



V Band Gaussian Optics Antenna, 58 to 68 GHz, 12"

Description:

Model SAG-5836834201-141-S1 is a 12" V-band Gaussian antenna that operates from 58 to 68 GHz. The Gaussian antenna delivers a 42 dBi nominal gain and 1.2 degree half power beamwidth. The antenna supports both linear and circular polarized waveforms and employs a corrugated feed horn to offer excellent aperture efficiency, high cross polarization rejections, and low sidelobe levels. This model is equipped with a 0.141" diameter circular waveguide and UG-385/U-M flange as its input port. By adding a mode transition, SAGE Millimeter model number SWT-15141-SB, the input port becomes a standard WR-15 waveguide, which can only support linear polarized waveforms.



Features:

- Center Fed
- Low Sidelobes
- Low Cross Polarization

Applications:

- Radar Systems
- Communication Systems
- Plasma Systems

Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency	58 GHz	63 GHz	68 GHz
Gain		42 dBi	
3 dB Beamwidth		1.2	
Sidelobes		-25 dB	
Polarization	Linear and Circular		
Return Loss		15 dB	
Specification Temperature		+25 °C	
Operating Temperature	-40 °C		+85 °C

*Note: Can operate from 54 to 75 GHz if the dominant mode is maintained

Mechanical Specifications:

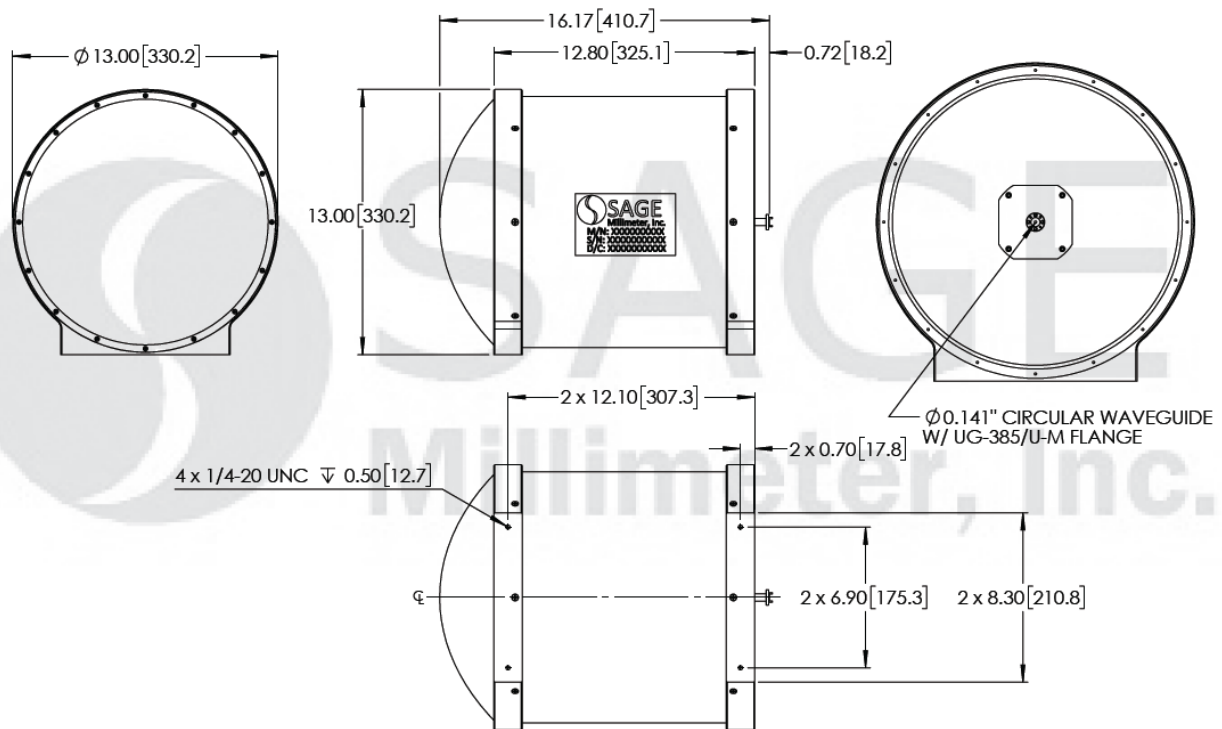
Item	Specification
Antenna Port	0.141" Dia Circular Waveguide with UG-385/U-M Flange
Lens Diameter	12.0"
Material	Aluminum
Finish	Black Anodized
Weight	19.5 lb
Dimensions	13.00" (Ø) x 16.17" (L)
Outline	AG-CV42-141



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



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 the antenna performance and may damage the antenna.

