



W-Band Spot-Focusing Lens Antenna

Description:

Model SAQ-903071-10-S1 is a W-band, spot-focusing lens antenna that delivers a 10 dB spot size of 0.80" at a focal length of 7.09". The antenna employs a low loss lens to offer excellent aperture efficiency at 90 GHz. The lens antenna is equipped with a standard WR-10 waveguide and UG-387/U-M flange as its input port. It supports linear polarized waveforms.



Features:

- Rugged Mechanical Configuration
- High Efficiency and Low loss
- Low Side Lobe Levels

Applications:

- Material Property Measurement Systems

Electrical Specifications:

Parameter		Minimum	Typical	Maximum
Frequency			90 GHz	
Focal Length			7.09"	
Peak to First Null	Spot Size		1.14"	
	Power Captured		83.8%	
10 dB Below Peak	Spot Size		0.80"	
	Power Captured		78.9%	
3 dB Below Peak	Spot Size		0.48"	
	Power Captured		47.4%	
Polarization			Linear	
Specification Temperature			+25 °C	
		-45 °C		+85 °C

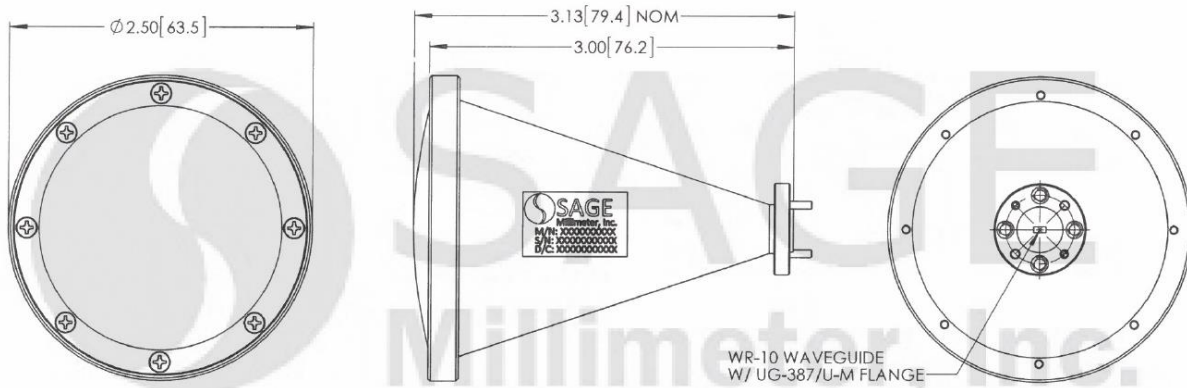
Mechanical Specifications:

Item	Specification
Antenna Port	WR-10 Waveguide with UG-387/U-M Flange
Lens Diameter	2.0"
Dimensions	3.13" (L) x 2.50" (Ø)
Horn Material	Aluminum
Finish	Gold Plated
Weight	4.7 Oz
Outline	AQ-RW-2.0



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



Note:

- SAGE Millimeter, Inc. reserves the right to change the information presented without notice.

Caution:

- Foreign objects in the waveguide will affect the antenna performance and may damage the antenna.

