



X-Band Rectangular Horn Antenna, 9.0 to 10.2 GHz

Description:

Model SAK-AR903103-90-C6 is a custom built X-band rectangular antenna. At center frequency, the antenna delivers a typical gain of 15.3 dBi and a half power beam width of 25 degrees vertically and 35 degrees horizontally. The cross polarization of the antenna is 35 dB or better across the operation range of 9.0 to 10.2 GHz and the typical return loss is 18 dB. This antenna is equipped with a WR-90 rectangular waveguide and UG-39/U flange as its input port.



Features:

- Low Side Lobes
- High Aperture Efficiency
- High Cross-Pol Isolation
- Light Weight

Applications:

- Airborne Radar Systems
- Communication Systems
- Sensor Systems

Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency	9.0 GHz	9.6 GHz	10.2 GHz
Gain		15.3 dBi	
3 dB Beamwidth, Vertical		24.9°	
3 dB Beamwidth, Horizontal		35.0°	
Side Lobe Level, Vertical		13 dB	
Side Lobe Level, Horizontal		27 dB	
Polarization		Linear	
Cross-Polarization		35 dB	
Return Loss		18.0 dB	

Mechanical Specifications:

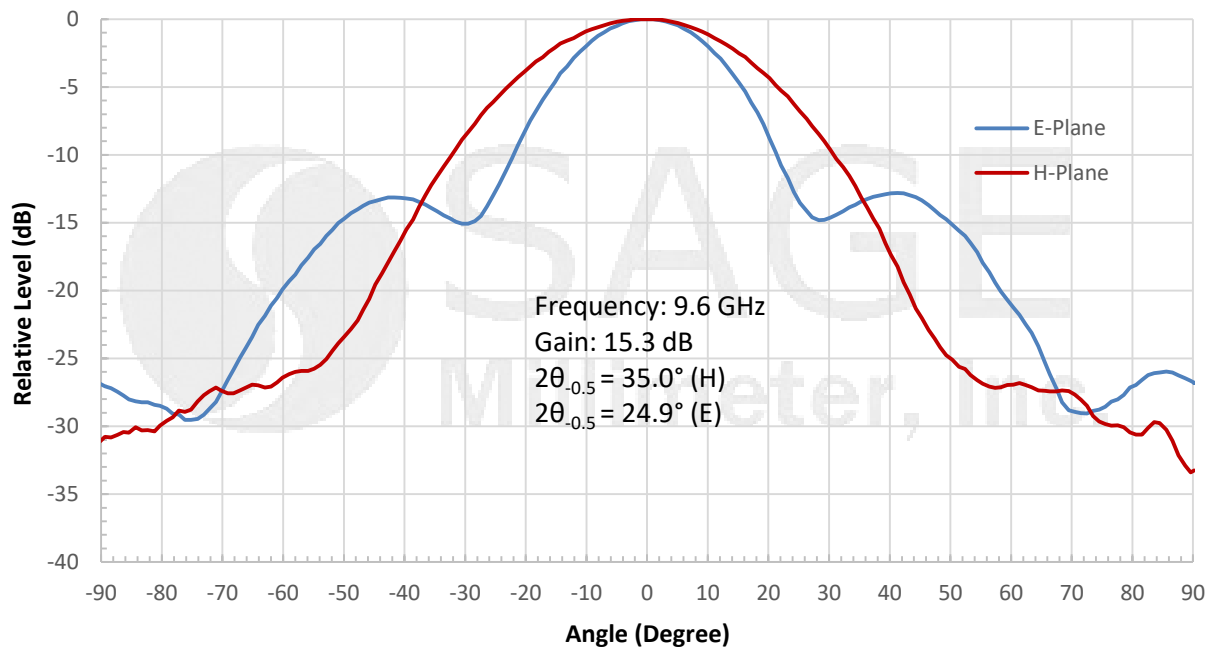
Item	Specification
Antenna Port	WR-90 Rectangular Waveguide with UG-39/U Flange
Dimensions	2.42" (W) x 2.69" (H) x 4.20" (L)
Weight	3.7 Oz
Material	Aluminum
Inner Finish	Silver Plated
Outer Finish	Black Paint
Outline	AK-X16-VP



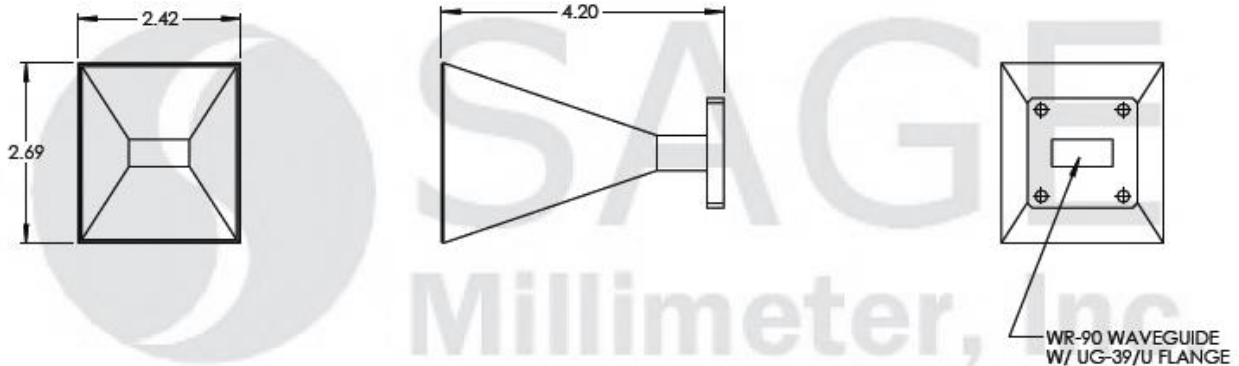


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Typical Antenna Patterns @ 9.6 GHz



Mechanical Outline: (Unless otherwise specified, all dimensions are in inches)



Note:

- All data presented is collected from a sample lot. Actual data may vary unit to unit.
- All testing was performed under +25°C room temperature.
- SAGE Millimeter, Inc. reserves the right to change the information presented without notice.

Caution:

- Any foreign objects in the antenna will cause performance degradation and possible device damage.

