



Product Name: EG-16W Series_ External One Port GNSS Antenna

Part Number: EG-16W-AC-B01

Features:

- Support GPS 1575.42MHz
- Robust Enclosure, IP67 Waterproof Resistant
- Cable Length & Connector are customizable
- RoHS & REACH Compliant

Applications:

- Automotive Navigation
- For all GPS applications with networking such as sensor, sonar multi-function gauge, etc.

External One Port GNSS Antenna

MODEL: EG-16W-AC-B01

WI-RD-D-264 V1.1

I. Specifications:

Items	Specifications		
Passive Antenna performance			
Application Band	GPS		
Frequency (MHz)	1575.42		
Efficiency (%)	69.66		
Average Gain (dBi)	-1.57		
Peak Gain (dBi)	1.63		
Axial Ratio	1.91		
V.S.W.R	< 2		
Return Loss (dB)	< -10		
Impedance (Ω)	50		
Polarization	R.H.C.P. (Right Handed Circular Polarization)		
Active Antenna Performance			
Application Band	GPS		
Frequency (MHz)	1575.42 \pm 1.023		
Gain (dB)	28		
Noise Figure (dB)	1.22		
Operation Voltage (V)	3.3 ~ 5		
Current Consumption (mA)	10.56 \pm 2		
Output Impedance (Ω)	50		
Out Of Band Rejection			
Frequencies (MHz)	600 ~ 1350	1350 ~ 1520	1650 ~ 3000
Out Of Band Rejection (dB)	50	34	45

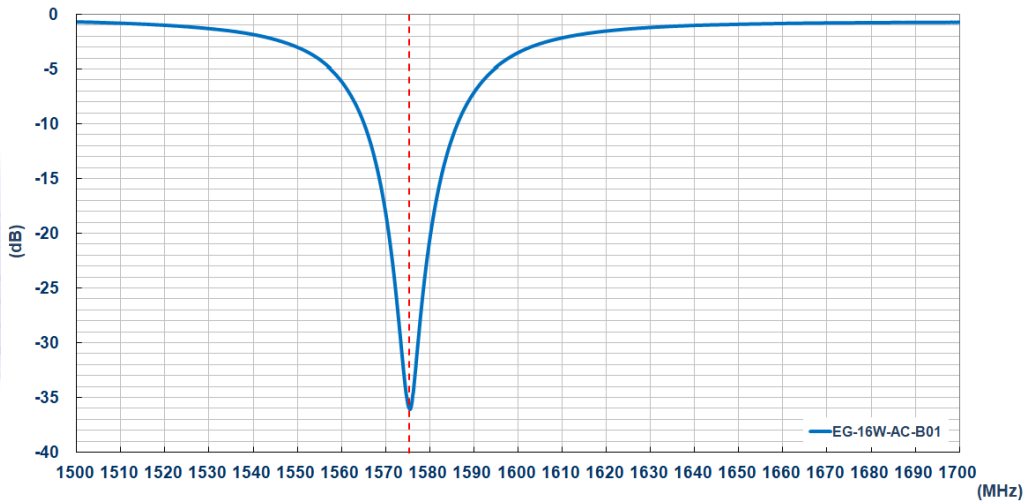
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ESD Protection	
Contact Discharge (KV)	± 8
Air Discharge (KV)	± 15
Mechanical Specifications	
Dimensions (mm)	φ 60.50(D) x 78.00(H)
Waterproof	IP67
Connector	TNC (SBJ)
Environmental Conditions	
Operation Temperature (°C)	-40 ~ +85
Storage Temperature (°C)	-40 ~ +85
Relative Humidity	95% non-condensing

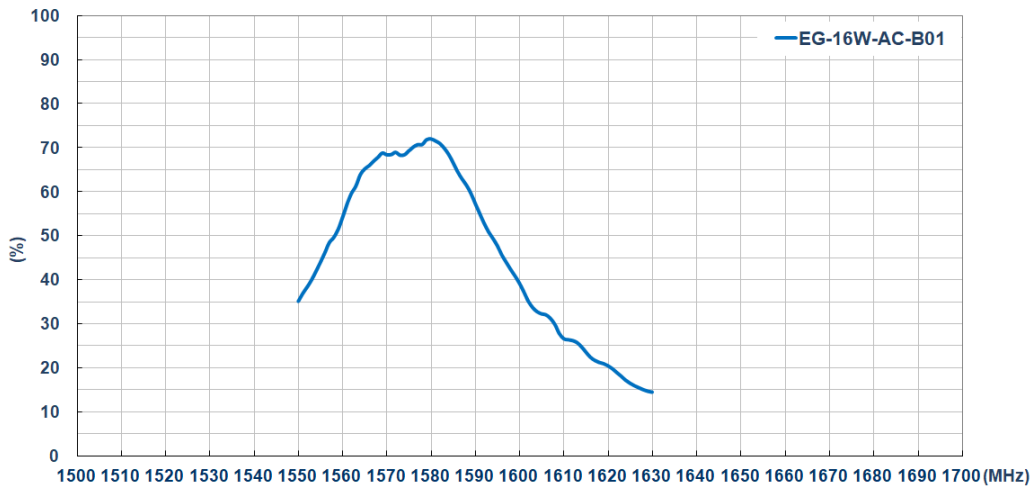
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II. Antenna Technical Parameters:

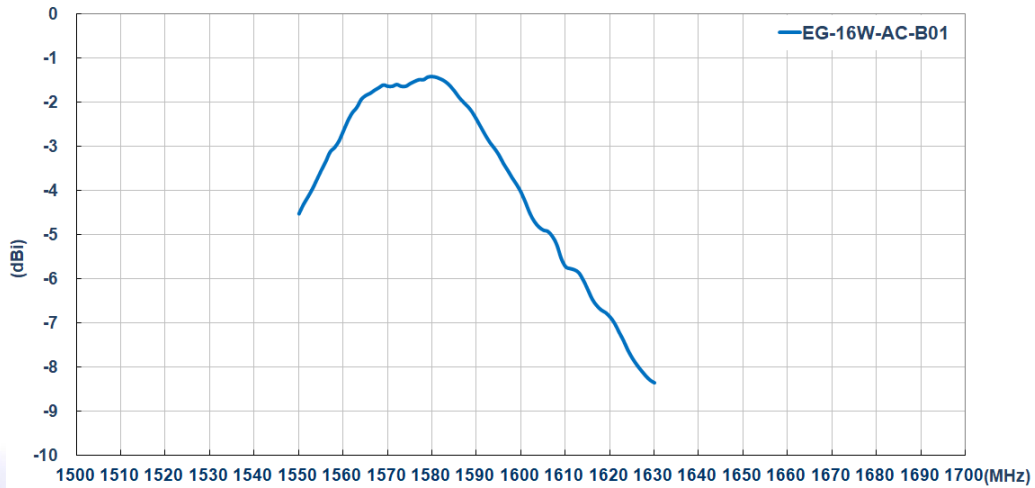
S11 (dB)



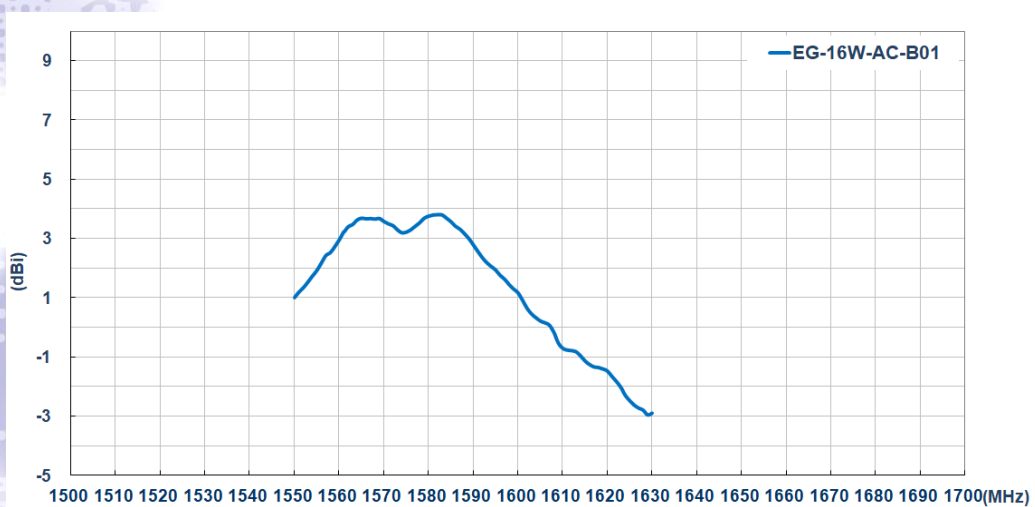
Efficiency (%)



Average Gain (dBi)

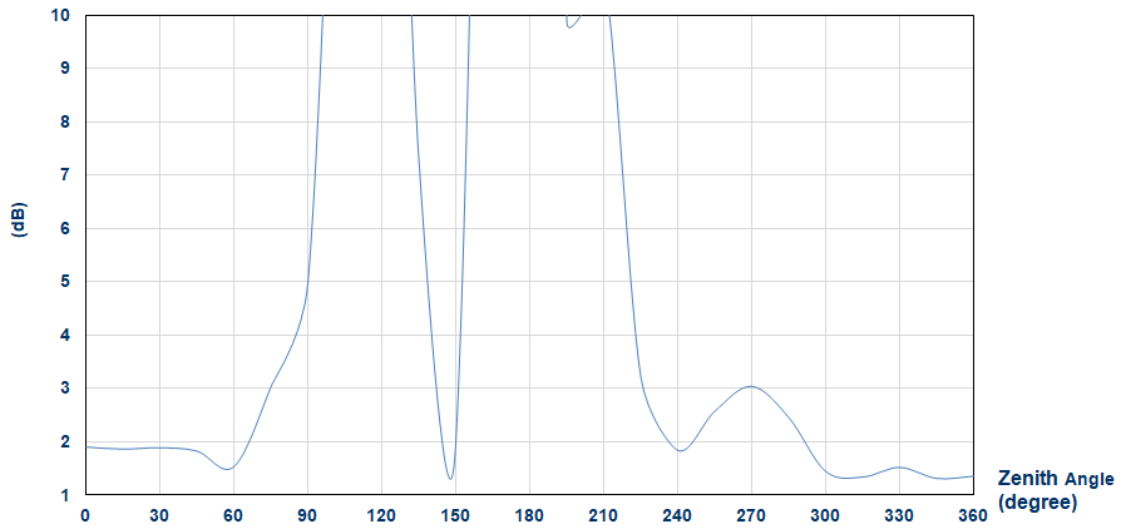


Peak Gain (dBi) – GNSS



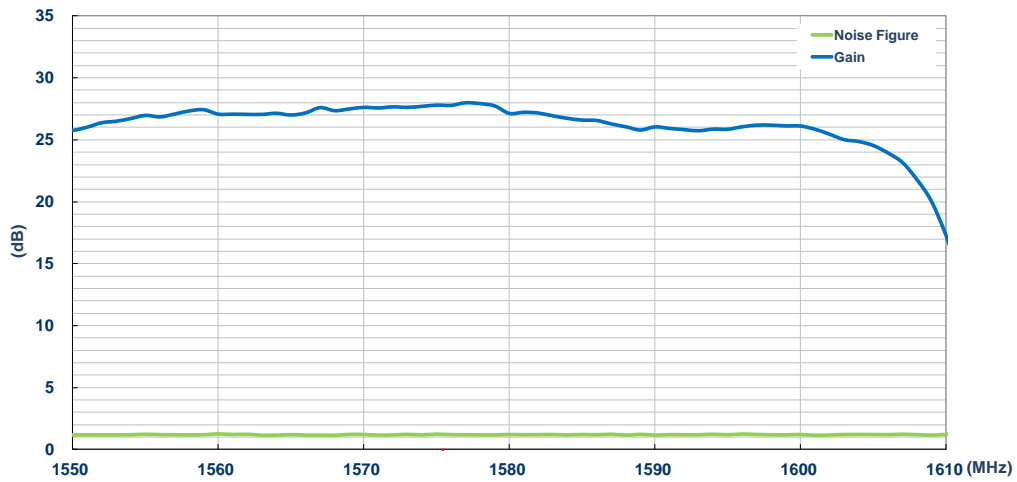
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Axial Ratio

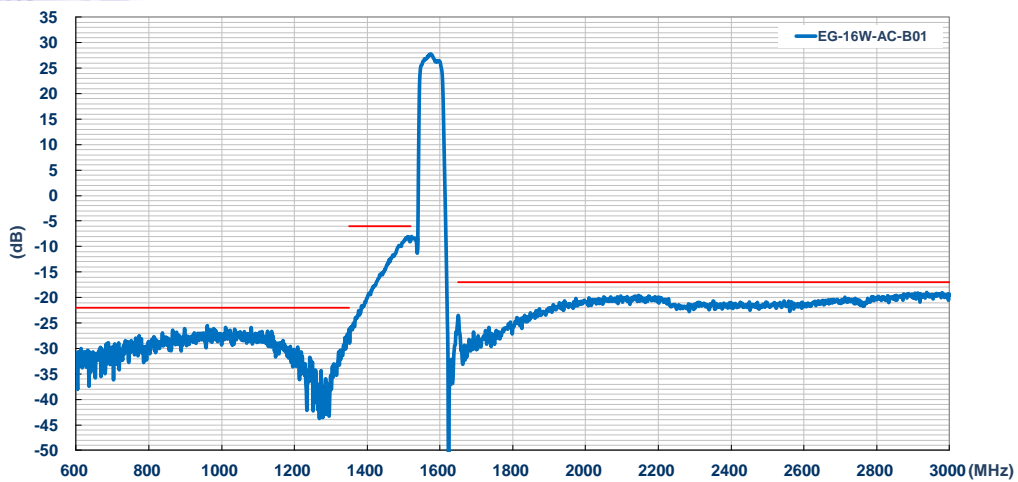


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Noise Figure & Gain (dB)



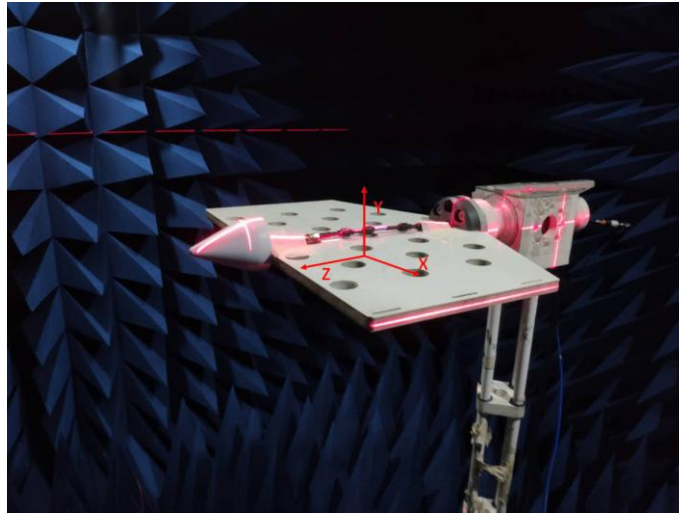
Out of Band Rejection (dB)



III. Antenna Radiation Pattern Measurement:

The antenna radiation patterns are measured in 3D Anechoic Chamber.

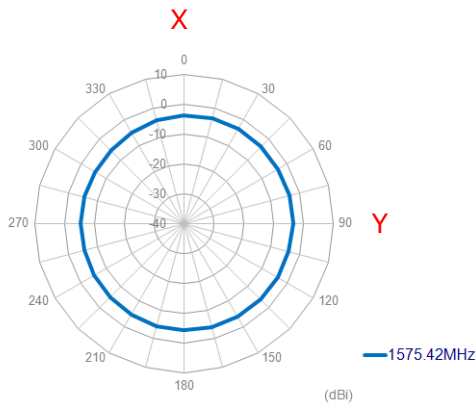
The measurement setup is as show below,



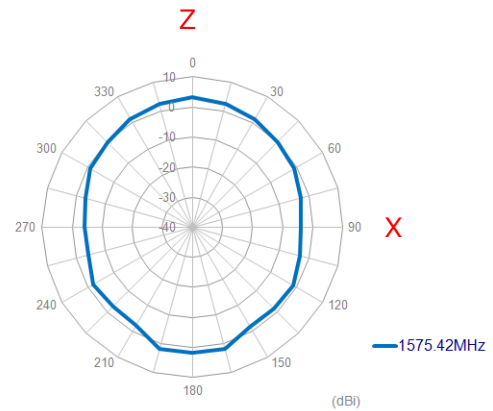
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IV. 2D Radiation Pattern:

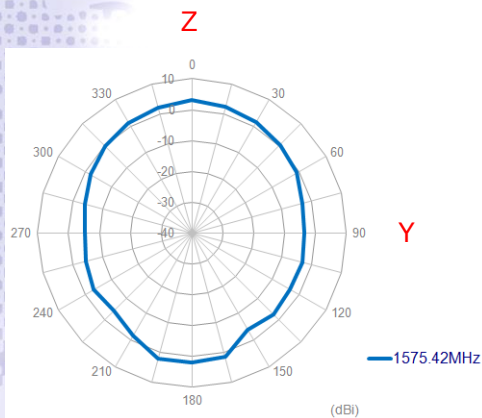
X-Y Plane



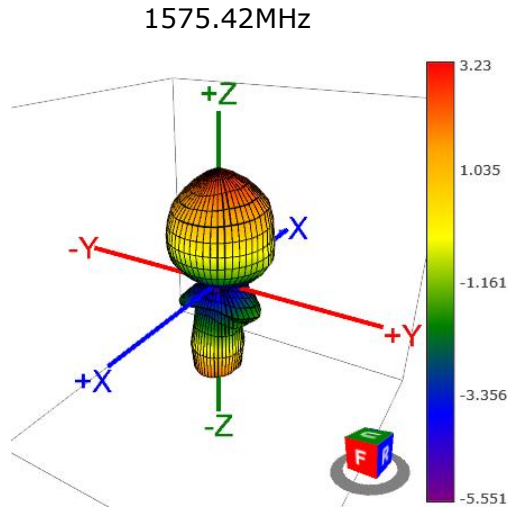
X-Z Plane



Y-Z Plane

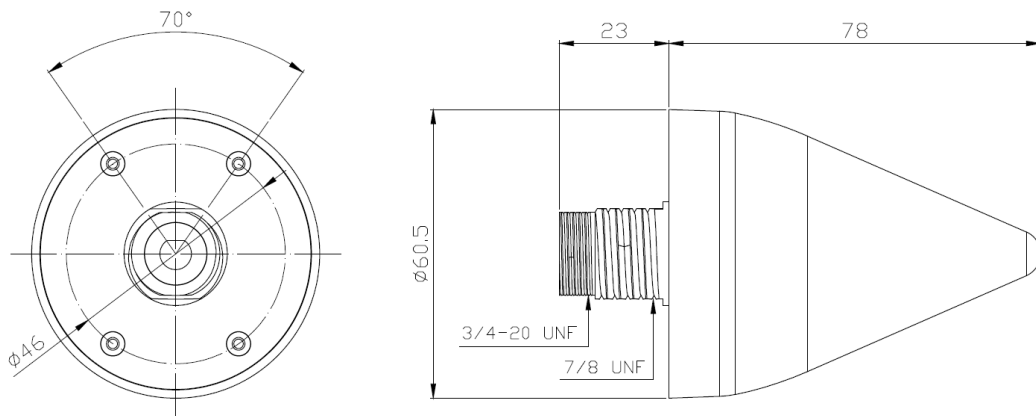


V. 3D Radiation Pattern:

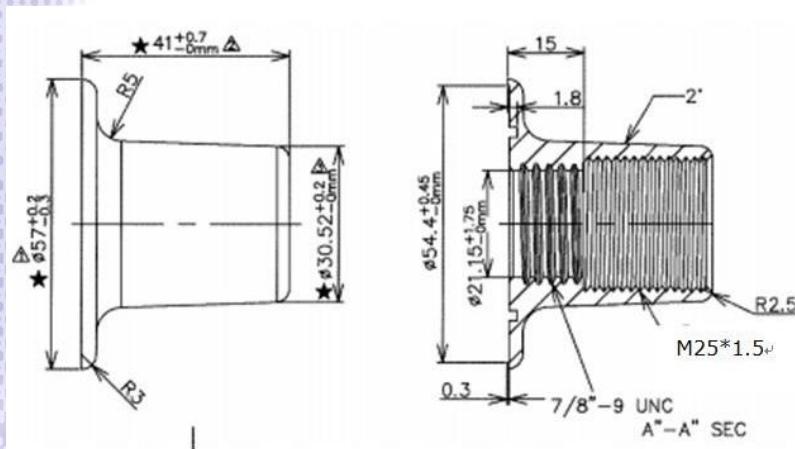


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VI. Mechanical Drawing (Unit:mm):



Pole Mount



Unit: mm