

# Active Multiband GNSS External Antenna



AEACBD050018-SG3



50.0 x 50.0 x 18.0 mm  
RoHS/RoHS II Compliant  
MSL = 1

## Features

- High positioning accuracy
- GPS/GLONASS/BeiDou/Galileo band support
- IP67 Rated
- Gain of 5.0 dBic
- Active GNSS with integrated LNA
- High LNA gain of 34 dB
- Low VSWR of 1.5
- RHCP polarization
- Magnetic mounting
- Improved GNSS reliability

## Applications

- GPS/GLONASS/BeiDou/Galileo applications
- IoT
- M2M
- Surveillance
- Fleet management and asset tracking
- Autonomous driving
- Telematics
- Agriculture
- Instrumentation
- Survey

## Electrical Specifications

Parameters	Min.	Typ.	Max.	Units	Note
Frequency Range		1561.098 ~ 1602		MHz	
VSWR			1.5		
Polarization		RHCP			Right Hand Circular Polarization
Impedance		50		$\Omega$	
Gain		5		dBic	@PCB Zenith
Axial Ratio			3	dB	

LNA Parameters	Min.	Typ.	Max.	Units	Note
Gain	32	34	36	dB	
VSWR			2.0		
Noise Figure			1.5	dB	
Supply Voltage		3~5		V	DC
Current Consumption			20	mA	

## Mechanical Characteristics

Parameters	Description
Connector	SMA
Cable Type	RG174/3M
Mounting	Magnet
Radom Material	ABS

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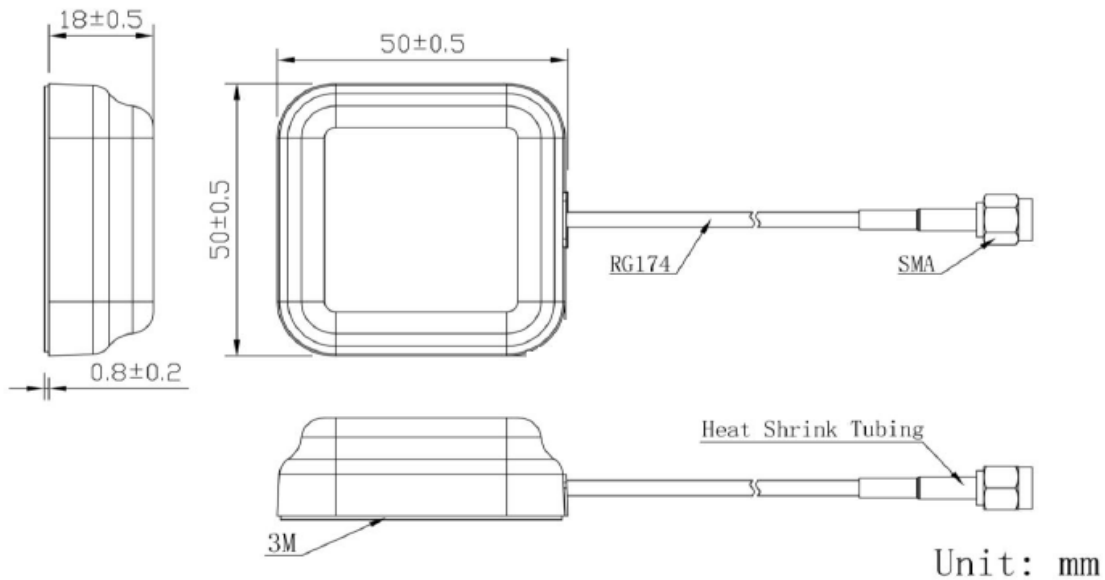


50.0 x 50.0 x 18.0 mm  
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## Environmental Characteristics

Parameters	Description
Ingress Protection	IP67 rated
Operating temperature	-40°C to +85°C
Relative Humidity	Up to 95 %
Vibration	10 to 55 Hz with 1.5 mm amplitude 2 hours

## Dimensions



## Product Image



# Active Multiband GNSS External Antenna

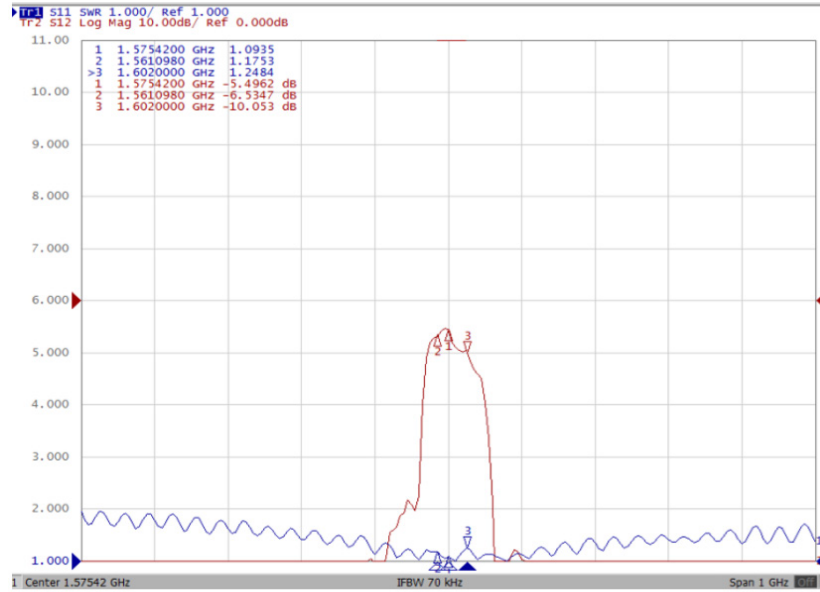


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## VSWR

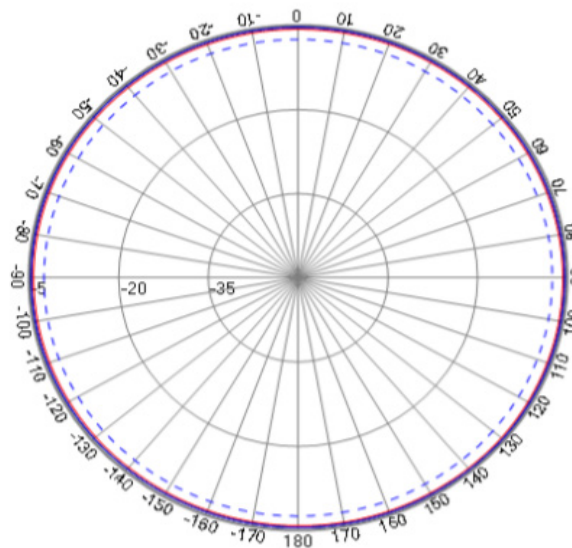


## Radiation Patterns:

### 2D- Pattern

Frequency: --- 1561 --- 1575 --- 1602

### XY - Plane



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REVISED: 01.25.2019

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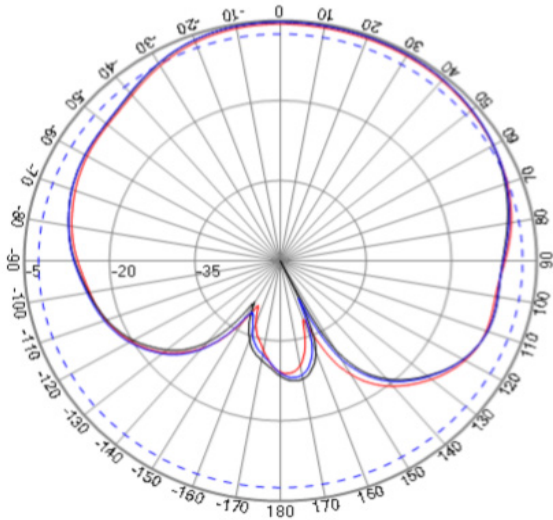
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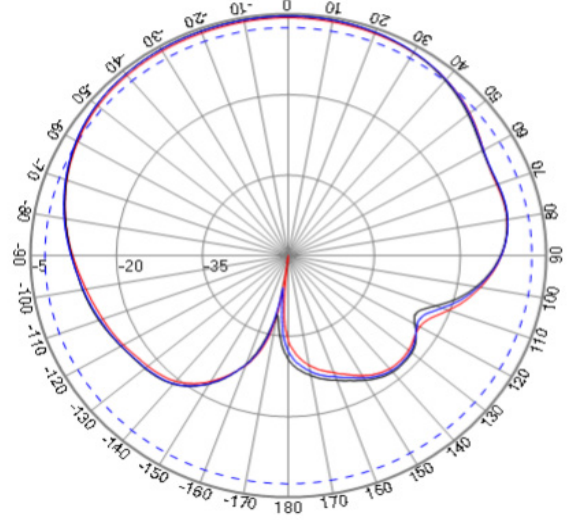
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## Radiation Patterns:

XZ - Plane



YZ - Plane

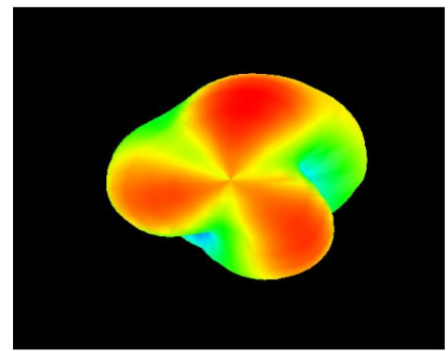
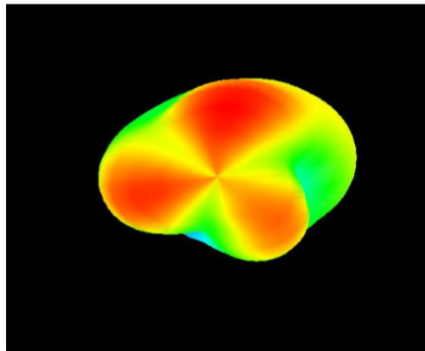
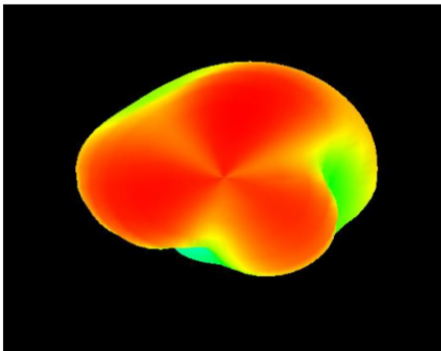


## 3D- Pattern

Frequency: 1561 MHz

Frequency: 1575.42 MHz

Frequency: 1602 MHz



## Packaging

The carton weighs of 15 Kgs and has 100 pieces in a dimension of 70.0 x 32.0 x 16.0 cm.



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