



W Band Gaussian Optics Antenna, 3"

Description:

Model SAG-8831043403-10-S1 is a 3" W-band Gaussian antenna that operates from 88 to 100 GHz. The Gaussian antenna delivers a 34 dBi nominal gain and 3.0 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 sidelobe levels. This model is equipped with a standard WR-10 waveguide and UG-387/U-M anti-cocking flange as its input port. By removing the mode transition, SAGE Millimeter model number SWT-10094-SB, the input port becomes a 0.094" diameter circular waveguide, which can support both linear and circular polarized waveforms.



Features:

- Center Fed
- Low Sidelobes
- Low Cross Polarization

Applications:

- Radar Systems
- Communication Systems
- Plasma Systems

Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency	88 GHz	94 GHz	100 GHz
Gain		34 dBi	
3 dB Beamwidth		3.0°	
Sidelobes		-20 dB	
Polarization		Linear	
Return Loss		21 dB	
Specification Temperature		+25 °C	
Operating Temperature	-40 °C		+85 °C

Mechanical Specifications:

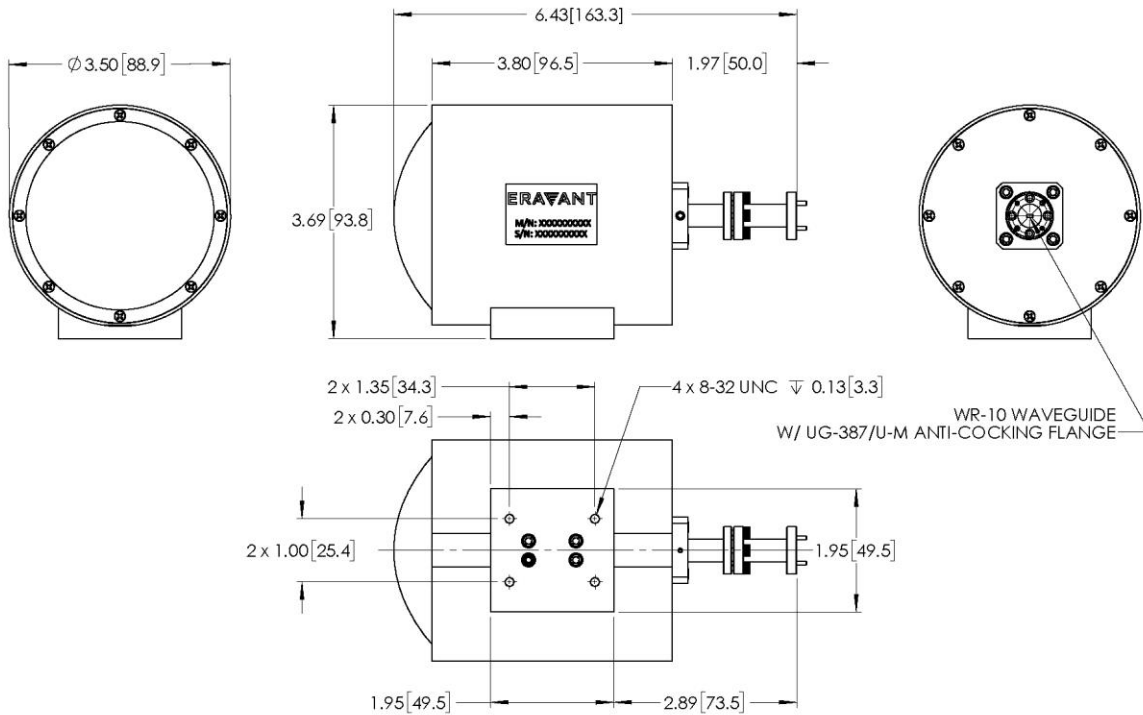
Item	Specification
Antenna Port	WR-10 Waveguide with UG-387/U-M Flange
Material	Aluminum
Finish	Black Anodized
Weight	1.4 lb
Lens Diameter	3.0"
Dimensions	3.69" (H) x 6.43" (L)
Outline	AG-RW34-A





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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:

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

