

SAG-2032533403-396-S1

K-Band Gaussian Optics Antenna, 20 to 24.5 GHz, 3.2°

SAG-2032533403-396-S1 is a 12" Ka-Band Gaussian antenna that operates from 20 to 24.5 GHz. The Gaussian antenna delivers a 34 dBi nominal gain and 3.2 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 0.396" diameter circular waveguide and UG-595/U flanges as its input port. By adding the mode transition, Eravant model number [SWT-42396-SA](#), the input port becomes a standard WR-42 waveguide, which can support only linear polarized waveform.



Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency Range	20 GHz		24.5 GHz
Gain		34 dBi	
3 dB Beamwidth		3.2°	
Sidelobes		-25 dB	-20 dB
Cross Polarization		-20 dB	
Polarization	Linear and Circular		
Return Loss		20 dB	
Specification Temperature		+25°C	
Operating Temperature	-40°C		+85°C

* Note: Can operate from 18 to 26.5 GHz if the dominant model is maintained and slight performance degradation is allowed.

Mechanical Specifications:

Item	Specification
Antenna Port	Ø0.396" Circular Waveguide with UG-595/U Flange
Material	Aluminum
Finish	Black Anodized
Lens Diameter	12.0"
Dimensions	13.00" (Ø) x 17.90" (L)
Outline	AG-CK34-396

ECCN

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FEATURES

- Center Fed
- Low Sidelobes
- Low Cross Polarization

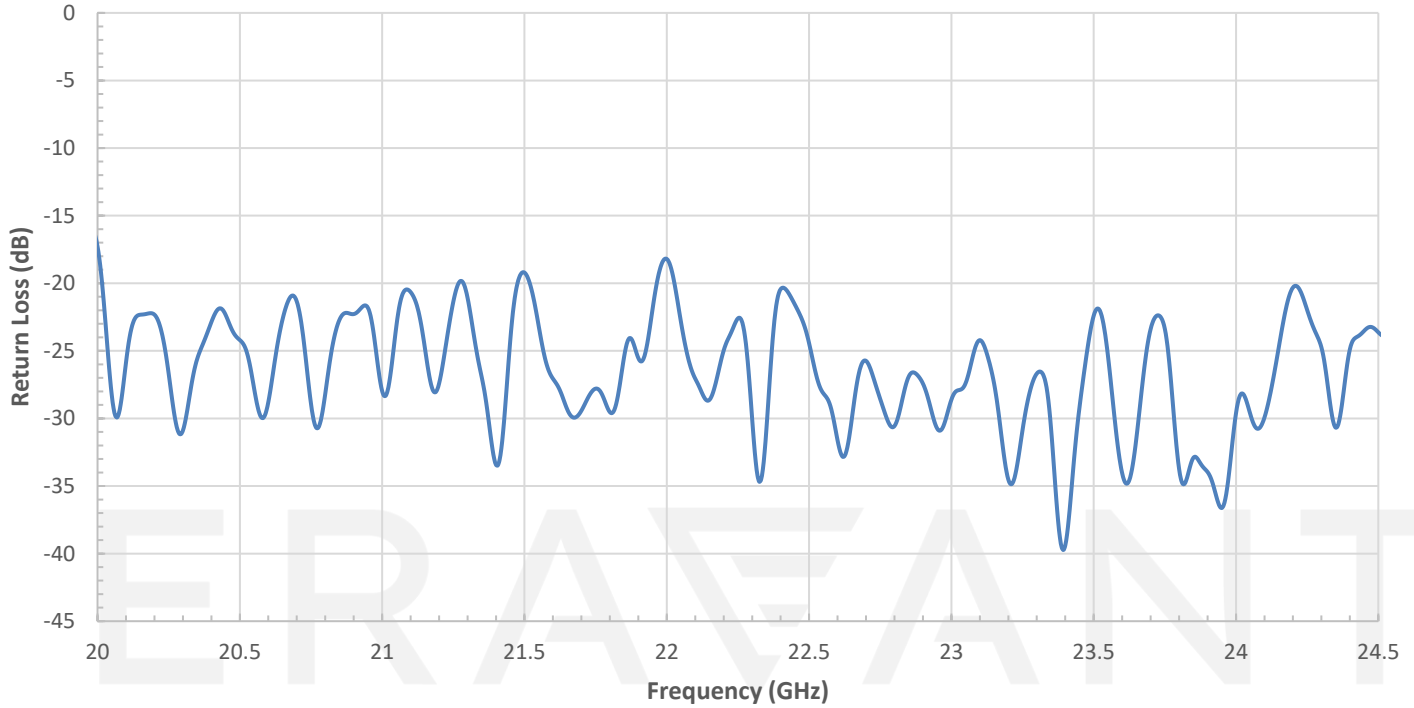
APPLICATIONS

- Radar Systems
- Communication Systems
- Plasma Systems

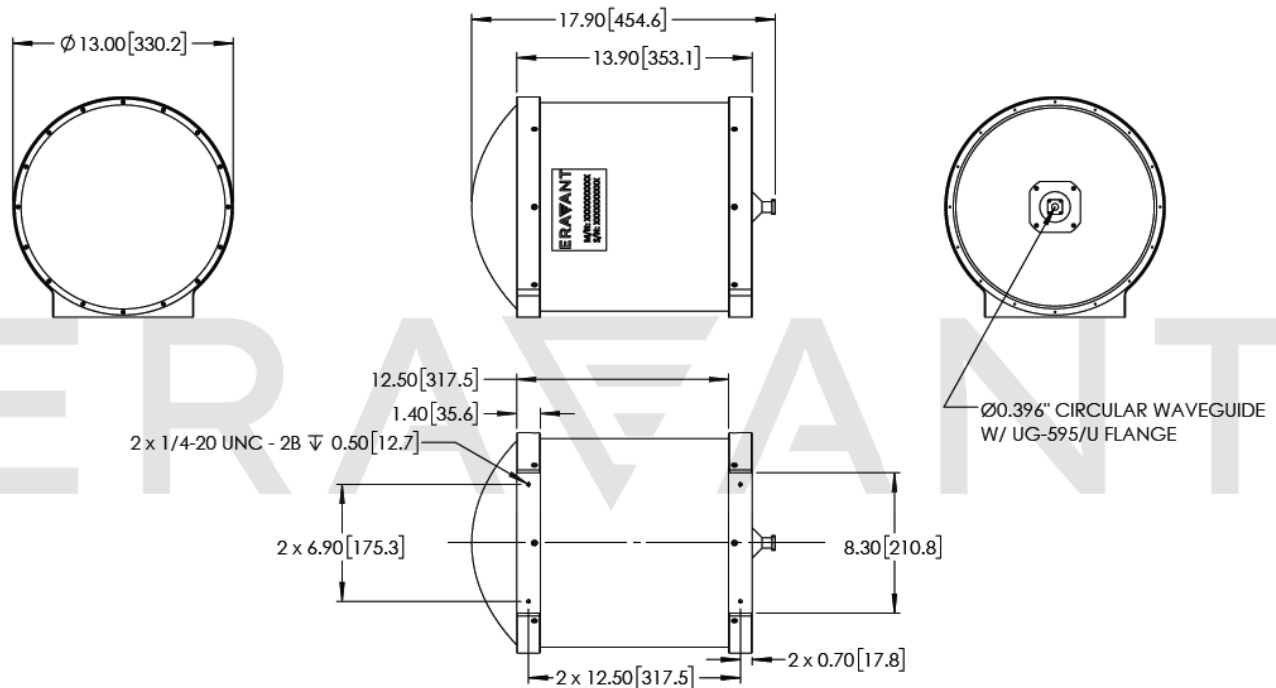
SUPPLEMENTAL DETAILS



Measured Return loss vs Frequency



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



NOTE:

- Eravant 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:

- If a waveguide is present, any foreign objects in the waveguide will cause performance degradation and may damage or destroy the unit.

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