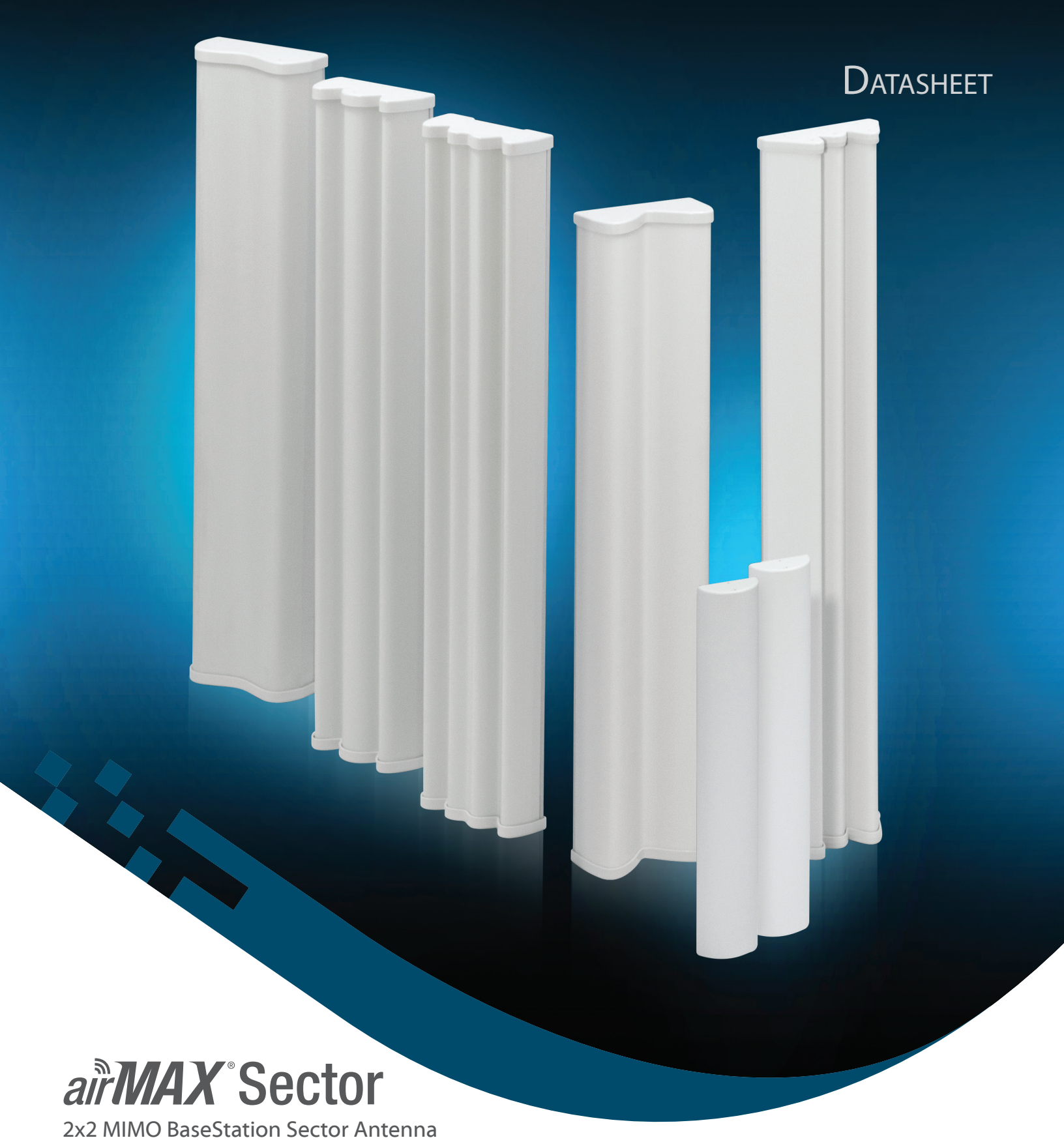
DATASHEET



# airMAX® Sector

## 2x2 MIMO BaseStation Sector Antenna

Models: AM-9M13, AM-2G15-120, AM-2G16-90, AM-3G18-120, AM-5G16-120, AM-5G17-90, AM-5G19-120, AM-5G20-90

High Performance, Long Range

Seamlessly Integrates with Rocket® Radio

Excellent Cross-Polarization Isolation

UBIQUITI® NETWORKS

# Overview

The airMAX® Sector Antenna is a carrier-class 2x2 dual-polarity MIMO sector antenna that was designed to seamlessly integrate with Rocket radios (Rocket sold separately).

On the right is one example of how the airMAX Sector Antenna can be deployed in a Point-to-MultiPoint (PtMP) network.

## Flexibility

To support your specific application, the airMAX Sector Antenna is available in several frequency models:

- 900 MHz
- 2.4 GHz
- 3 GHz
- 5 GHz

## High Performance

Highly resistant to noise interference, the airMAX Sector Antenna provides superior gain and beam performance for high-capacity, multipoint networks.

## Durable Construction

Each airMAX Sector Antenna is designed with robust mechanical design for outdoor application use.

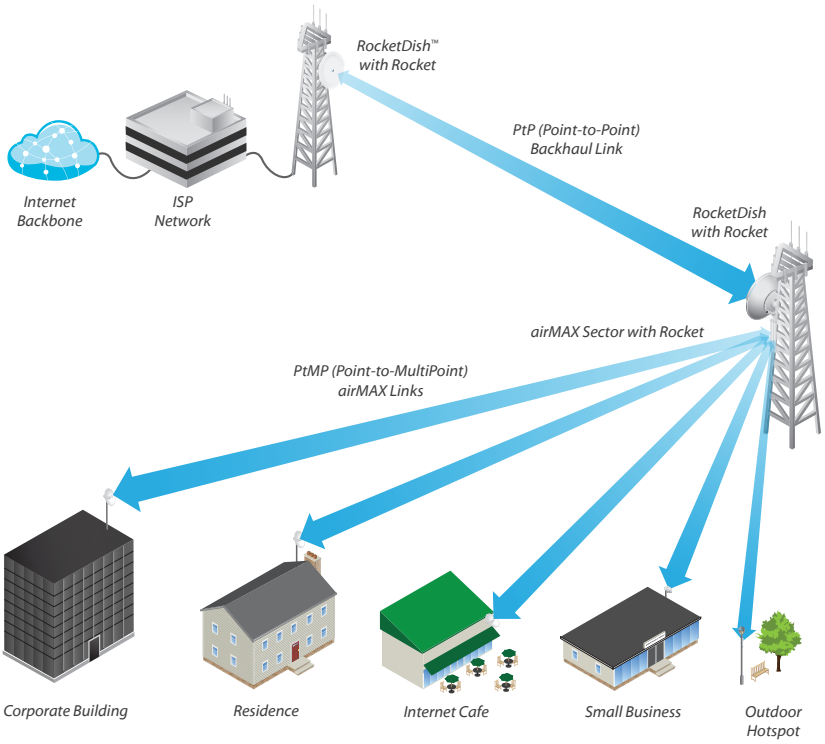
## Plug and Play Integration

Every airMAX Sector Antenna has a built-in Rocket mount, so installation requires no special tools. Snap the Rocket securely into place and mount the antenna; you then have the optimal combination of Rocket radio and airMAX Sector Antenna for your application.

Pair the Rocket radio with the airMAX Sector Antenna to create a powerful basestation. This versatile combination gives network architects unparalleled flexibility and convenience.

## Application Example

### PtMP Link



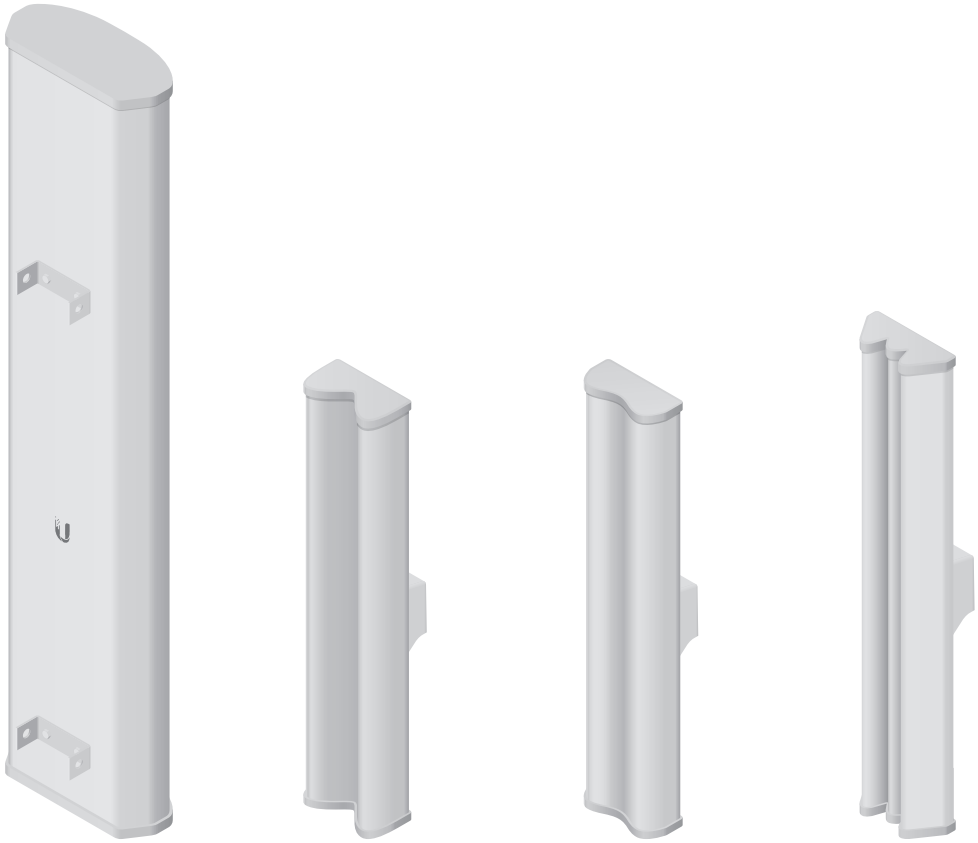

*The combination of the airMAX Sector Antenna with a Rocket radio provides sector-wide coverage and utilizes airMAX technology to provide carrier-class performance and power.*

## Rocket Radio with AM-5G20-90



*The Rocket snaps into the built-in Rocket mount with ease.*

# Model Comparison



| | AM-9M13 | AM-2G15-120 | AM-2G16-90 | AM-3G18-120 |
|---|---|---|---|---|
| Frequency Band | 900 MHz | 2.4 GHz | 2.4 GHz | 3 GHz |
| Gain | 13 dBi | 15 dBi | 16 dBi | 18 dBi |



| | AM-5G16-120 | AM-5G17-90 | AM-5G19-120 | AM-5G20-90 |
|---|---|---|---|---|
| Frequency Band | 5 GHz | 5 GHz | 5 GHz | 5 GHz |
| Gain | 16 dBi | 17 dBi | 19 dBi | 20 dBi |

# Specifications

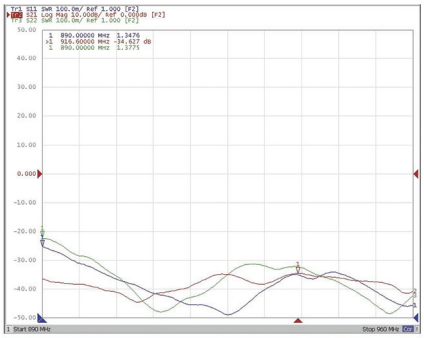
| Antenna Characteristics | | | | |
|---|---|---|---|---|
| Model | AM-9M13 | AM-2G15-120 | AM-2G16-90 | AM-3G18-120 |
| Dimensions* | 1290 x 290 x 134 mm (50.79 x 11.42 x 5.28") | 700 x 145 x 93 mm (27.56 x 5.71 x 3.66") | 700 x 145 x 79 mm (27.56 x 5.71 x 3.11") | 735 x 144 x 78 mm (28.94 x 5.67 x 3.07") |
| Weight* | 12.5 kg (27.56 lbs) | 4.0 kg (8.82 lbs) | 3.9 kg (8.6 lbs) | 5.9 kg (13 lbs) |
| Frequency Range | 902 - 928 MHz | 2.3 - 2.7 GHz | 2.3 - 2.7 GHz | 3.3 - 3.8 GHz |
| Gain | 13.2 - 13.8 dBi | 15.0 - 16.0 dBi | 16.0 - 17.0 dBi | 17.3 - 18.2 dBi |
| HPOL Beamwidth | 109° (6 dB) | 123° (6 dB) | 91° (6 dB) | 118° (6 dB) |
| VPOL Beamwidth | 120° (6 dB) | 118° (6 dB) | 90° (6 dB) | 121° (6 dB) |
| Electrical Beamwidth | 15° | 9° | 9° | 6° |
| Electrical Downtilt | N/A | 4° | 4° | 3° |
| Max. VSWR | 1.5:1 | 1.5:1 | 1.5:1 | 1.5:1 |
| Wind Survivability | 200 km/h (125 mph) | 200 km/h (125 mph) | 200 km/h (125 mph) | 200 km/h (125 mph) |
| Wind Loading | | | | |
| Polarization | Dual-Linear | Dual-Linear | Dual-Linear | Dual-Linear |
| Cross-pol Isolation | 30 dB Min. | 28 dB Min. | 28 dB Min. | 28 dB Min. |
| ETSI Specification | N/A | EN 302 326 DN2 | EN 302 326 DN2 | EN 302 326 DN2 |
| Mounting | Universal Pole Mount, RocketM Bracket, and Weatherproof RF Jumpers Included | | | |

| Antenna Characteristics | | | | |
|---|---|---|---|---|
| Model | AM-5G16-120 | AM-5G17-90 | AM-5G19-120 | AM-5G20-90 |
| Dimensions* | 367 x 63 x 41 mm (14.45 x 2.48 x 1.61") | 367 x 63 x 41 mm (14.45 x 2.48 x 1.61") | 700 x 135 x 73 mm (27.56 x 5.32 x 2.87") | 700 x 135 x 70 mm (27.56 x 5.32 x 2.76") |
| Weight* | 1.1 kg (2.43 lb) | 1.1 kg (2.43 lb) | 5.9 kg (13 lbs) | 5.9 kg (13.01 lb) |
| Frequency Range | 5.10 - 5.85 GHz | 4.90 - 5.85 GHz | 5.15 - 5.85 GHz | 5.15 - 5.85 GHz |
| Gain | 15.0 - 16.0 dBi | 16.1 - 17.1 dBi | 18.6 - 19.1 dBi | 19.4 - 20.3 dBi |
| HPOL Beamwidth | 137° (6 dB) | 72° (6 dB) | 123° (6 dB) | 91° (6 dB) |
| VPOL Beamwidth | 118° (6 dB) | 93° (6 dB) | 123° (6 dB) | 85° (6 dB) |
| Electrical Beamwidth | 8° | 8° | 4° | 4° |
| Electrical Downtilt | 4° | 4° | 2° | 2° |
| Max. VSWR | 1.5:1 | 1.5:1 | 1.5:1 | 1.5:1 |
| Wind Survivability | 200 km/h (125 mph) | 200 km/h (125 mph) | 200 km/h (125 mph) | 200 km/h (125 mph) |
| Wind Loading | | | | |
| Polarization | Dual-Linear | Dual-Linear | Dual-Linear | Dual-Linear |
| Cross-pol Isolation | 22 dB Min. | 22 dB Min. | 28 dB Min. | 28 dB Min. |
| ETSI Specification | EN 302 326 DN2 | EN 302 326 DN2 | EN 302 326 DN2 | EN 302 326 DN2 |
| Mounting | Universal Pole Mount, RocketM Bracket, and Weatherproof RF Jumpers Included | | | |

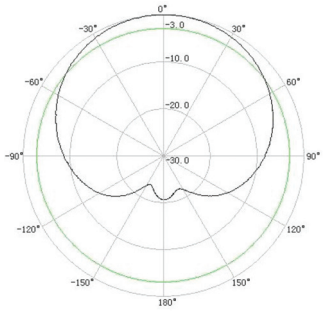
** Dimensions and weight exclude pole mount and Rocket (Rocket sold separately)*

## AM-9M13 Antenna Information

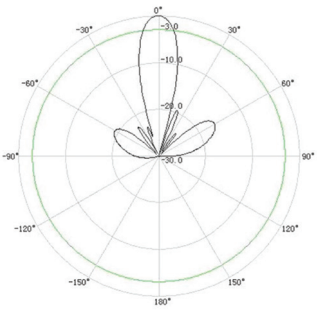
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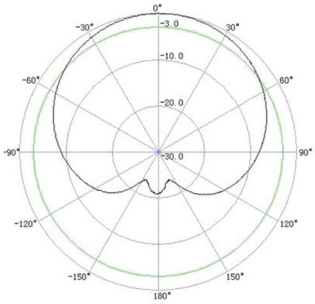
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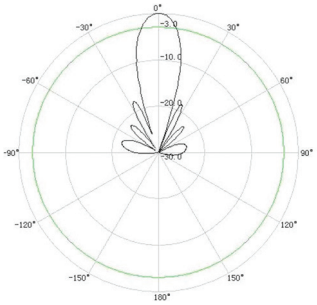
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*Horizontal Azimuth*

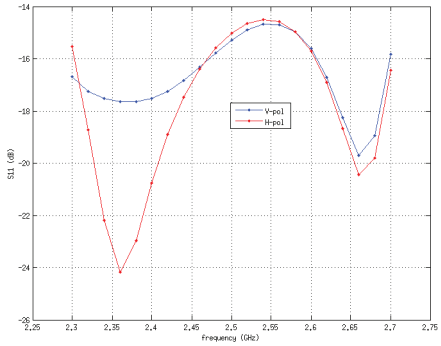


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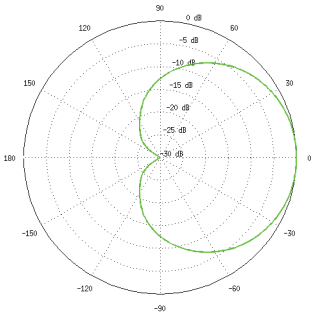


## AM-2G15-120 Antenna Information

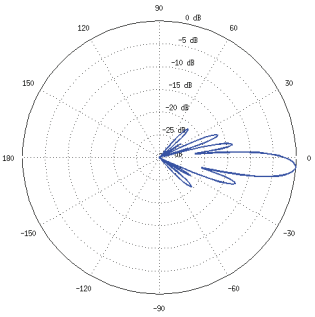
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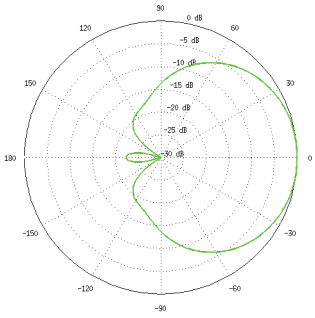

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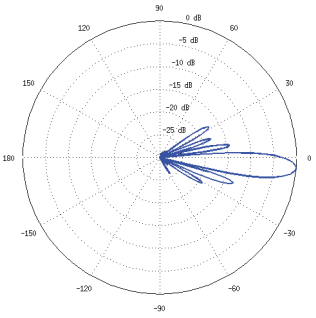
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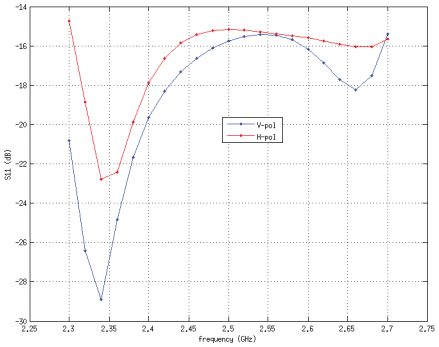


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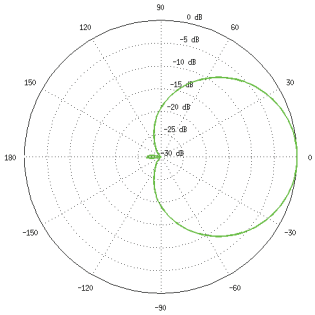


## AM-2G16-90 Antenna Information

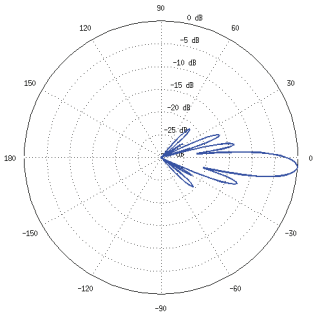
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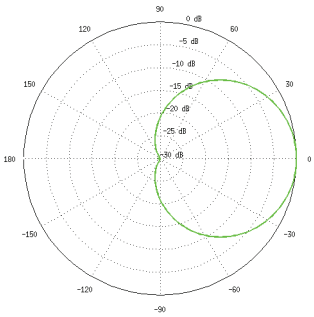

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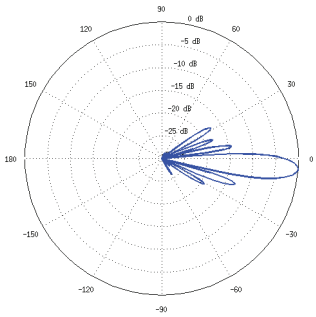

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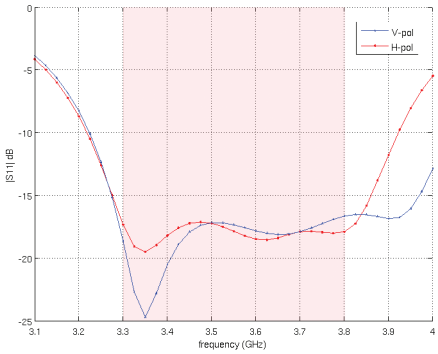



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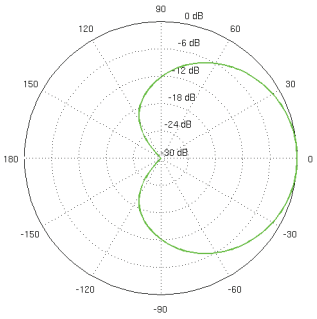



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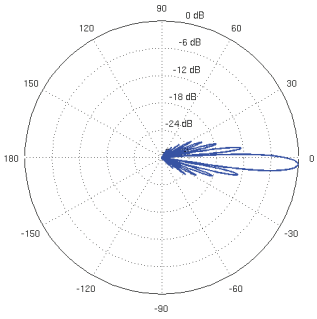
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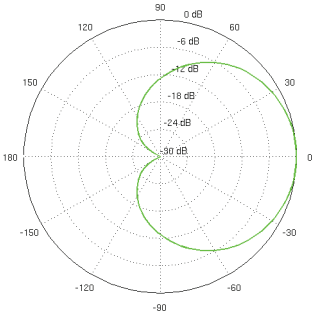

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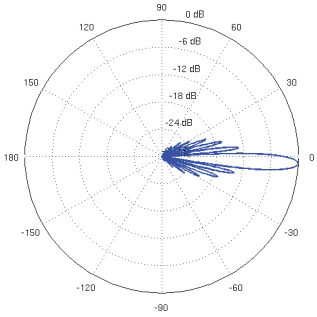

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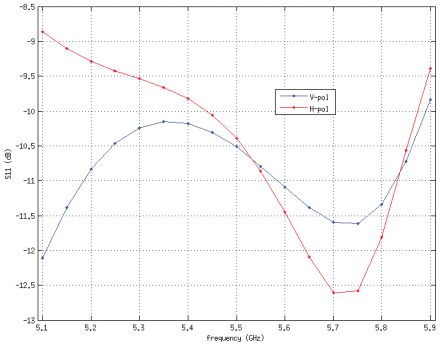



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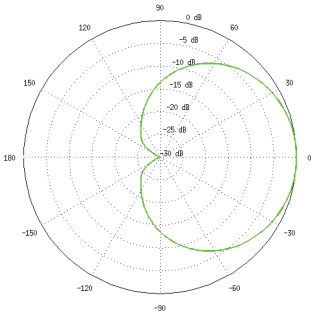


## AM-5G16-120 Antenna Information

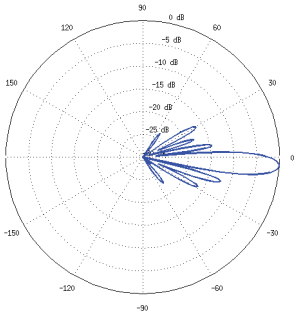
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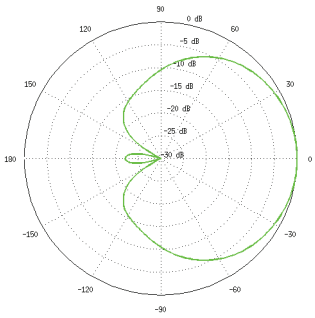

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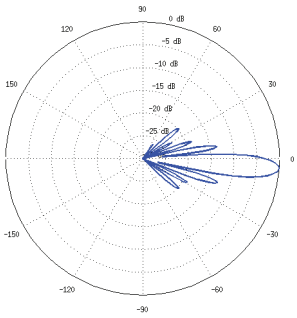
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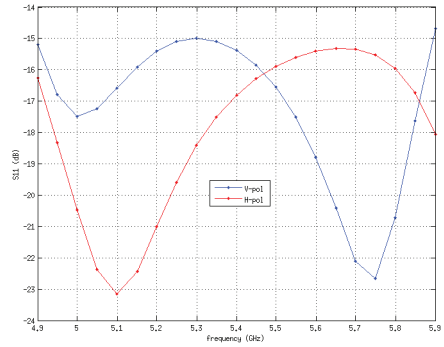


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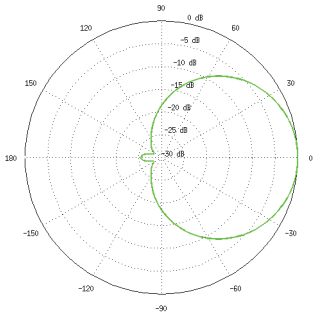


## AM-5G17-90 Antenna Information

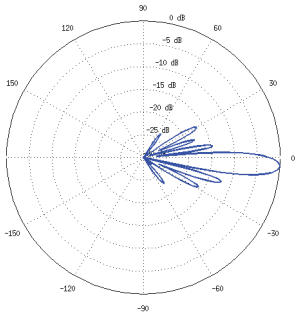
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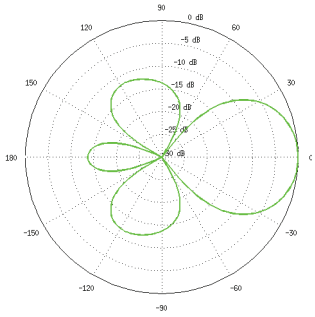

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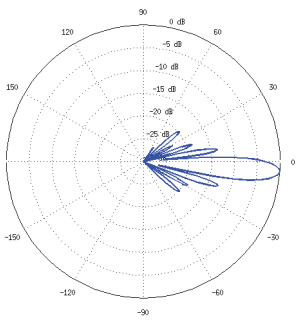
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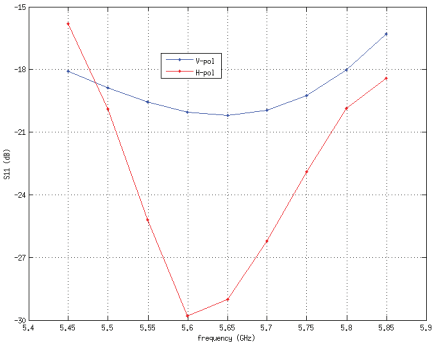


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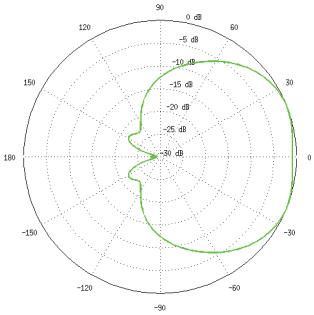


## AM-5G19-120 Antenna Information

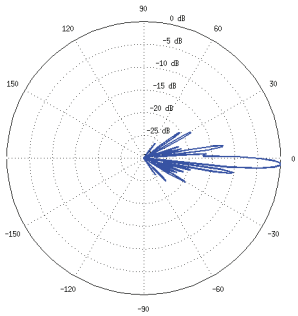
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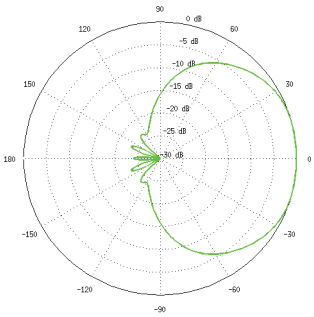

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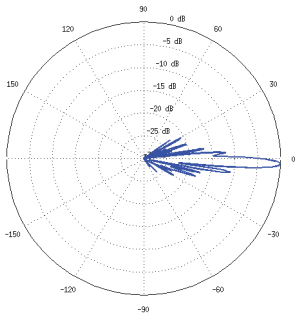
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*Horizontal Azimuth*

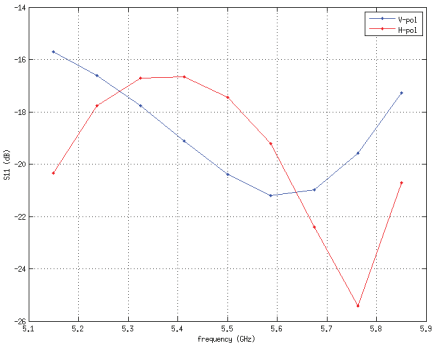


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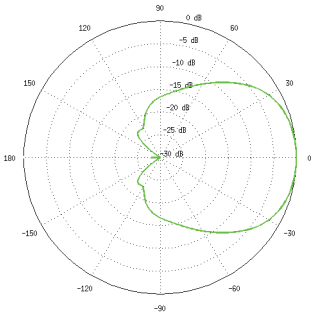


## AM-5G20-90 Antenna Information

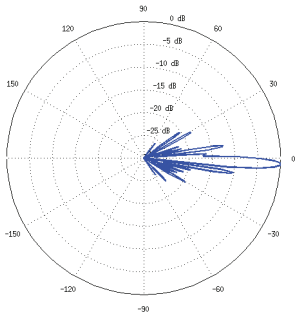
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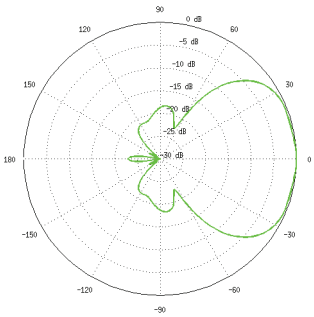

*Vertical Azimuth*



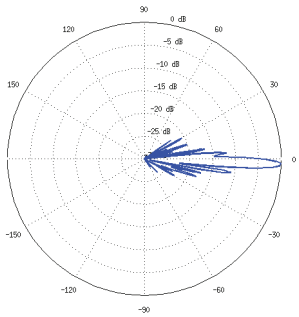
*Vertical Elevation*



*Horizontal Azimuth*



*Horizontal Elevation*



Specifications are subject to change. Ubiquiti products are sold with a limited warranty described at: www.ubnt.com/support/warranty
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