



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

Part Number: EG-16W-AC-B04

Features:

- GPS L1, GLONASS L1, BEIDOU B1, GALILEO E1, and QZSS L1 Frequencies
- Compact Construction / Low Profile / Fully Waterproof / Designed for harsh environment
- Special Cone Housing reduces the effect of snow or dust coverage, as well as bird perching
- Outstanding Out of Band Attenuation capability
- Anti-theft locking nut
- Ultra-High Sensitivity
- Lightning Induced Surge Protection, IEC 61000-4-5 (Class 4) 4kV

External One Port GNSS Antenna

MODEL: EG-16W-AC-B04

WI-RD-D-291 V1.1

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I. Specifications:

Category	Specifications		
Electrical Characteristics			
Polarization	R.H.C.P.(Right Handed Circular Polarization)		
Gain @ Zenith (typical)	1561 MHz	-0.5 dBic	
	1575.42 MHz	2 dBic	
	1598 ~ 1606 MHz	0.6 dBic	
	Mounted on the 70mm x 70mm square ground plane		
Axial Ratio	3 dB max.		
	Mounted on the 70mm x 70mm square ground plane		
Low Noise Amplifier			
Frequency (MHz)	1561 ~ 1606		
Gain	35dB ±3dB @ 5V		
Bandwidth	51 MHz min. @ S11≤-10 dB		
Noise Figure (typical)	< 1.5 dB		
Supply Voltages	3 ~ 5.5V DC		
V.S.W.R	2.0 max.		
Current Consumption (typical)	12 mA		
Out of Band Rejection	f0=1586MHz	f0 ± 50MHz: ≥ 34 dB	
		f0 ± 60MHz: ≥ 60 dB	
Overall Specification (Through Patch and LNA)			
Center Frequency (MHz)	1561	1575.42	1598~1606
Gain @ Zenith	35 ± 3dB (Cable loss) note 1.		
V.S.W.R	2.0 max.		
Output Impedance	50 Ω		

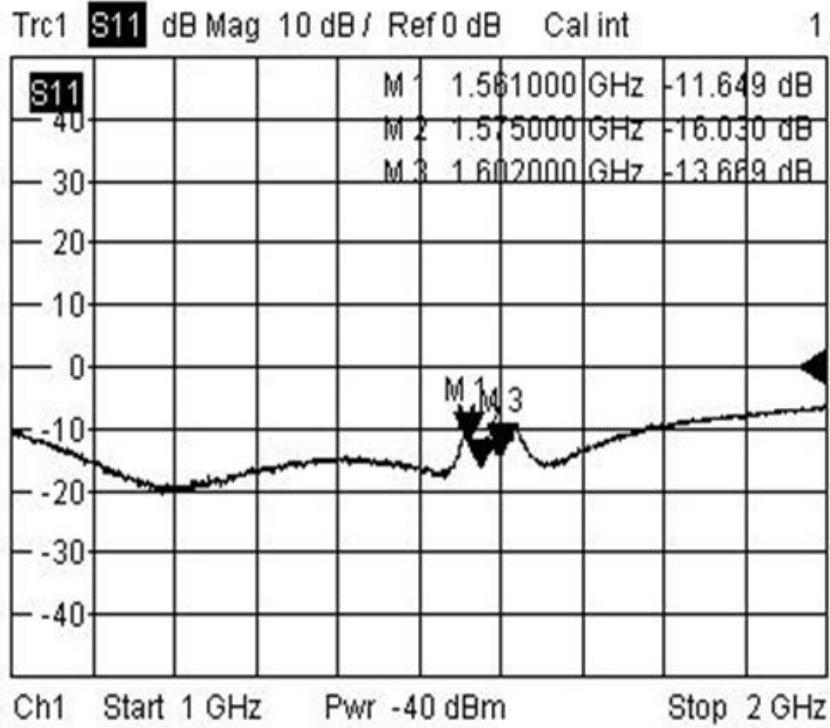
ESD Protection & Lightning Protection	
Contact (KV)	± 8
Air (KV)	± 15
Lightning Protection	IEC 61000-4-5 (Class 4) 4kV
Physical Condition	
Construction	Polycarbonate radome detachable cable/connector for easy mount, rubber-O-ring between top radome and screw base for waterproof.
Dimension (mm)	φ 60.5(D) x 78(H)
Weight	125 g (w/o cable & connector)
Color	Standard in ivory with 0.8 inch threaded wing nut(standard accessory)
Mounting	Bulkhead mount with 0.8 inch threaded wing nut(standard accessory)
Waterproof Resistant	IP67
Cable & Connector	
RF Cable	5 meter RG174/U (standard) cable & length (optional)
Pulling Strength	6 Kg @ 5sec.
Connector Available	BNC, TNC, GT5, MCX(OSX), SMA, SMB or SMC. Straight or right angle.
Optional Adapters	Universal Connector Adapter (FME to TNC/BNC/SMA/SMB/MCX)
Environmental Conditions	
Operation Temperature	-40 ~ +85 °C
Storage Temperature	-40 ~ +85 °C
Relative Humidity	95% non-condensing

Note 1:Cable loss-(-1.2dB/m)

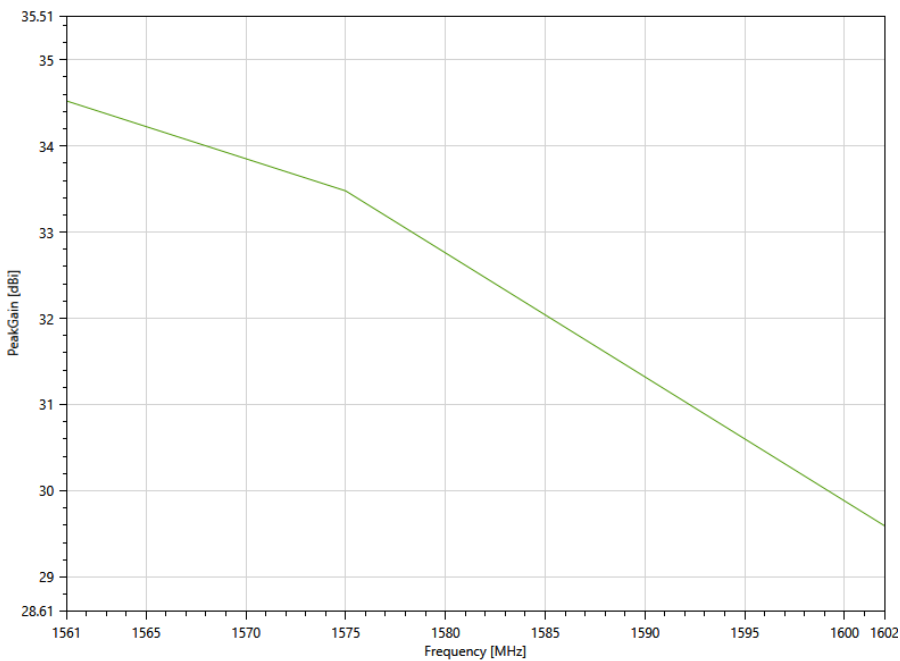
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II. Antenna Technical Parameters:

S11



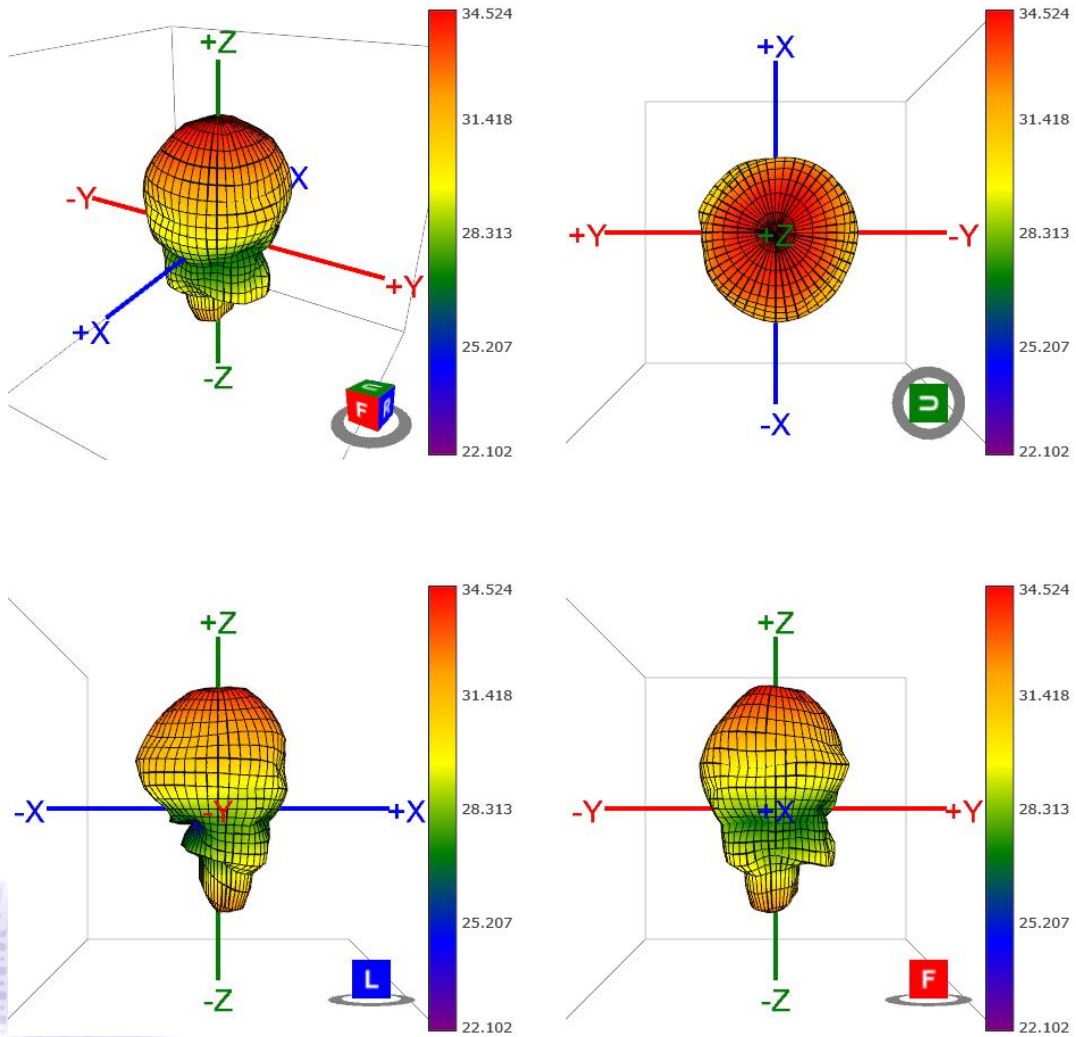
Peak Gain (dBi)



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III. 3D Radiation Pattern:

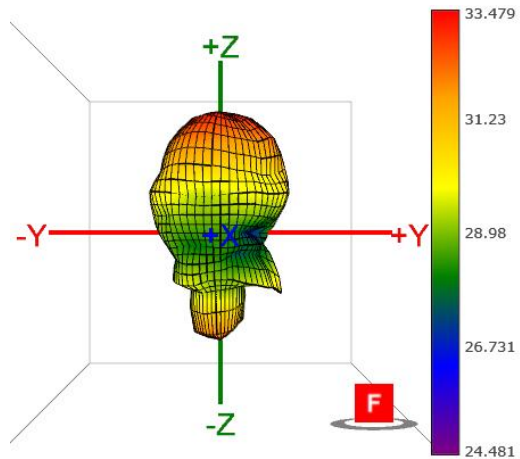
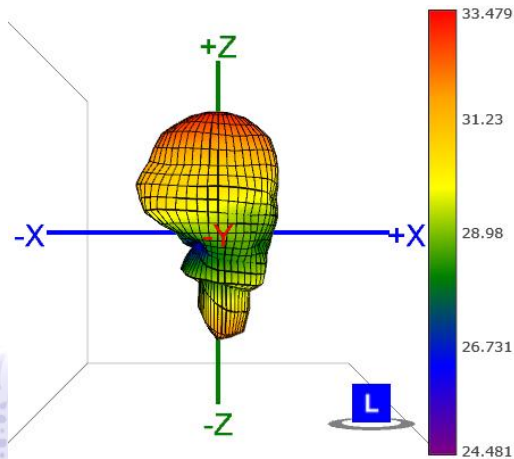
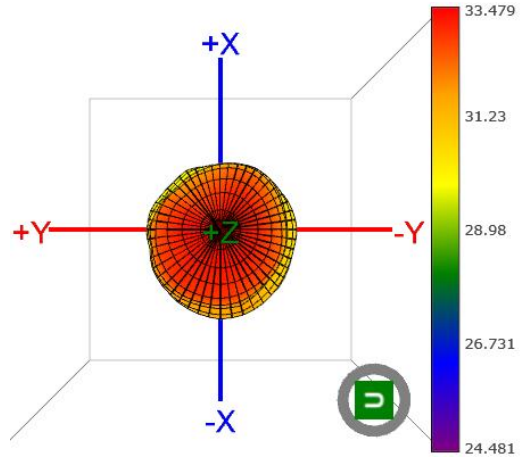
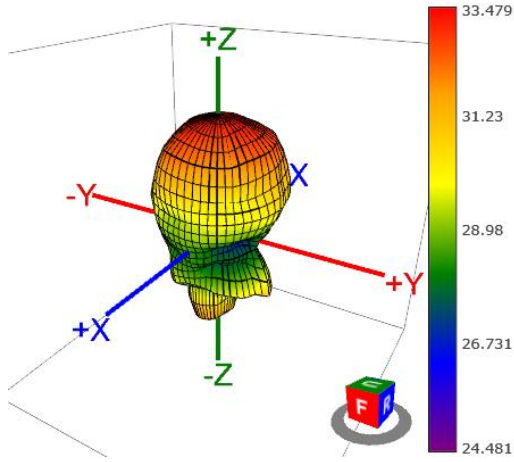
1561MHz (dBi)



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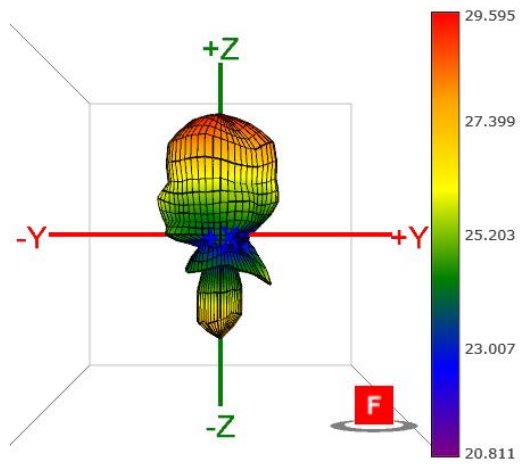
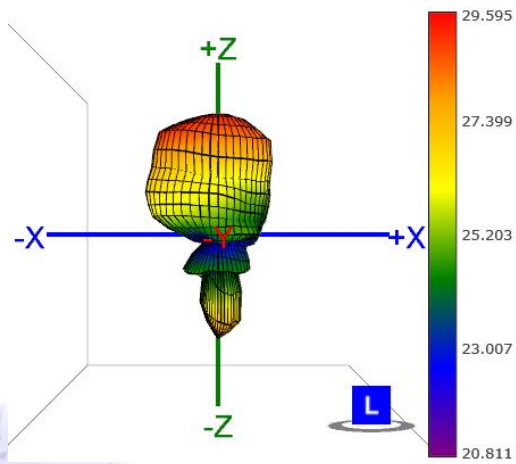
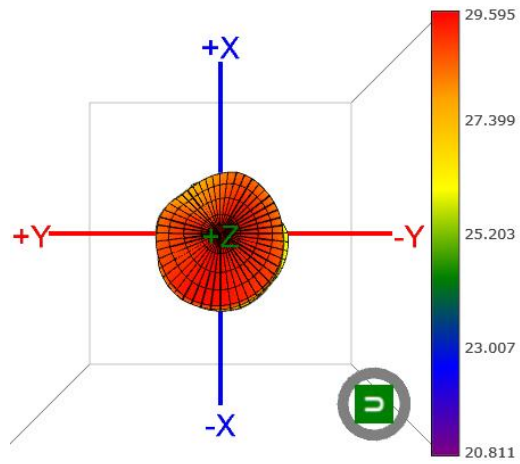
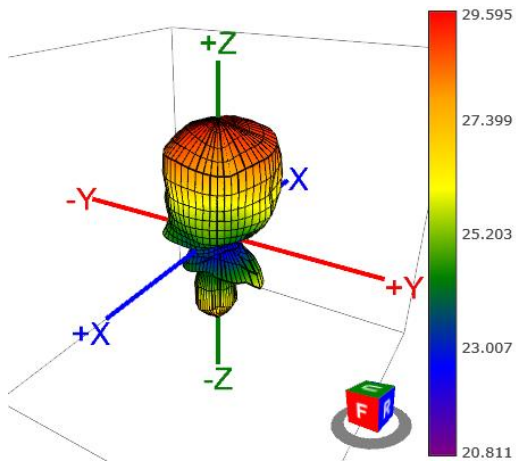
1575MHz (dBi)



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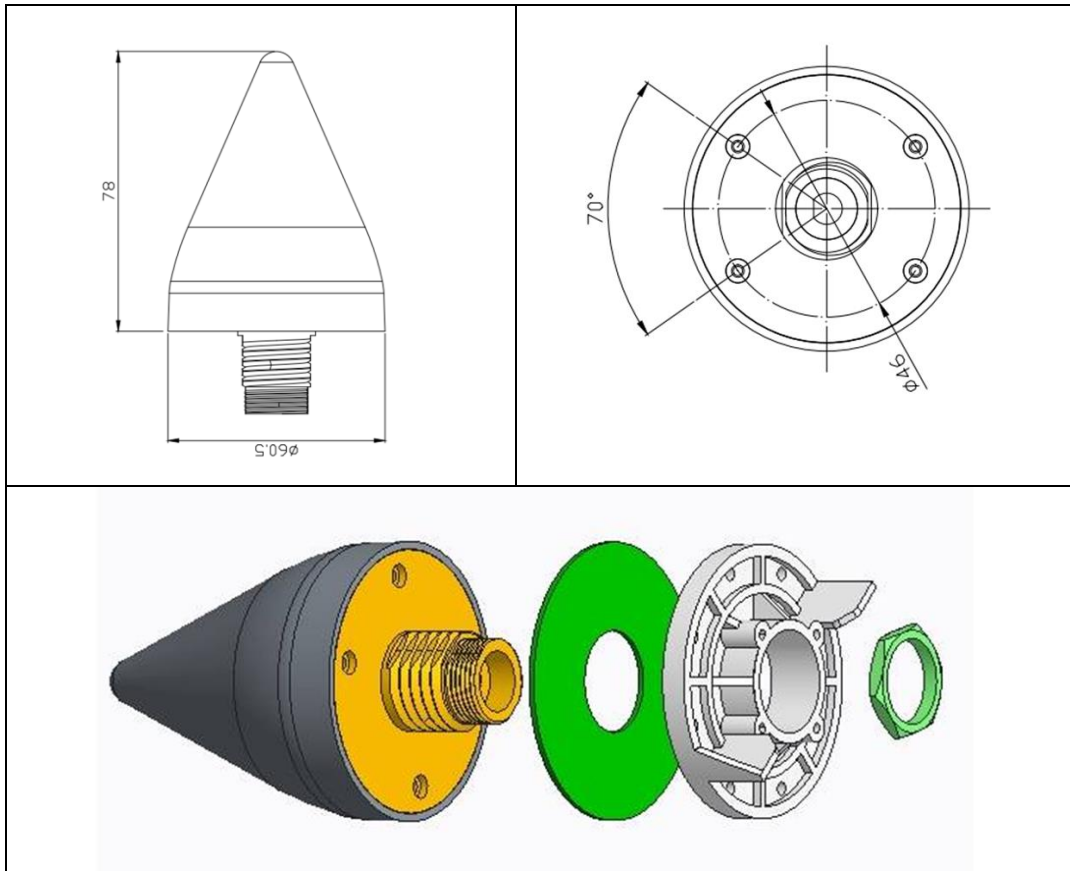
1602MHz (dBi)



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IV. Mechanical Drawing (Unit:mm):



Tolerance: 0.3mm

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