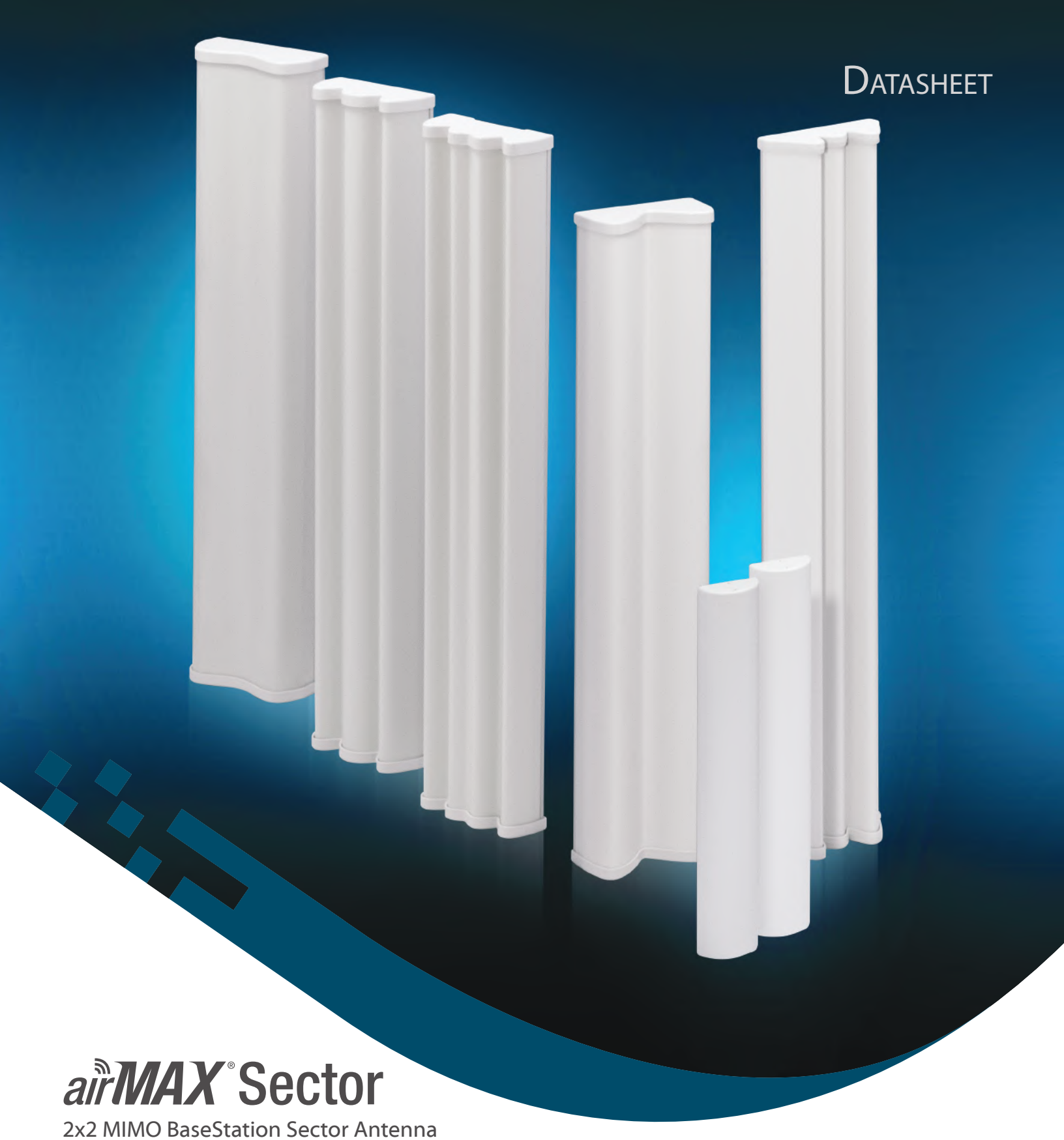
DATASHEET



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.

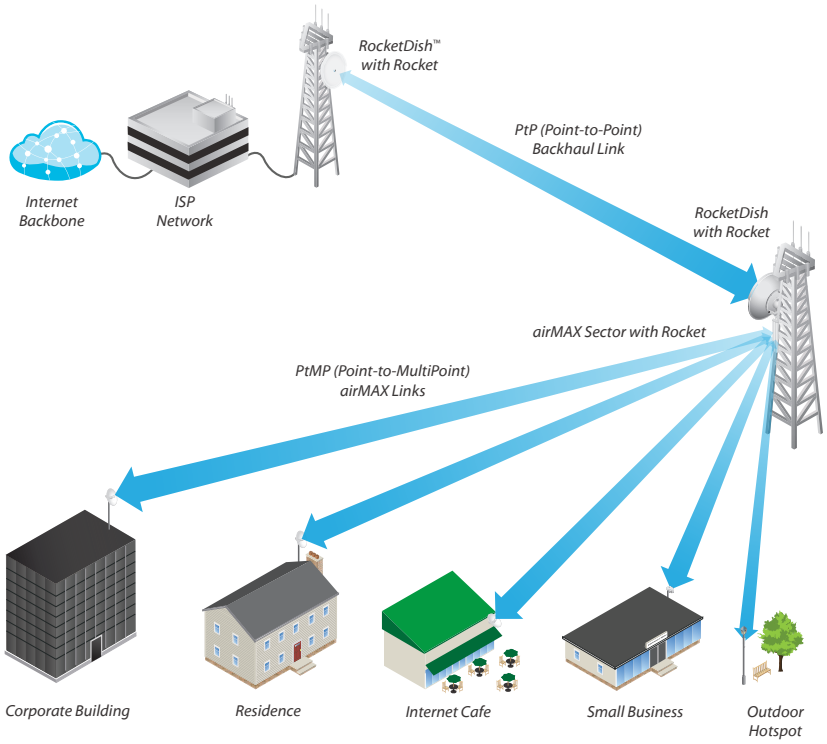
Plug and Play Integration

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



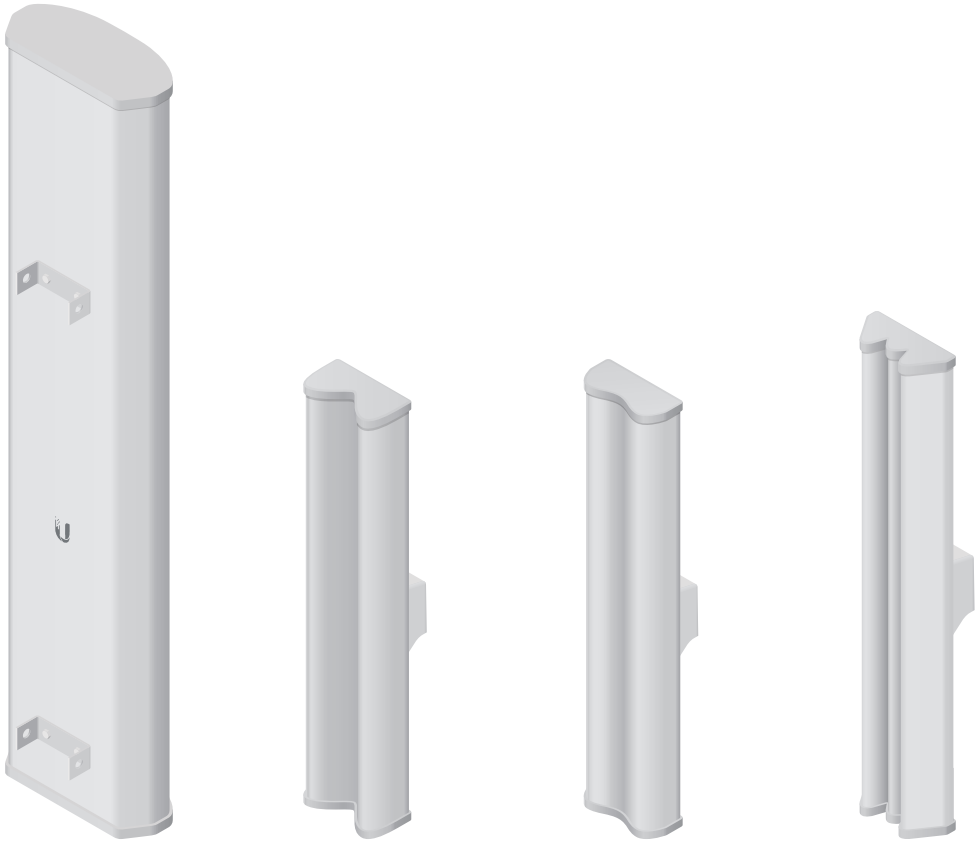
The combination of the airMAX Sector Antenna with a Rocket radio provides sector-wide coverage and utilizes airMAX technology to provide carrier-class performance and power.

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

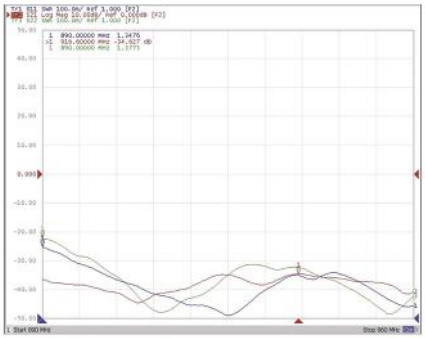
Antenna Characteristics				
Model	AM-9M13	AM-2G15-120	AM-2G16-90	AM-3G18-120
Dimensions*	1290 x 290 x 134 mm (50.79 x 11.42 x 5.28")	700 x 145 x 93 mm (27.56 x 5.71 x 3.66")	700 x 145 x 79 mm (27.56 x 5.71 x 3.11")	735 x 144 x 78 mm (28.94 x 5.67 x 3.07")
Weight*	12.5 kg (27.56 lbs)	4.0 kg (8.82 lbs)	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	658.3 N @ 200 km/h (148 lbf @ 125 mph)	169 N @ 200 km/h (38 lbf @ 125 mph)	133.4 N @ 200 km/h (30 lbf @ 125 mph)	146.8 N @ 200 km/h (33 lbf @ 125 mph)
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	41.7 N @ 200 km/h (9.375 lbf @ 125 mph)	41.7 N @ 200 km/h (9.375 lbf @ 125 mph)	137.9 N @ 200 km/h (31 lbf @ 125 mph)	182 N @ 200 km/h (41 lbf @ 125 mph)
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			

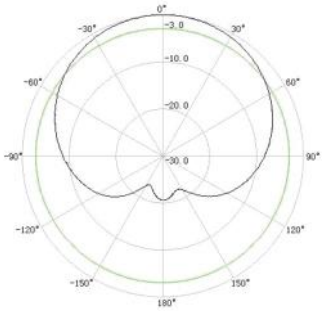
** Dimensions and weight exclude pole mount and Rocket (Rocket sold separately)*

AM-9M13 Antenna Information

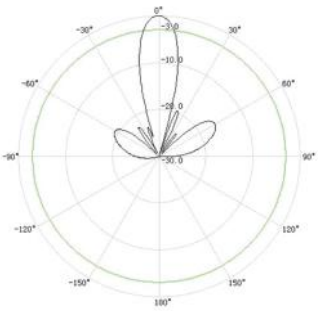
Return Loss



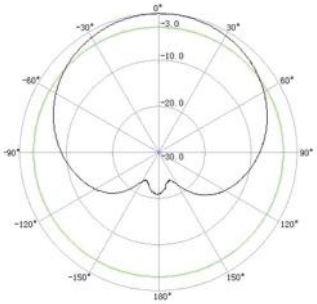
Vertical Azimuth



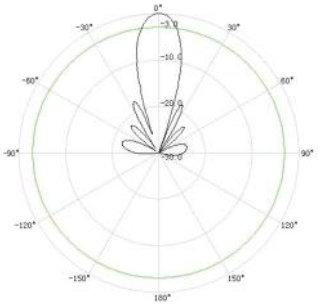
Vertical Elevation



Horizontal Azimuth

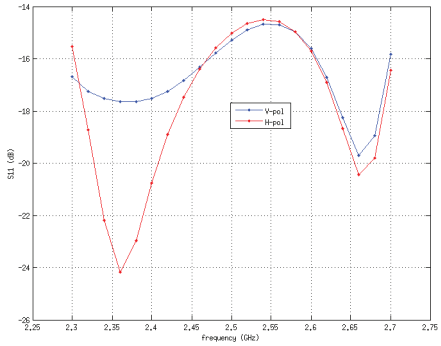


Horizontal Elevation

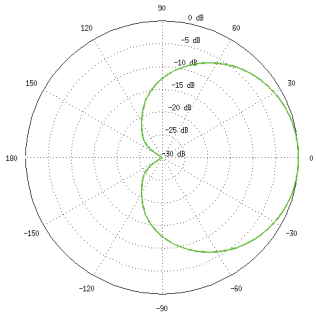


AM-2G15-120 Antenna Information

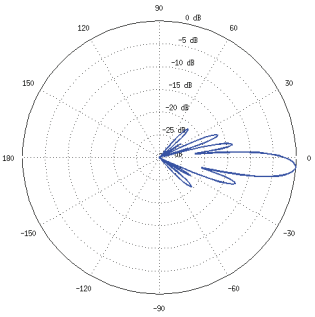
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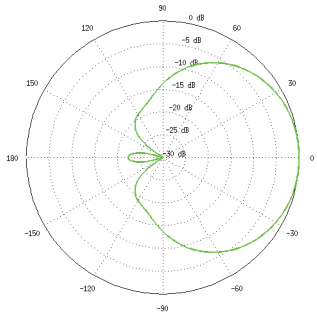
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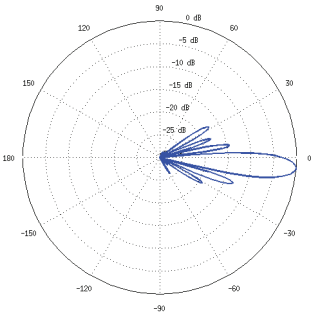
Vertical Elevation



Horizontal Azimuth

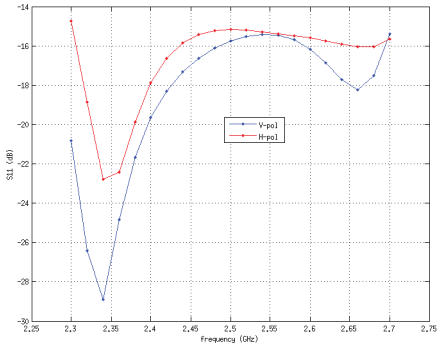


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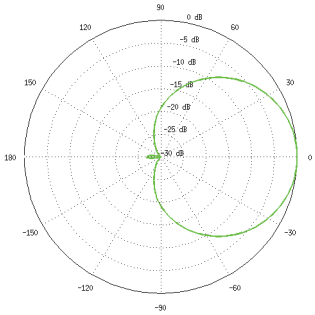


AM-2G16-90 Antenna Information

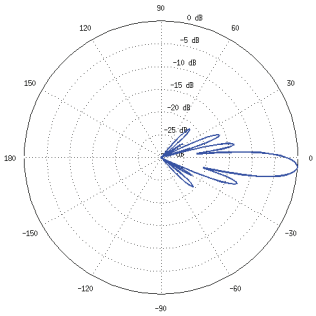
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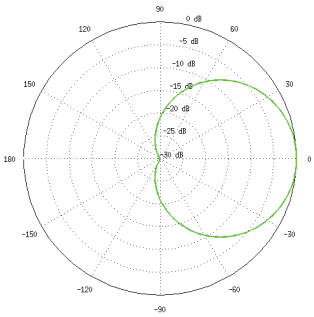
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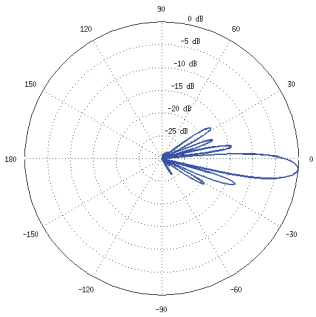
Vertical Elevation



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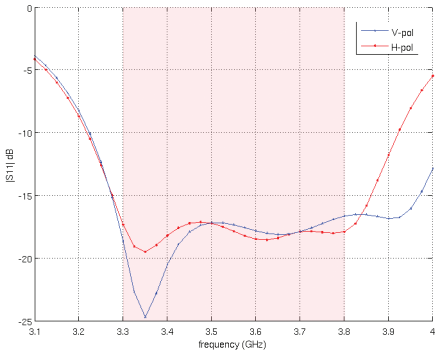


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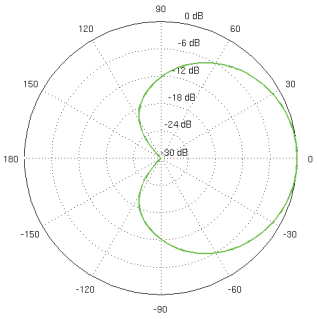


AM-3G18-120 Antenna Information

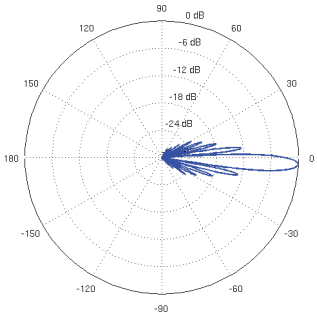
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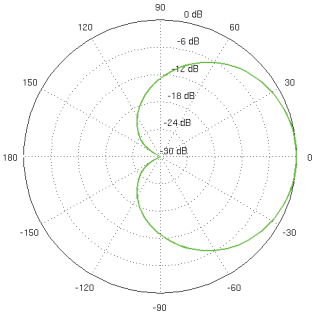
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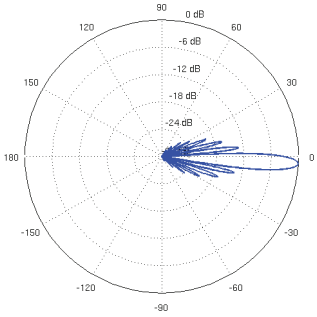
Vertical Elevation



Horizontal Azimuth

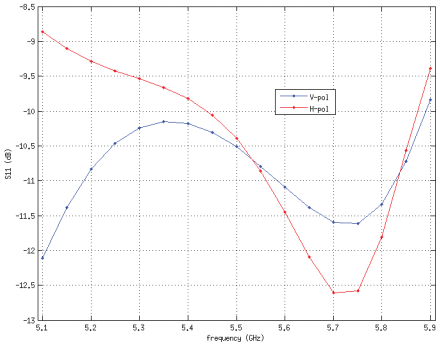


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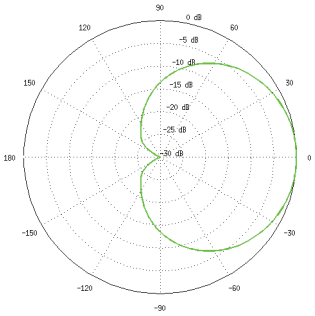


AM-5G16-120 Antenna Information

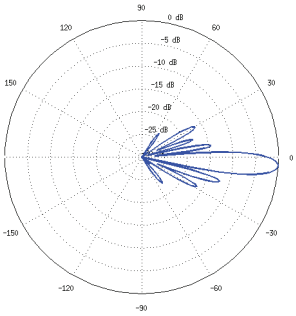
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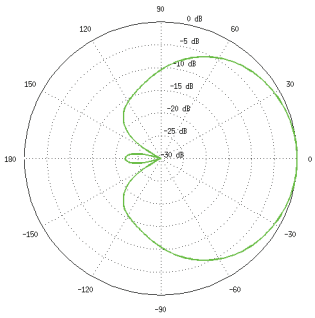
Vertical Azimuth



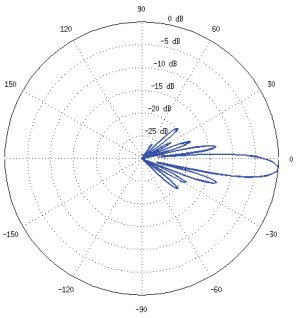
Vertical Elevation



Horizontal Azimuth

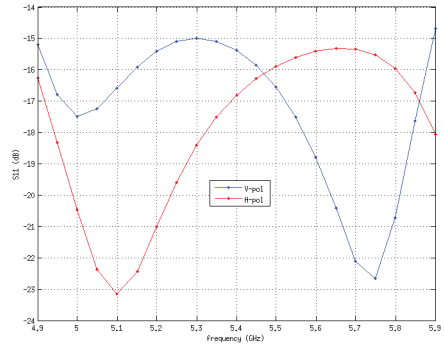


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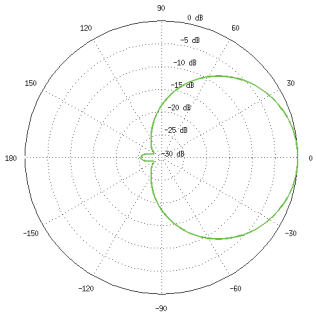


AM-5G17-90 Antenna Information

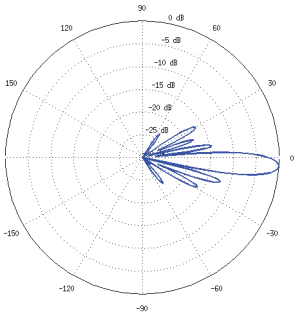
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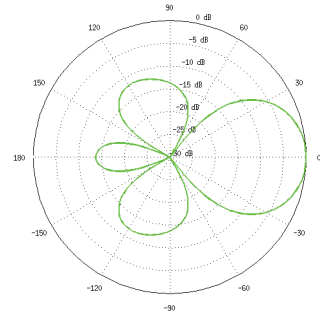
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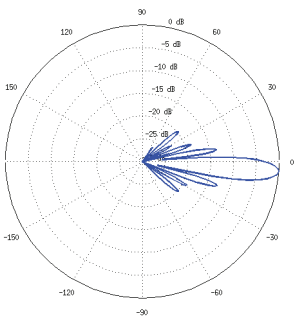
Vertical Elevation



Horizontal Azimuth

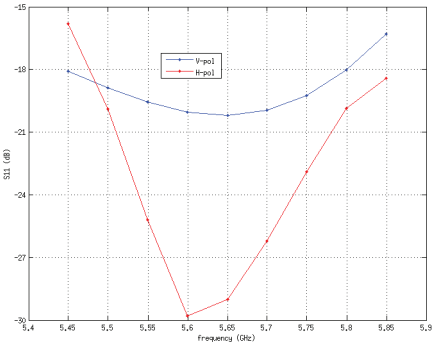


Horizontal Elevation

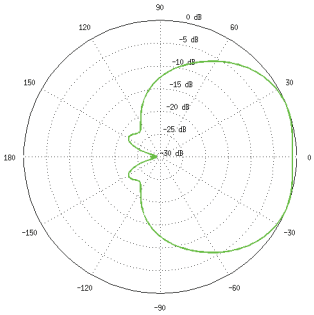


AM-5G19-120 Antenna Information

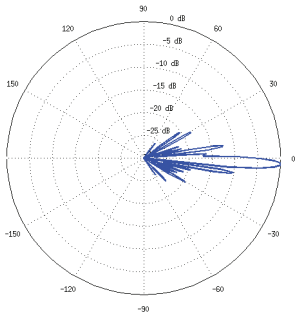
Return Loss



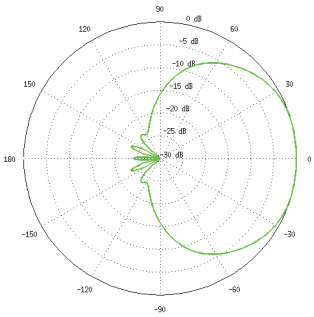
Vertical Azimuth



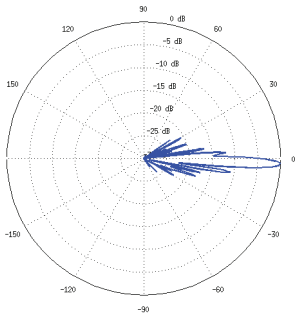
Vertical Elevation



Horizontal Azimuth

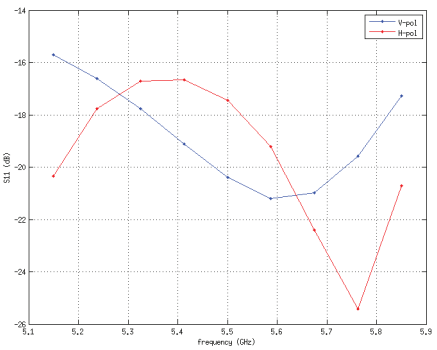


Horizontal Elevation

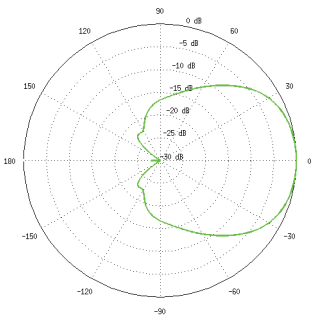


AM-5G20-90 Antenna Information

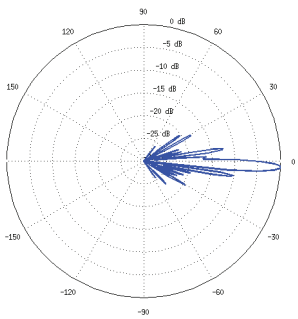
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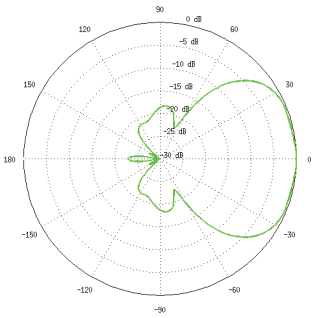
Vertical Azimuth



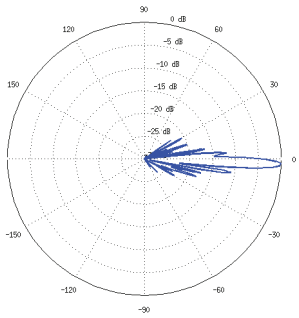
Vertical Elevation



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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