



D Band Gaussian Optics Antenna, 3"

Description:

Model SAG-1441544002-06-S1 is a 3" D-Band Gaussian antenna that operates from 140 to 150 GHz. The Gaussian antenna delivers a 40 dBi nominal gain and 1.9 degree half power beamwidth. The antenna supports linear polarized waveforms and employs a corrugated feed horn to offer excellent aperture efficiency, high cross polarization rejections, and low side lobe levels. This model is equipped with a standard WR-06 waveguide and UG-387/U-M flange as its input port. By removing the mode transition, SAGE Millimeter model number SWT-06059-SB, the input port becomes a 0.059" diameter circular waveguide, which can support both linear and circular polarized waveforms.



Features:

- Center Fed
- Low Side Lobes
- Low Cross Polarization

Applications:

- Radar Systems
- Communication Systems
- Plasma Systems

Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency	140 GHz		150 GHz
Gain		40 dBi	
3 dB Beamwidth		1.9°	
Side Lobes		-20 dB	
Polarization		Linear	
Return Loss		21 dB	

Mechanical Specifications:

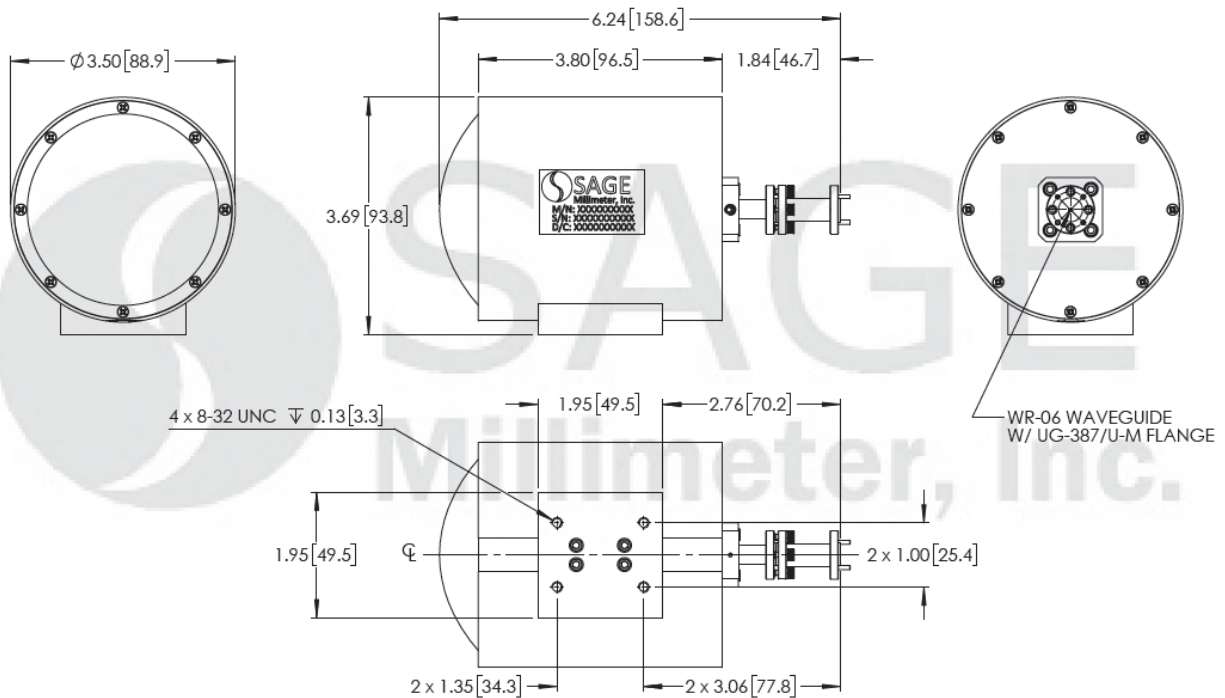
Item	Specification
Antenna Port	WR-06 Waveguide with UG-387/U-M Flange
Material	Aluminum
Finish	Black Anodized
Weight	1.4 lb
Lens Diameter	3.0"
Dimensions	3.50" (Ø) x 6.24" (L)
Outline	AG-RD40





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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.
- The operation frequency of the antenna can be extended to a wider range with small performance degradation at the edges of the band.

Caution:

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

