SAY-7138635005-12-S1-WR

E-Band Cassegrain Antenna, Weather Resistant, 71 to 86 GHz, 24”, 50 dBi Gain

SAY-7138635005-12-S1-WR is a E-band Cassegrain antenna that offers a nominal gain of 50 dBi and a typical half power beamwidth of 0.5 degrees from 71 to 86 GHz. The aluminum reflector offers a lightweight and rugged mechanical structure and is treated with a chem film conversion coating for corrosion resistance, while an integrated radome provides dust and weather protection. A corrugated scalar feed horn is used to provide optimal feed efficiency, low side lobes, high cross-pol rejection, and uniform illumination. The antenna port is a WR-12 waveguide with UG-387/U Anti-Cocking Flange and can support linear polarized waveforms. Other port configurations, circular waveguide port, are available under different model numbers.

Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency	71 GHz		86 GHz
Gain		50 dBi	
3 dB Beamwidth		0.5°	
Sidelobes		-17 dB	
Return Loss		15 dB	
Specification Temperature		+25 ˚C	
Operating Temperature	-40 ˚C		+85 ˚C

Mechanical Specifications:

Item	Specification
RF Ports	WR-12 Waveguide with UG-387/U Anti-Cocking Flange
RF Port Material	Aluminum
RF Port Finish	Chem Film
Reflector Material	Aluminum
Reflector Finish	Grey Painted, Color Code-Pantone 1C
Reflector Diameter	24”
Outline	AY-RE50-24-A

ECCN

EAR99

FEATURES

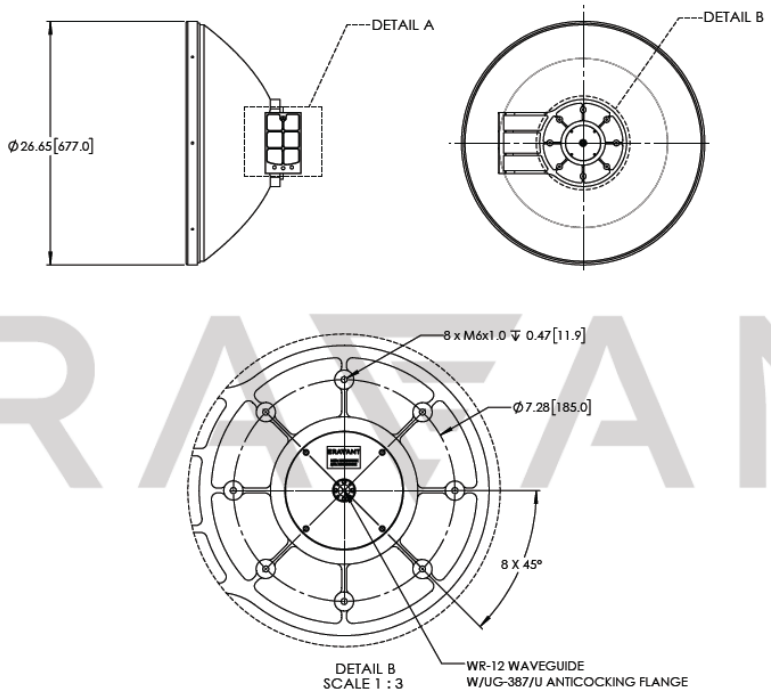
- Linear Polarization
- Low Side Lobe Levels
- High Cross-Polarization

APPLICATIONS

- Radar Communication System
- EW Systems

SUPPLEMENTAL DETAILS

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



NOTE:

- Test data provided is collected from a sample lot. Actual data may vary slightly from unit to unit. All testing is performed under +25 °C room temperature.
- For the simulated test data provided, actual measured data may slightly vary.
- Eravant reserves the right to change the information presented without notice.

CAUTION:

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