



## W Band Gaussian Optics Antenna, 0.094” Dia Circular Waveguide, 3”

### Description:

**Model SAG-8831043403-094-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 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 0.094” diameter circular waveguide and UG-387/U-M anti-cocking flange as its input port. By adding the mode transition, SAGE Millimeter model number SWT-10094-SB, the input port becomes a standard WR-10 waveguide, which can support only linear polarized waveforms.



### Features:

- Center Fed
- Low Sidelobes
- Low Cross Polarization
- Linear and Circular 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	
Cross Polarization		-20 dB	
Polarization		Linear	
Return Loss		21 dB	
Specification Temperature		+25 °C	
Operating Temperature	-40 °C		+85 °C

### Mechanical Specifications:

Item	Specification
Antenna Port	0.094” Dia Circular Waveguide with UG-387/U-M Anti-Cocking Flange
Material	Aluminum
Finish	Black Anodized
Weight	1.4 lbs
Lens Diameter	3.0”
Dimensions	3.50” (Ø) x 5.37” (L)
Outline	AG-CW34-094-A

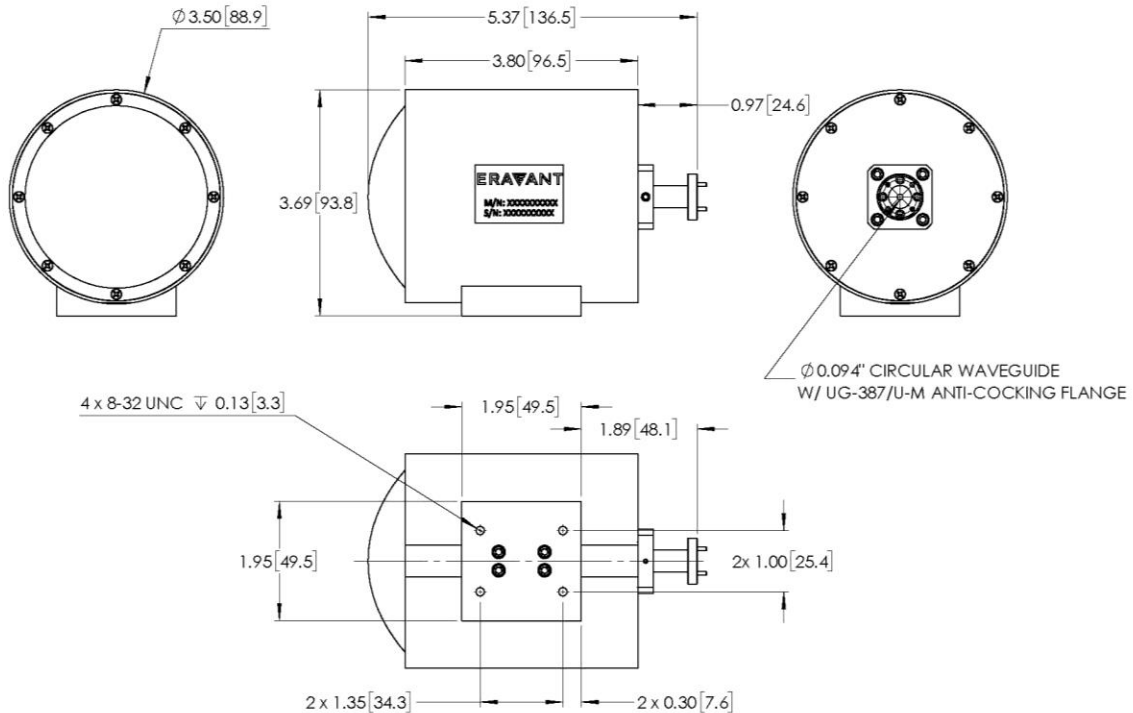


www.eravant.com | 501 Amapola Avenue, Torrance, CA 90501  
 Phone: 424-757-0168 | Fax: 424-757-0188 | Email: support@eravant.com



## W Band Gaussian Optics Antenna, 0.094" Dia Circular Waveguide, 3"

**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.

