

WR-90, X-Band Probe Antenna, Square Waveguide

Description:

Model SAP-900-S2-7.0 is a square waveguide probe antenna that operates from 8.2 to 12.4 GHz. The antenna offers 9.0 dBi nominal gain, 68 degrees typical half power beamwidth on the E-plane and 65 degrees on the H-plane, respectively. The antenna supports linear and circular polarized waveforms. The input of this antenna is 0.90" x 0.90" square waveguide with UG-39/U flange.



Features:

- Square Waveguide Interface
- Precisely Machined and Gold Plated
- Linear and Circular Polarization

Applications:

- Antenna Ranges
- Antenna Gain Measurements
- System Setups

Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency	8.2 GHz		12.4 GHz
Gain		9.0 dBi	
Polarization	Linear		
3 dB Beamwidth, E-Plane		68°	
3 dB Beamwidth, H-Plane		65°	
Side Lobes, E-Plane		-12 dB	
Side Lobes, H-Plane		-20 dB	
Return Loss		10 dB	
Specification Temperature		+25 °C	
Operating Temperature	-40 °C		+85 °C

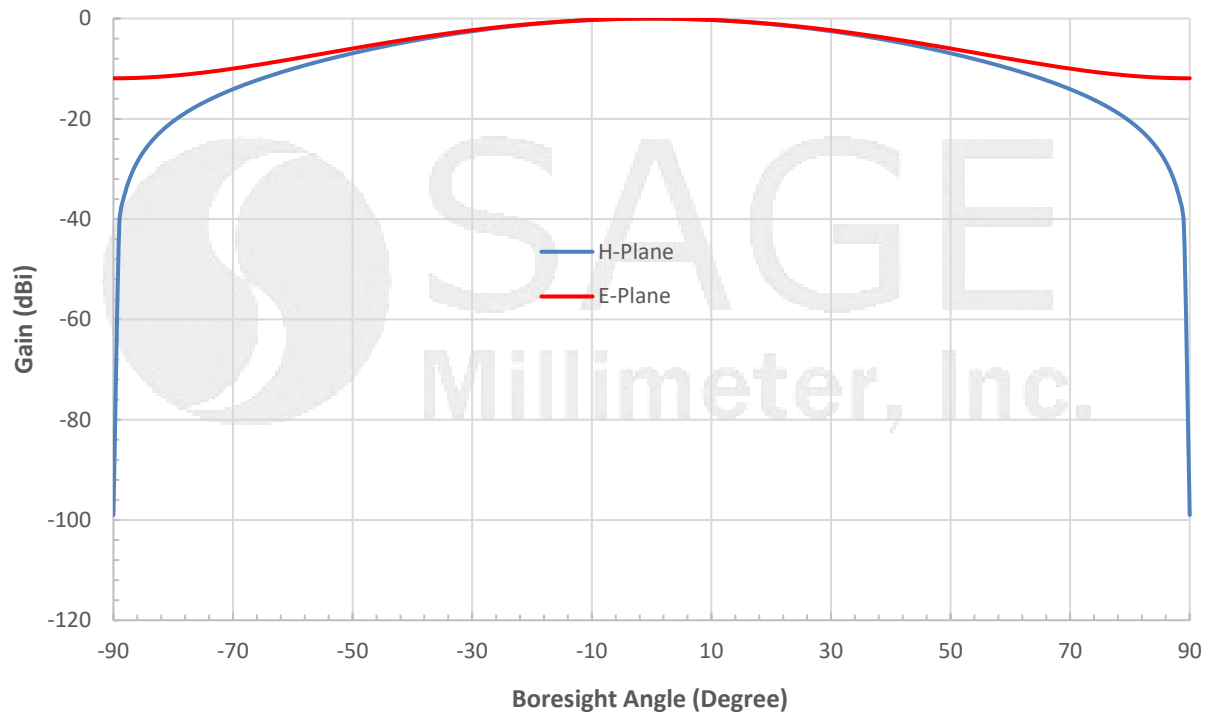
Mechanical Specifications:

Item	Specification
Antenna Port	0.90" x 0.90" Square Waveguide
Flange Type	UG-39/U Flange
Material	Brass
Finish	Gold Plated
Weight	8.5 Oz
Size	7.00" (L) x 1.63" (W) x 1.63" (H)
Outline	AP-SX-900-7.0

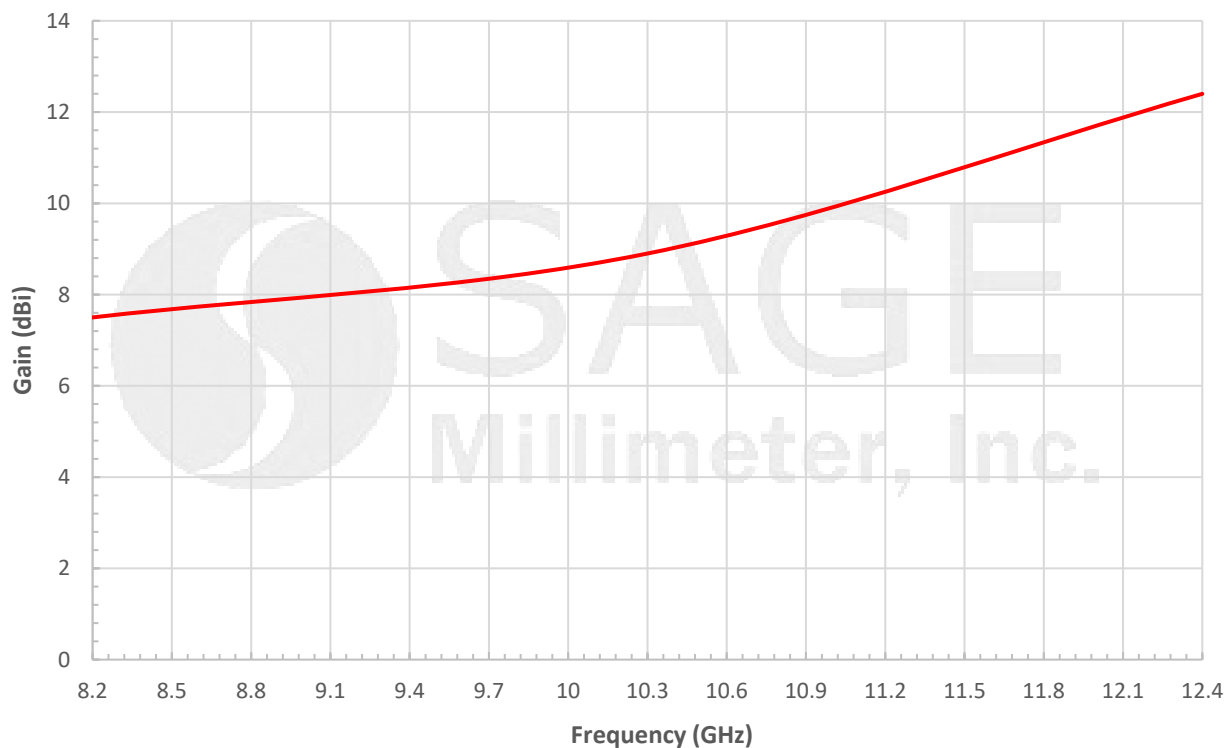


WR-90, X-Band Probe Antenna, Square Waveguide

Typical Antenna Pattern @ 10.3 GHz

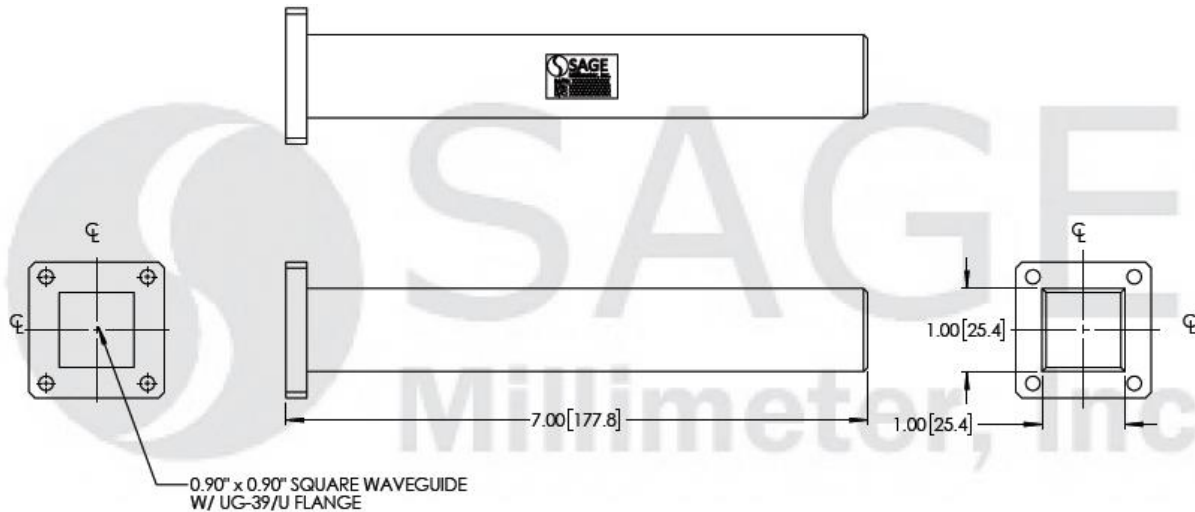


Typical Gain vs. Frequency



WR-90, X-Band Probe Antenna, Square Waveguide

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



Note:

- 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 antenna will cause performance degradation and possible device damage.

