



Proven, Fast, Reliable

WirelessGRID™ Vertically Polarized Sector Antennas 120° and 90°. Model #s: AI108-MP-120. AI108-MP-90

For Outdoor Radios Operating in the 4.90 – 5.85 GHz Range

Product Highlights

The WirelessGRID™ Vertically Polarized Sector antennas are high gain sector antennas which cover the full 4.90-5.85 GHz U-NII band applications for point to multi-point systems.

- ◆ **High Gain** 16 dBi for 120 degree sector and 17 dBi for 90 degree sector in a small form factor
- ◆ **Low Wind Loading** at 160 MPH (257 km/h) survivability
- ◆ **Rugged, weatherproof, integrated designs** Type N female integrated connector and galvanized steel tilt bracket for mounting on up to 3.5" (88 mm) diameter pole



Proven Performance

Proven in thousands of networks worldwide the WirelessGRID™ 120° and 90° Degree Sector antennas offer full frequency band coverage from 4.90 to 5.85 GHz. and are designed to provide wide angle directional coverage from a wall or mast mounting location. The antennas can also be used as part of a sectorized omnidirectional base antenna array with four 90 degree antennas used to provide 360 degree coverage from a site. The antennas are enclosed in a rugged UV stable ASA radome designed to provide years of trouble free service. The antennas are DC grounded for lightning/ESD protection.

Environmental			
Operating Temperature	-40° C to +70° C (-40° F – 158° F)		
Waterproofing	IP67/NEMA 4	Flammability	UL94
Humidity	ETS 300 019-1-4, EN 302 085 (annex A.1.1)		
Wind Survivability	100 MPH (160 km/h) Sustained	136 MPH (218 km/h) for 3 seconds	
Vibration	Designed to IEC 60721-3-4		
Salt and Fog	Designed to IEC 68-2-11	Ice and Snow	1" (25 mm) Radial Survival

Models and Ordering Information	
AI108-MP-120	120 Degree Sector Antenna 16 dBi Gain, 5 Degree Vertical, Vertical Polarization
AI108-MP-90	90 Degree Sector Antenna 17 dBi Gain, 5 Degree Vertical, Vertical Polarization

Electrical			
Frequency Range	4.90 – 5.85 GHz		
Gain, Minimum	90° @ 17dBi 120° @ 16 dBi	VSWR, Maximum	1.8:1
Cross-Polarization	15 dB	Front to Back Ratio, Minimum	25dB
3 dB Vertical Beam Width	6°	3 dB Horizontal Beam Width	90° or 120°
Elevation	Down to -25°	Polarization	Vertical
Input power, Maximum	10 Watts	Input Impedance	50 Ohms
Lightning Protection	DC Grounded		

Compliance and Certification	
With all AIRAYA Radios	ETSI EN 302 085 V1.1.2 (2001-02), CS 1

Mechanical Dimensions	
Dimensions (LxWxD)	24.66 x 2.0 x 2.74 in (62.6 x 5.0 x 6.9 cm)
Weight lbs (grams)	2.0 lbs. (1.3 kg)
Connector	N-Type Female Integrated Connector
Radome	UV stabile ASA
Mounting Bracket	Mast Mount. Mechanical down tilt 15° mount for 1.5" (38 mm) to 3.5" (88 mm) dia. pole
Pole Diameter	Minimum: 1.5" (38 mm), Maximum: 3.5"(89 mm)



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