

External Combo Antenna LTE/GPS



AEACBD081016-C2LG



Ø81.6 x 16.2 mm
RoHS/RoHS II Compliant
MSL = 1

Features

- 4G/LTE full band coverage
- Active GPS with LNA gain of 28 dB
- IP67 rated
- Magnetic mount
- RHCP for GPS antenna

Applications

- 4G/LTE/3G/2G/GSM applications
- GNSS/GPS
- Telematics
- M2M
- IoT and Industrial IoT
- Geolocation and tracking
- Transportation and agriculture
- Smart city

Electrical Characteristics

Parameters	Min.	Typ.	Max.	Units	Note
LTE Antenna					
Frequency Range		698-960/1710-2690		MHz	
VSWR			3.0		
Polarization	Linear				
Impedance		50		Ω	
Gain		2.5		dBi	
GPS Antenna					
Center Frequency		1575.42±3		MHz	
Bandwidth		CF±5		MHz	
Polarization		RHCP			
Gain		2		dBic	Zenith
VSWR			2.0		
Impedance		50			
Axial Ratio			3	dB	
LNA					
Gain		28±2		dB	
Noise Figure			1.5	dB	
VSWR			2.0		
Supply Voltage		2.2~5.0		V	DC
Current Consumption			15	mA	

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Mechanical Characteristics

Parameters	Description
Connector	SMA Male
Cable Type	RG174
Cable Length	3M
Material	ABS
Mount way	Magnetic
Dimensions	Φ81.6x16.2mm

Environmental Characteristics

Parameters	Description
Waterproof	IP67
Operating Temperature	-40 ~ +85°C
Relative Humidity	Up to 95%
MSL Level	1
ROHS Complaint	Yes
Vibration	10 to 55Hz with 1.5mm amplitude 2 hours

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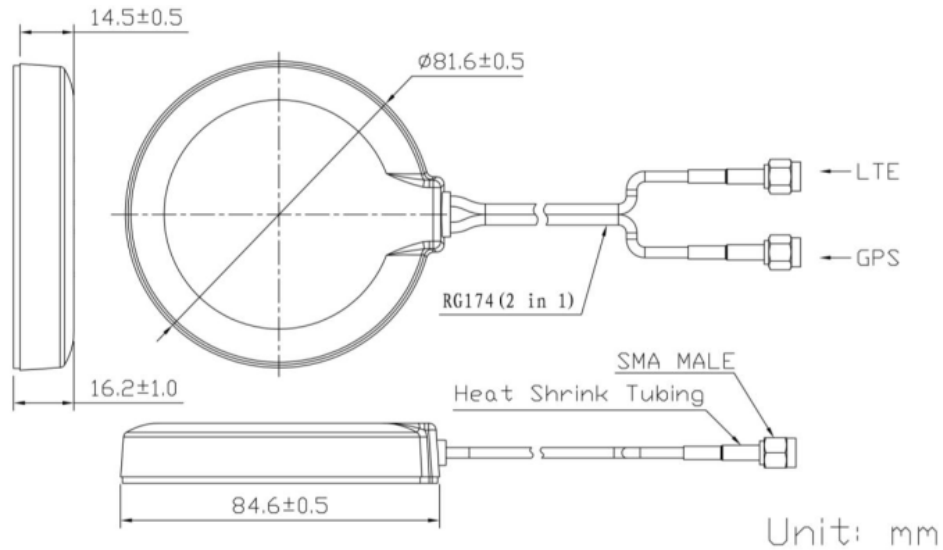


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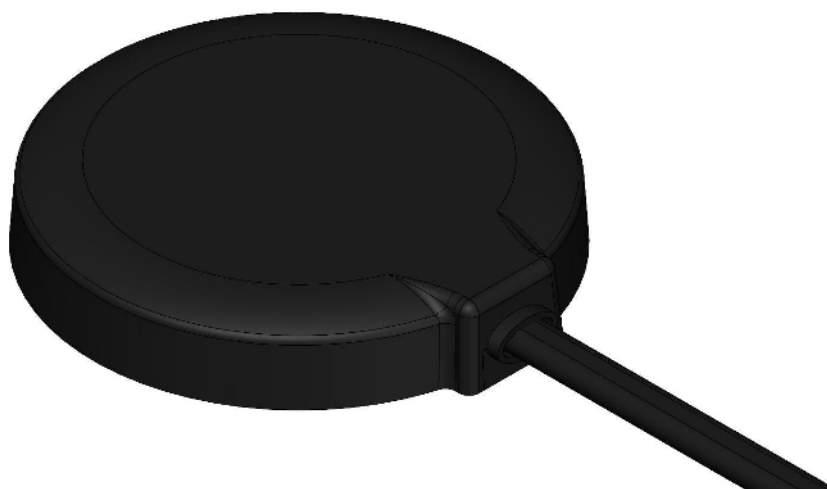


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Dimensions



Product Image



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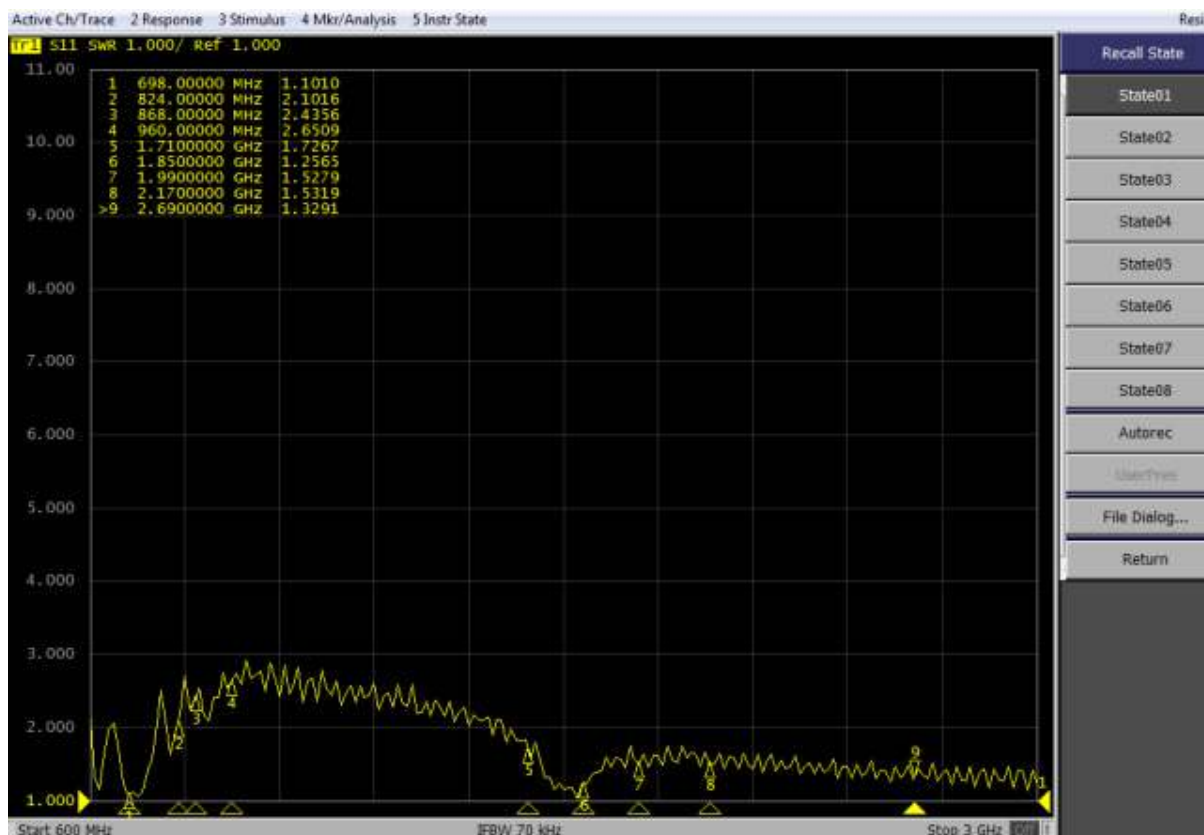


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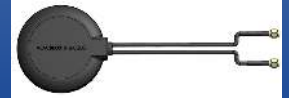
VSWR Characteristics



Gain and Efficiency

Frequency (MHz)	Efficiency	Gain (dBi)
698	0.69	2.23
824	0.58	2.38
868	0.55	1.12
960	0.54	1.0
1710	0.57	0.9
1850	0.52	0.3
1990	0.57	0.73
2170	0.59	1.96
2690	0.58	1.94

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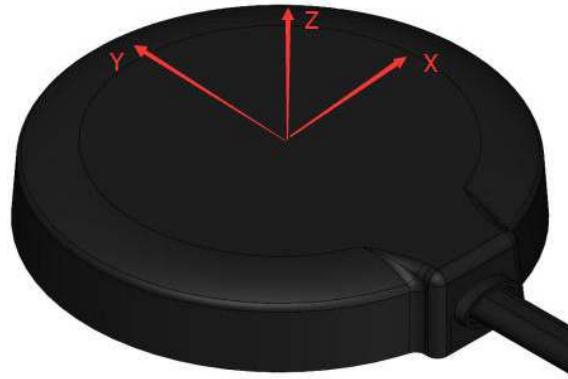


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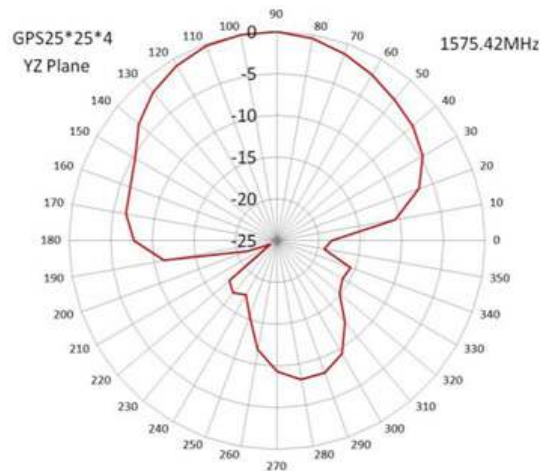
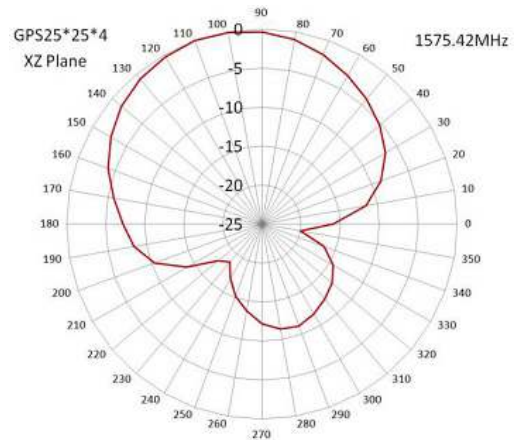
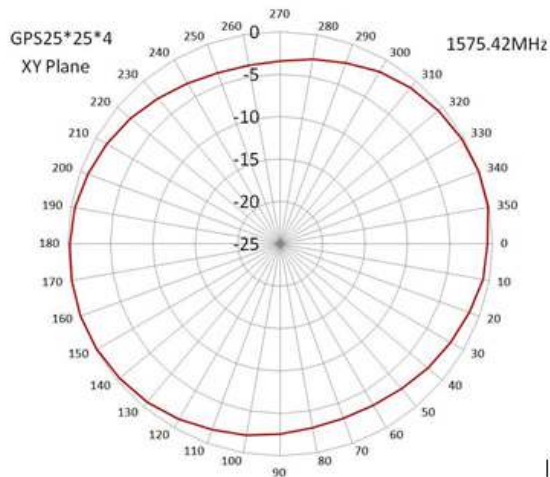
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Radiation Patterns

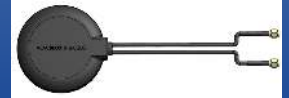


2D Radiation Patterns

GPS Antenna



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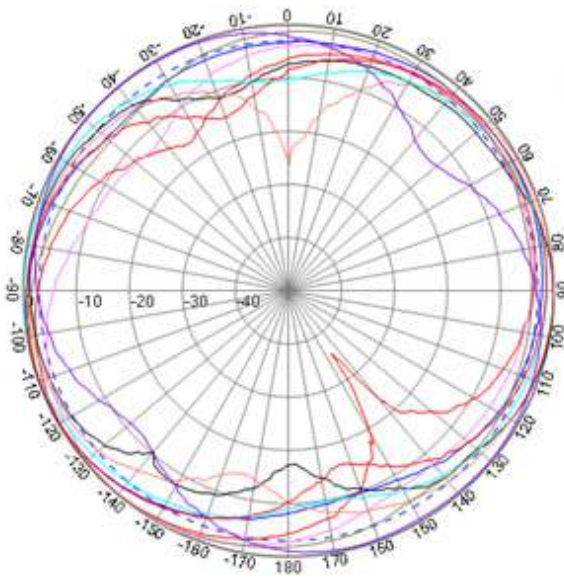
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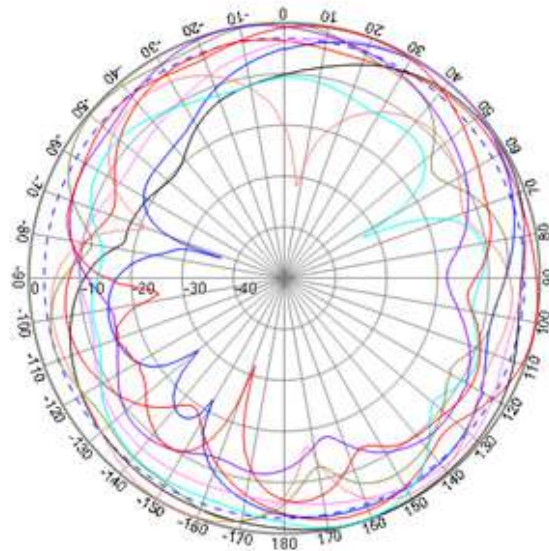
2D Radiation Patterns

LTE Antenna



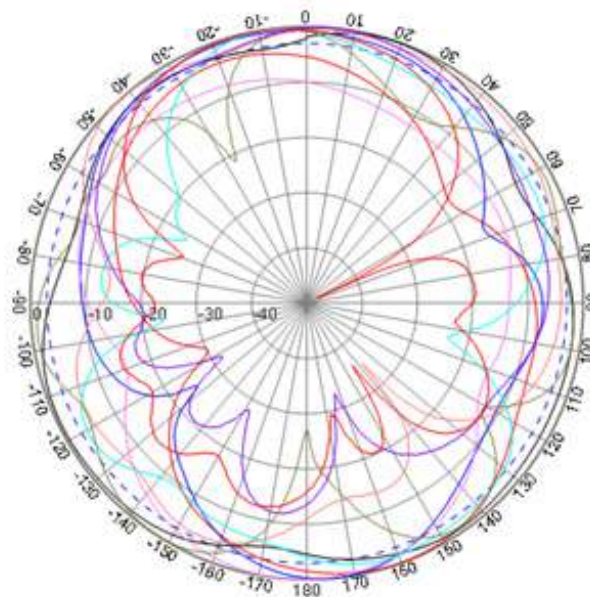
XY PLANE

- Freq: 700
- Freq: 824
- Freq: 868
- Freq: 960
- Freq: 1710
- Freq: 1850
- Freq: 1990
- Freq: 2170
- Freq: 2690



XZ PLANE

- Freq: 700
- Freq: 824
- Freq: 868
- Freq: 960
- Freq: 1710
- Freq: 1850
- Freq: 1990
- Freq: 2170
- Freq: 2690



YZ PLANE

- Freq: 700
- Freq: 824
- Freq: 868
- Freq: 960
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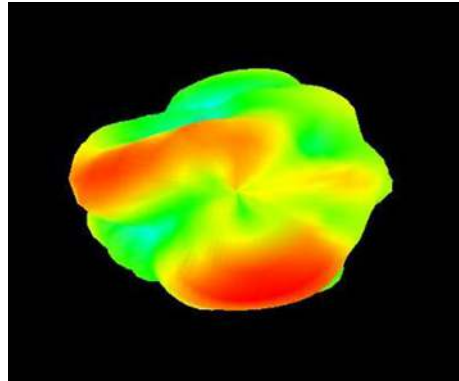


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3D Radiation Patterns

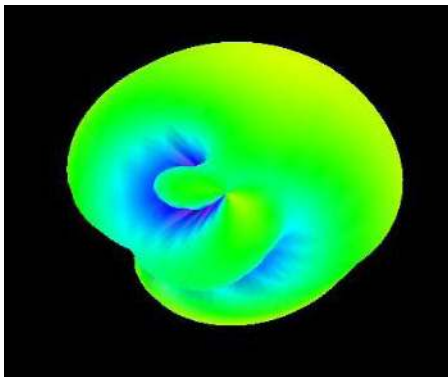
GPS Antenna

1575.42 MHz

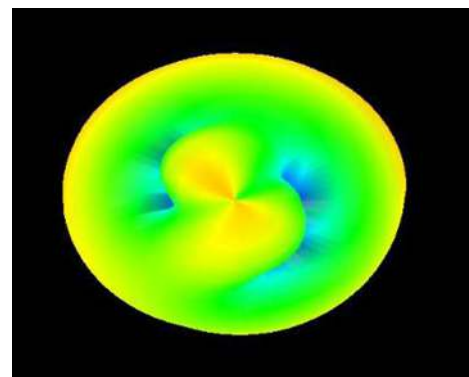


LTE Antenna

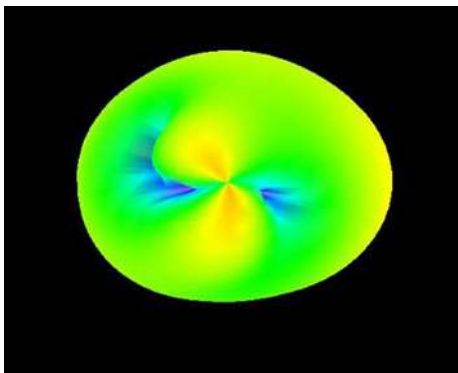
700 MHz



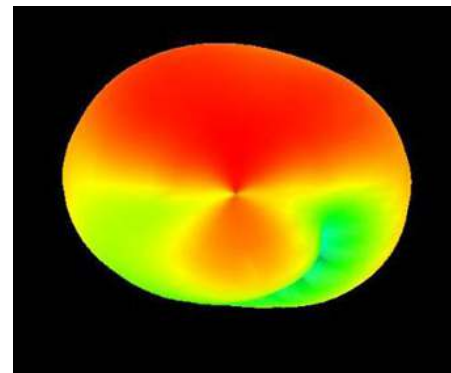
824 MHz



868 MHz



960 MHz



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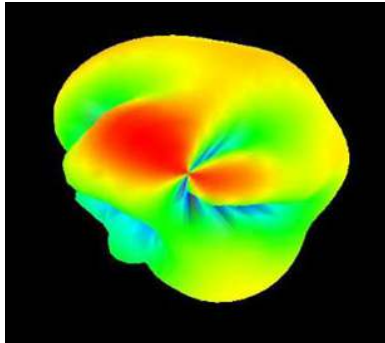
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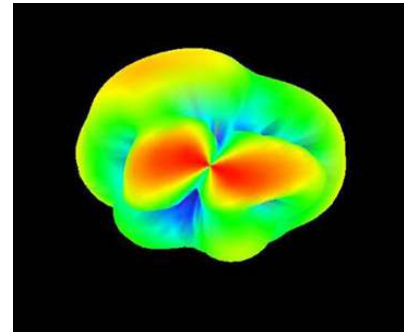
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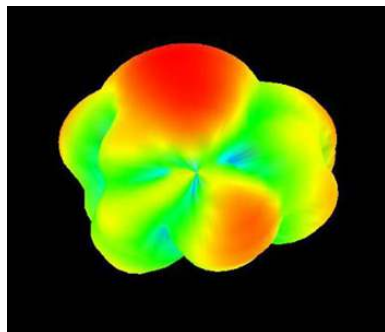
1710 MHz



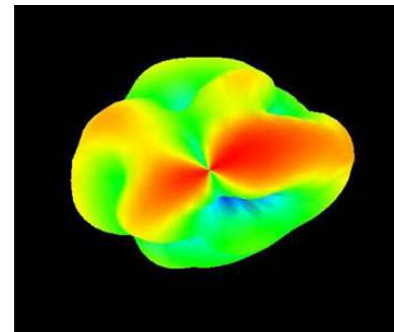
1850 MHz



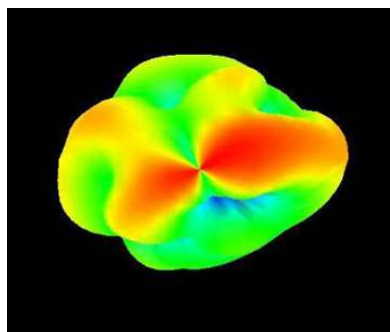
1990 MHz



2170 MHz



2690 MHz



Packaging

Each 49.5 x 22.5 x 27 cm size carton includes 50 pcs antenna, weighs 7.5 kg.

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