



Product Name: GPS Antenna

Part Number: GA-88P Series

Features:

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

Applications:

- Marine Electronics
- Navigation & Tracking
- Networking(M2M)

GPS Antenna

MODEL: GA-88P Series

Preliminary

I. Specifications:

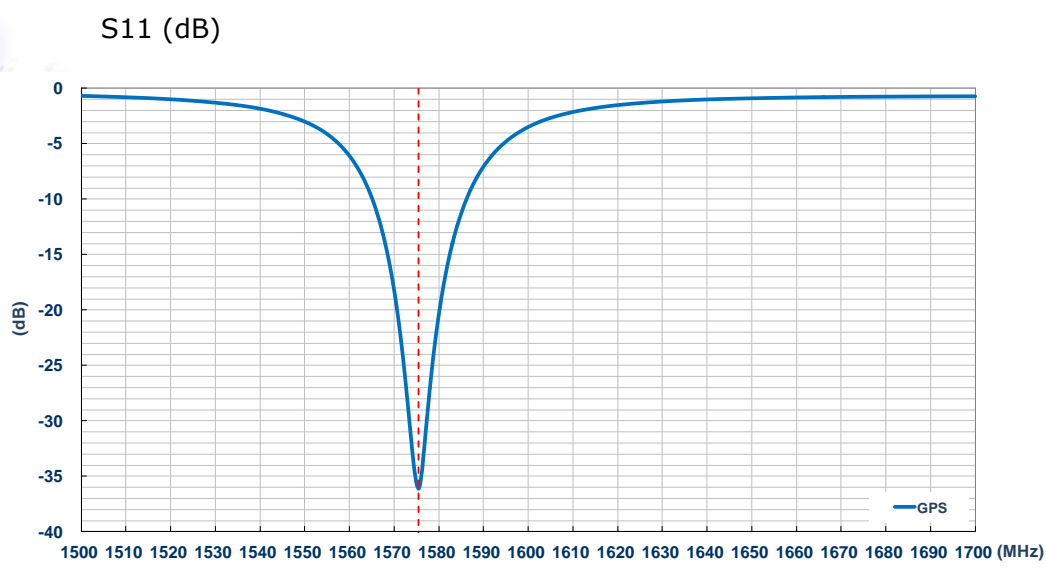
Items	Specifications
Passive Antenna performance	
Application Band	GPS
Frequency (MHz)	1575.42
Efficiency (%)	69.66
Average Gain (dBi)	-1.57
Peak Gain (dBi)	1.63
V.S.W.R	< 2
Return Loss (dB)	< -10
Impedance (Ω)	50
Polarization	R.H.C.P. (Right-Handed Circular Polarization)
Active Antenna Performance	
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

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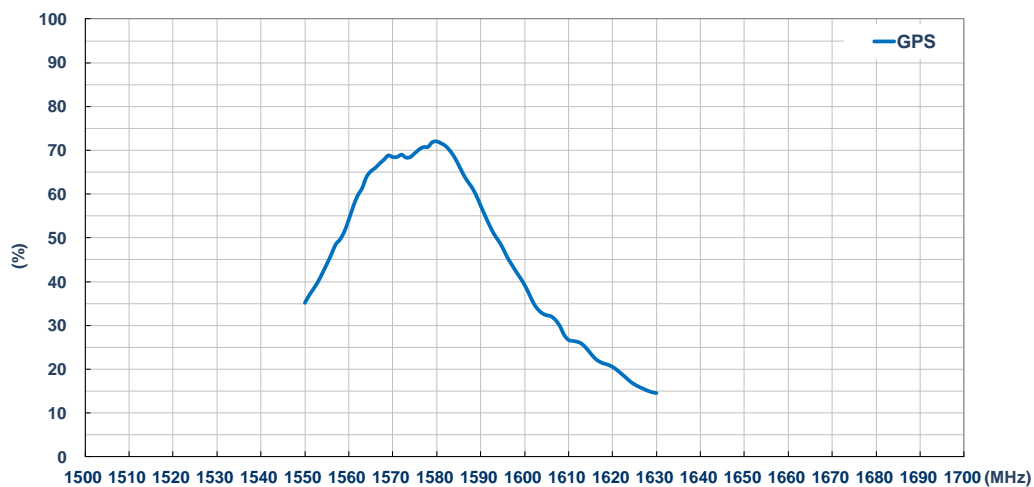
Out Of Band Rejection			
Frequency (MHz)	600 ~ 1350	1350 ~ 1520	1650 ~ 3000
Out Of Band Rejection (dB)	50	34	45
ESD Protection			
Contact Discharge (KV)	± 8		
Air Discharge (KV)	± 15		
Mechanical Specifications			
Dimensions (mm)	φ 80(D) x 71.2(H)		
Waterproof	IP67		
Cable / Length	RG58 / 10 meters		
Connector	TNC (SP)		
Environmental Conditions			
Operation Temperature	-40 ~ +85 °C		
Storage Temperature	-40 ~ +85 °C		
Waterproof Resistant	IP67		
Relative Humidity	95% non-condensing		

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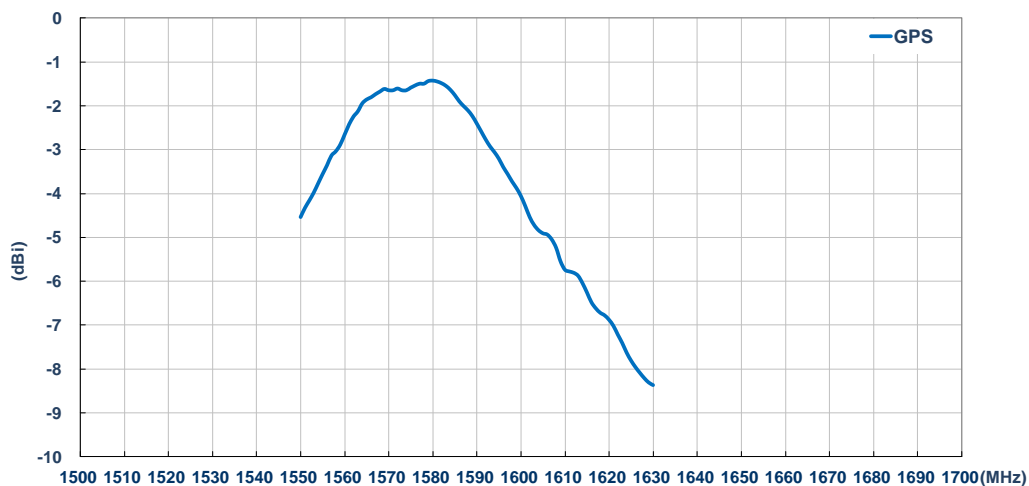
II. Antenna Technical Parameters:



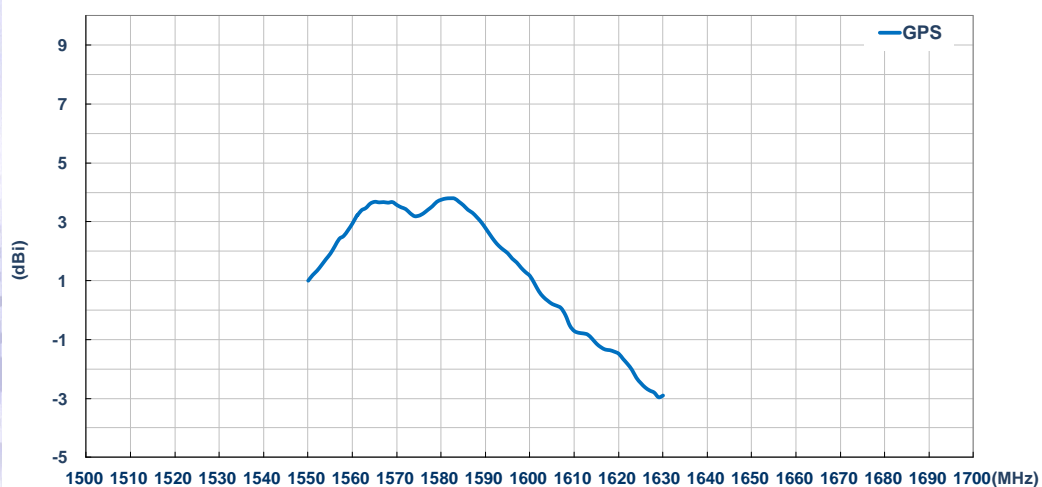
Efficiency (%)



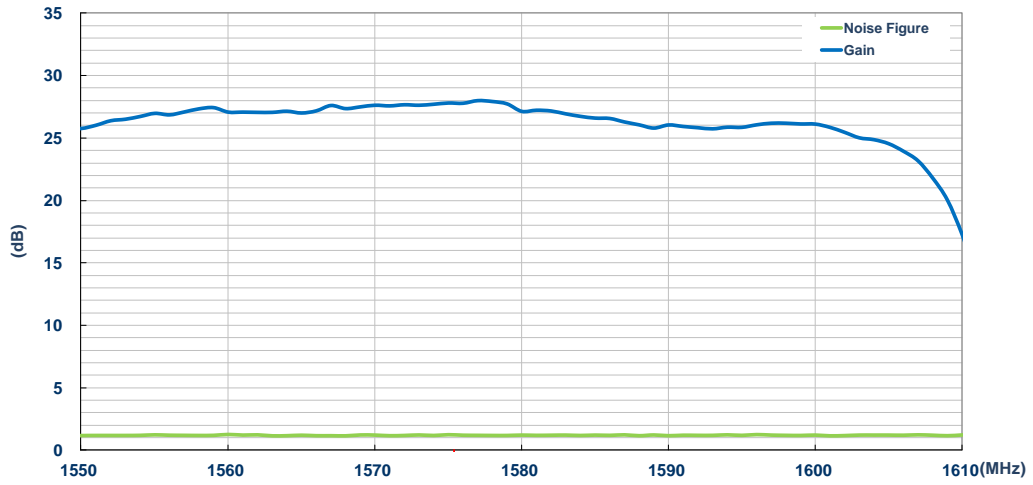
Average Gain (dBi)



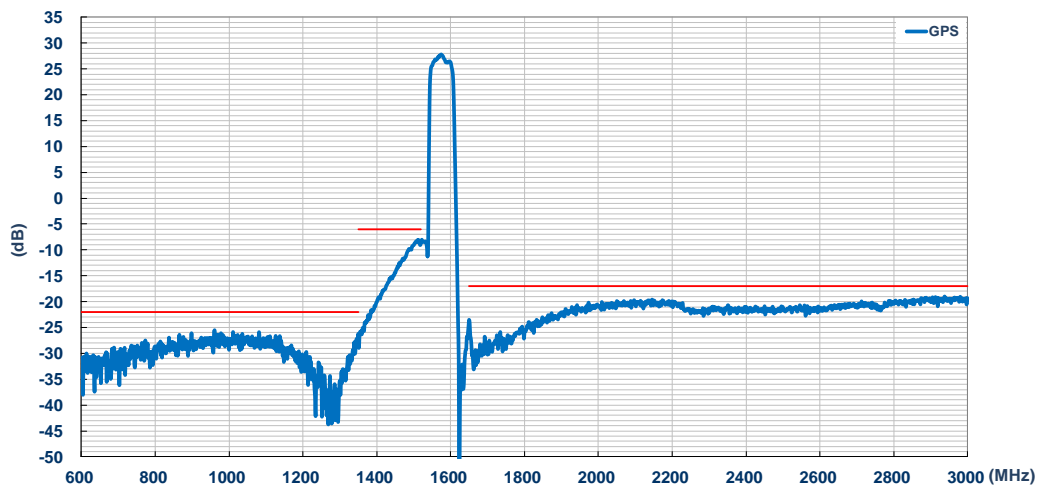
Peak Gain (dBi)



Noise Figure & Gain (dB)

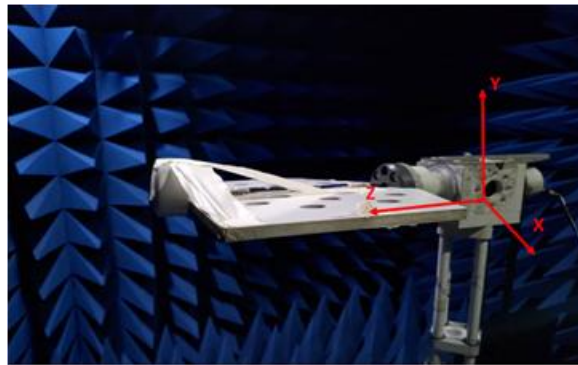


Out of Band Rejection (dB)



III. Antenna Radiation Pattern Measurement:

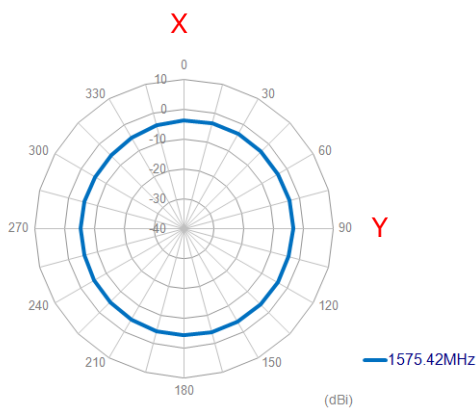
The antenna radiation patterns are measured in 3D Anechoic Chamber. The measurement setup is as show below,



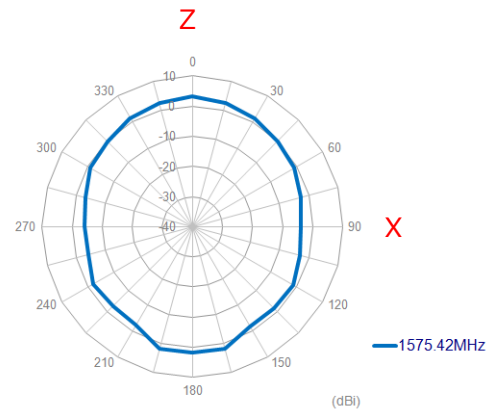
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IV. 2D Radiation Pattern:

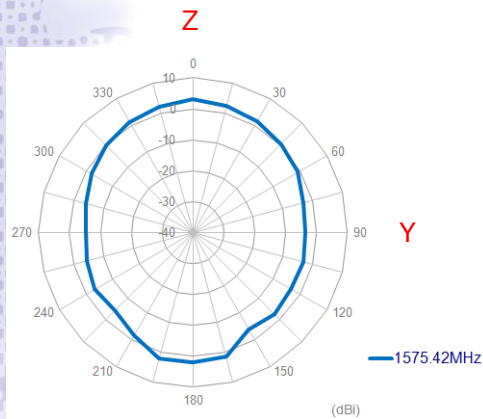
X-Y Plane



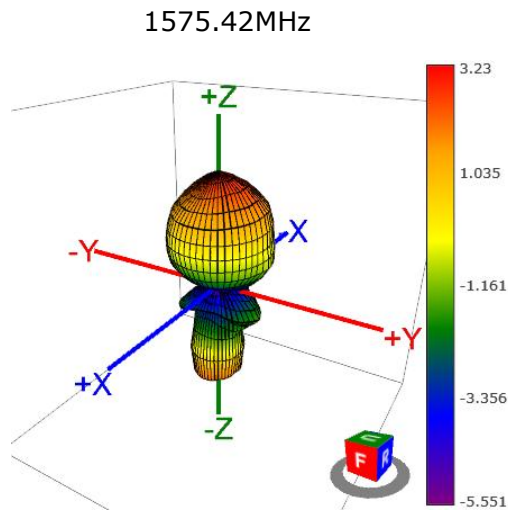
X-Z Plane



Y-Z Plane

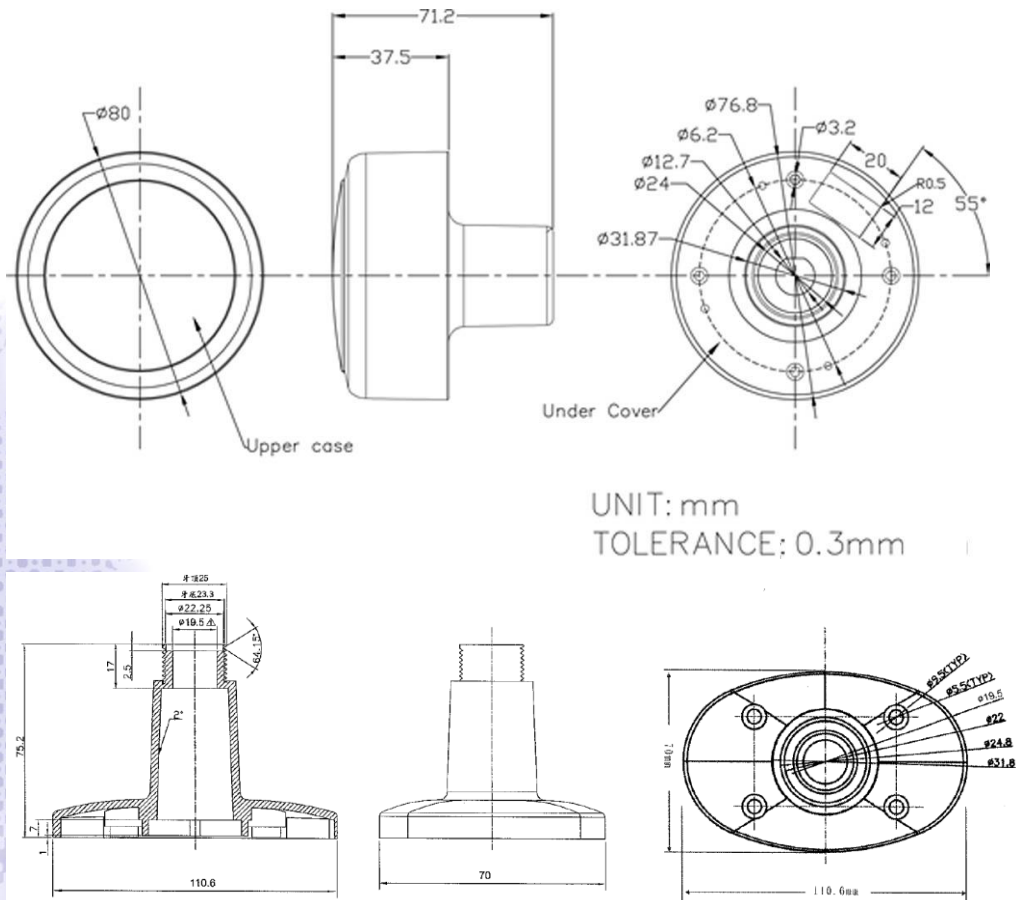


V. 3D Radiation Pattern:

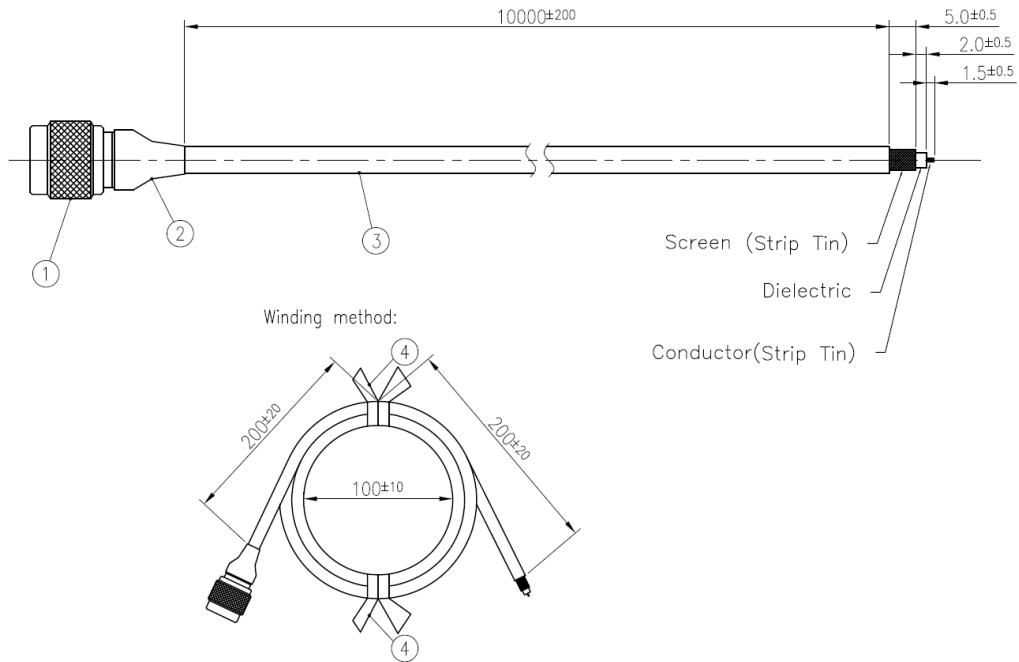


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VI. Mechanical Drawing (Unit:mm):



Cable



4	Twist Tie	PVC	Black	1
3	Cable RG58	PVC	Black	1
2	Molding	PVC	Black	1
1	TNC(SP) Connector	Brass	Ni plating	1
No	NAME	MATERIAL	FINISH	Q'TY

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