

H-band Probe Antenna, 9.0” L

SAP-112-R2-9.0 is a H-band probe antenna that operates from 7 GHz to 10 GHz. The antenna offers 6.5 dBi nominal directivity and 105 degrees typical half power beamwidth on the E-plane and 60 degrees typical half power beamwidth on the H-plane. The antenna supports linear polarized waveforms. The input of this antenna is a WR-112 waveguide with UG-51/U Flange.



Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency Range	7 GHz		10 GHz
Directivity		6.5 dBi	
Polarization		Linear	
3 dB Beamwidth, E-Plane		105°	
3 dB Beamwidth, H-Plane		60°	
Side Lobes, E-Plane		-10 dB	
Side Lobes, H-Plane		-14 dB	
Return Loss		13 dB	
Specification Temperature		+25°C	
Operating Temperature	-40°C		+85°C

Mechanical Specifications:

Item	Specification
Antenna Port	WR-112 Waveguide with UG-51/U Flange
Size	9.00” (L) x 1.875 (W) x 1.975 (H)
Flange Material	Brass
Waveguide Material	Copper
Finish	Black Painted
Outline	AP-RH-9.0

ECCN

EAR99

FEATURES

- Rectangular Waveguide Interface
- Linear Polarization

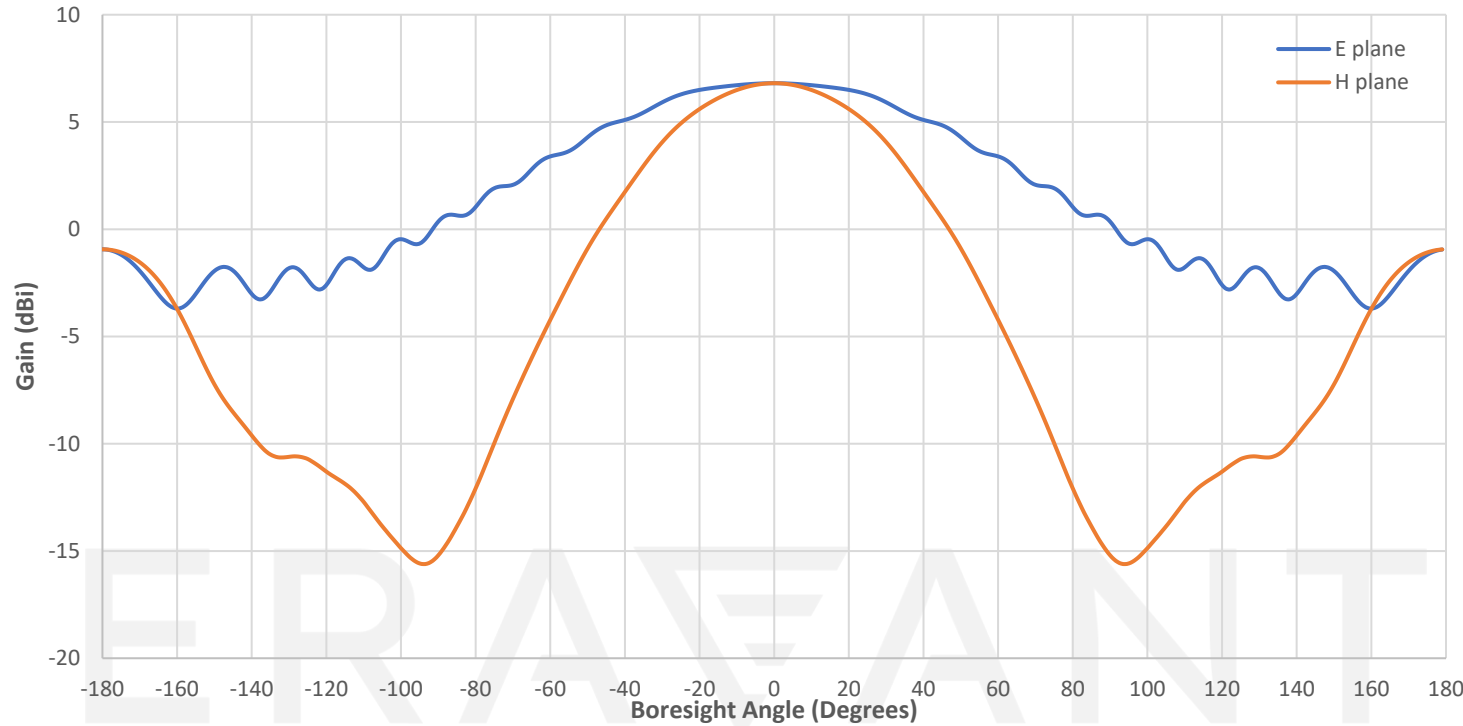
APPLICATIONS

- Antenna Ranges
- Antenna Directivity Measurements
- System Setups

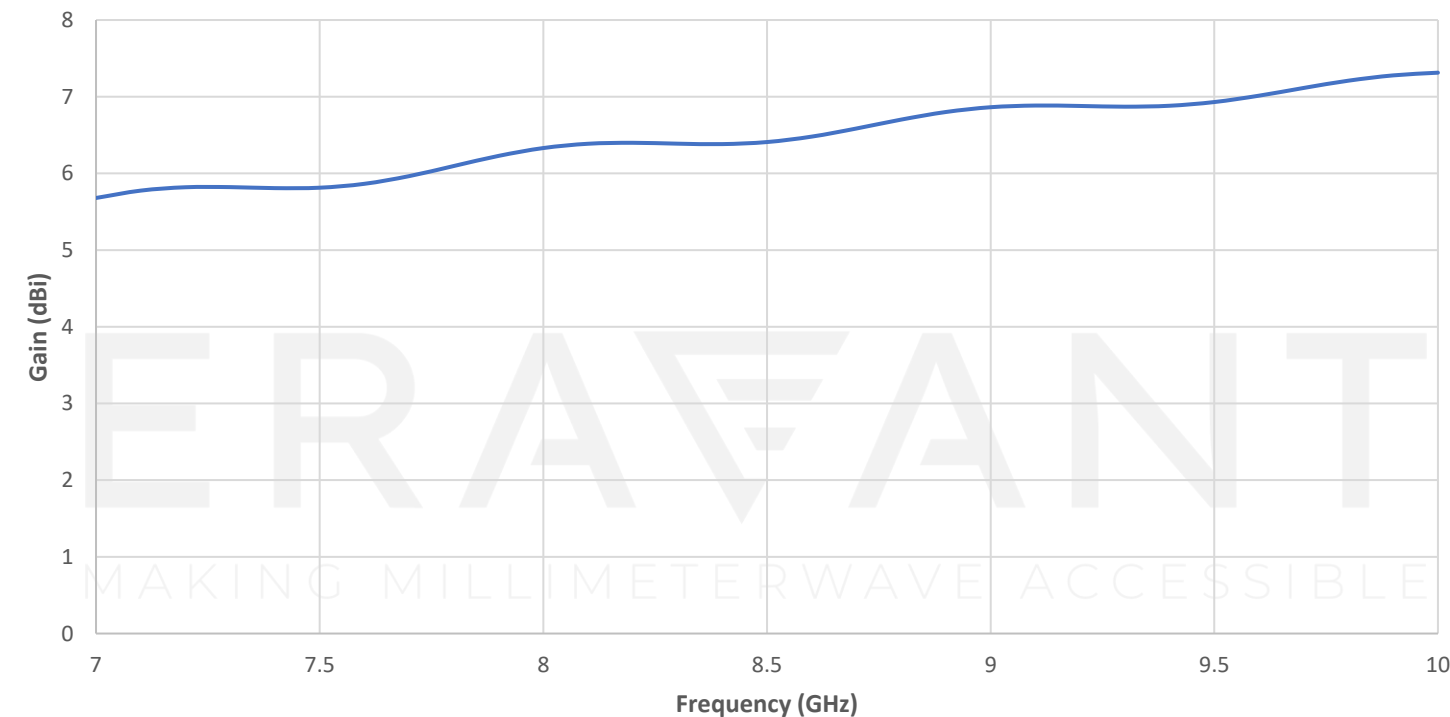
SUPPLEMENTAL DETAILS



Simulated Pattern at 8.5 GHz

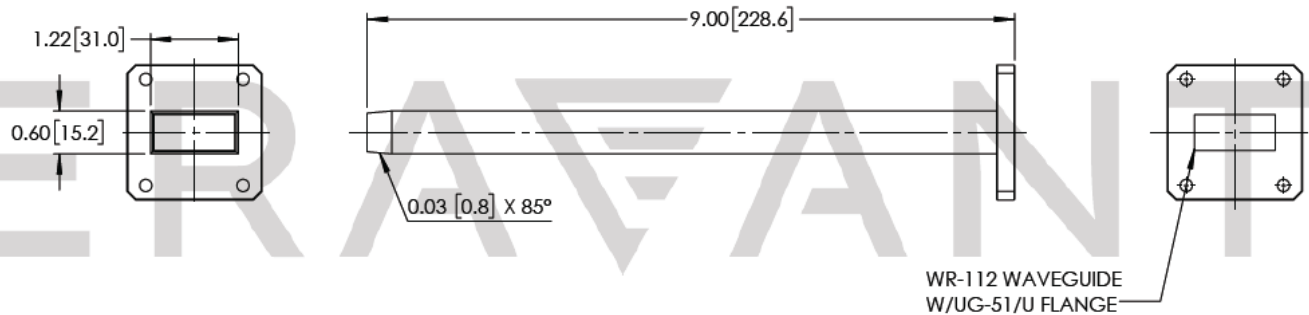


Simulated Gain vs Frequency



Mechanical Outline:

Unless otherwise specified, all dimensions are in inches [millimeters]

**NOTE:**

- All testing is performed under +25 °C room temperature.
- This antenna is a mature product. The reasons for only providing simulated data can be found in the following blog here.
- Eravant reserves the right to change the information presented without notice.

CAUTION:

- Any foreign objects in the waveguide will cause performance degradation and may damage or destroy the unit.