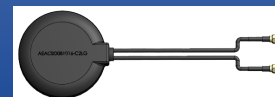


# External Combo Antenna LTE/GPS



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

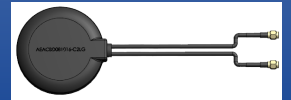
## Applications

- 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	

# External Combo Antenna LTE/GPS



AEACBD081016-C2LG



Ø81.6 x 16.2 mm  
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MSL = 1

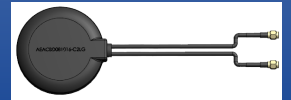
## Mechanical Characteristics

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

# External Combo Antenna LTE/GPS

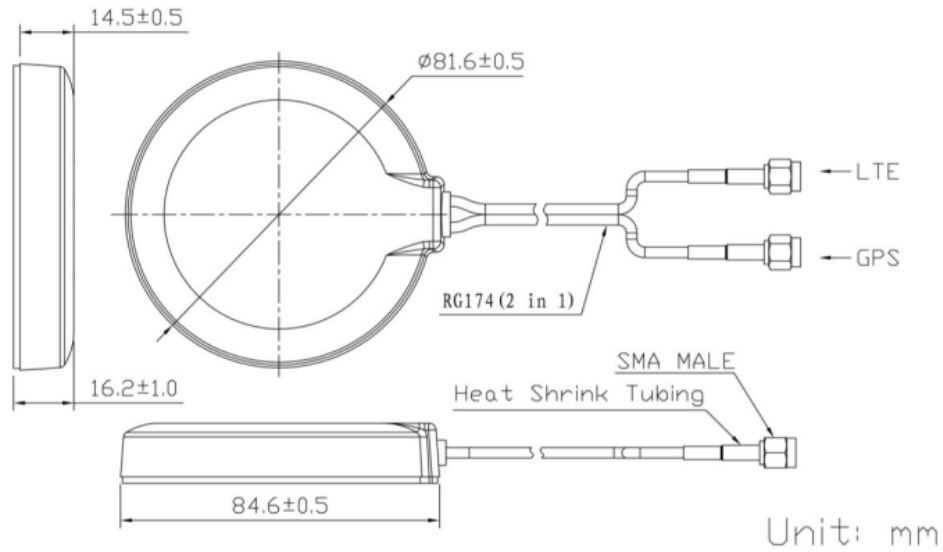


AEACBD081016-C2LG

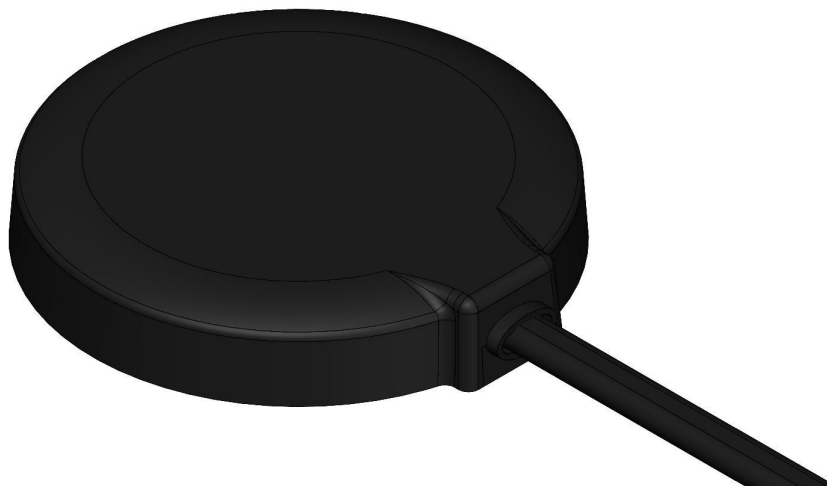


Ø81.6 x 16.2 mm  
RoHS/RoHS II Compliant  
MSL = 1

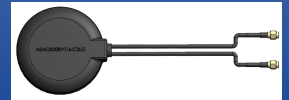
## Dimensions



## Product Image



# External Combo Antenna LTE/GPS

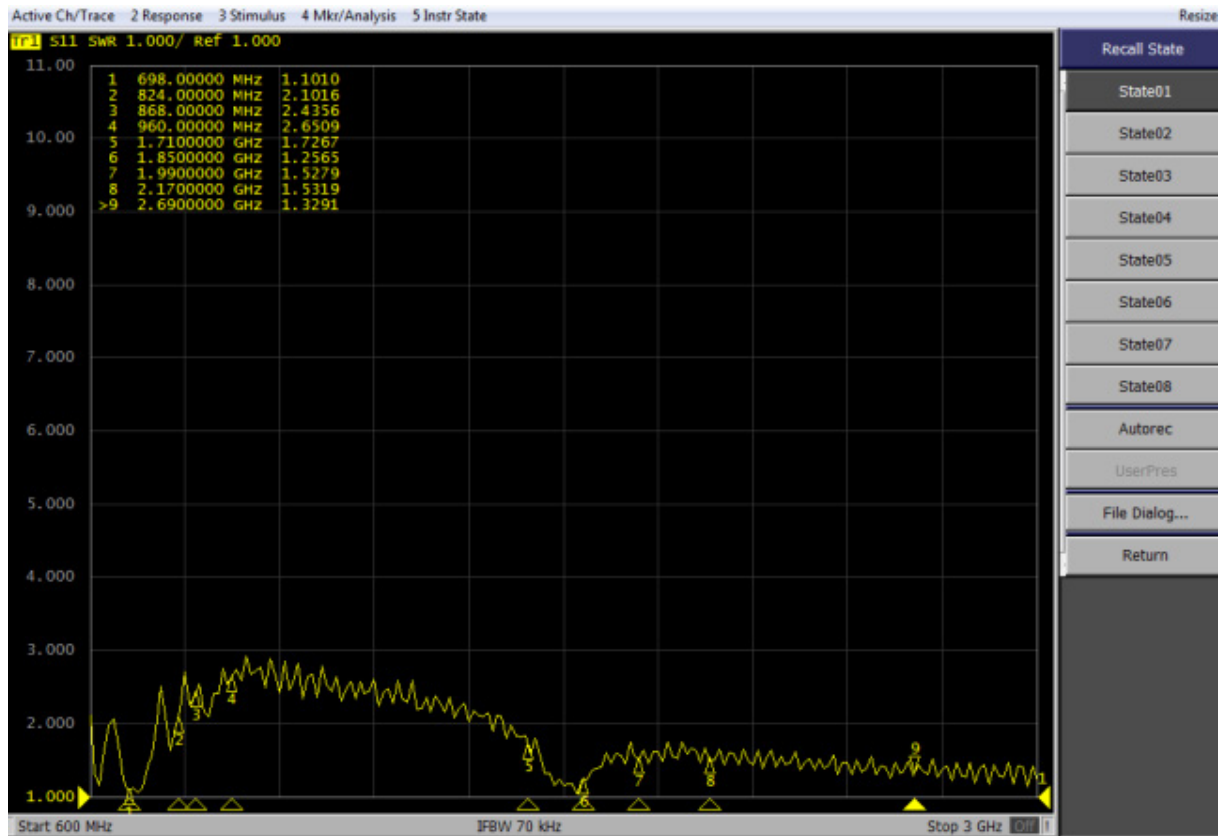


AEACBD081016-C2LG



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

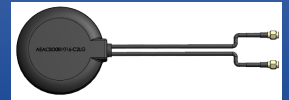
## VSWR Characteristics



## 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

# External Combo Antenna LTE/GPS

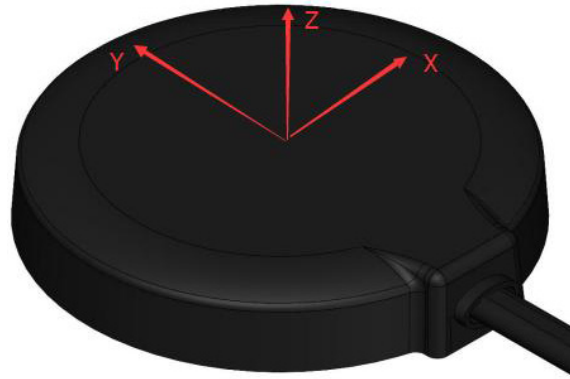


AEACBD081016-C2LG



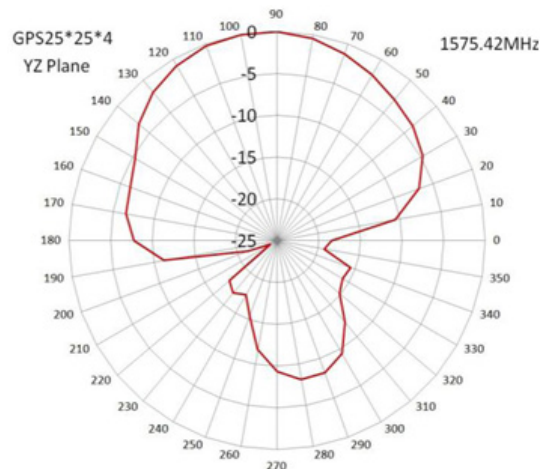
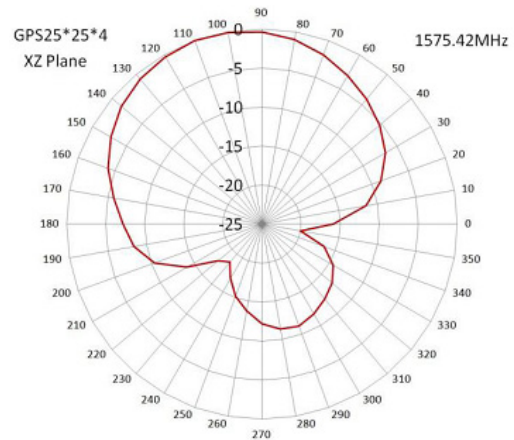
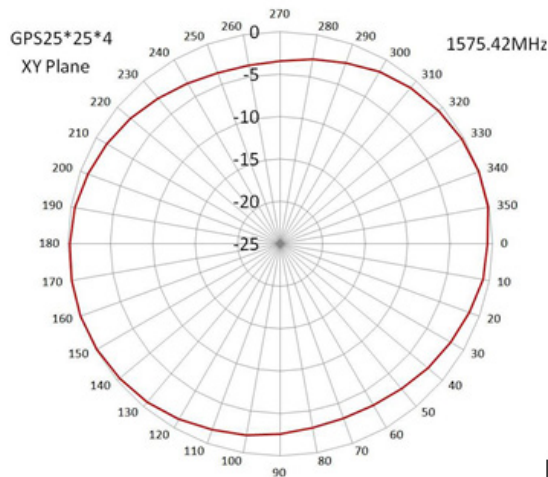
Ø81.6 x 16.2 mm  
RoHS/RoHS II Compliant  
MSL = 1

## Radiation Patterns

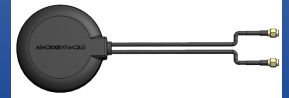


## 2D Radiation Patterns

GPS Antenna



# External Combo Antenna LTE/GPS



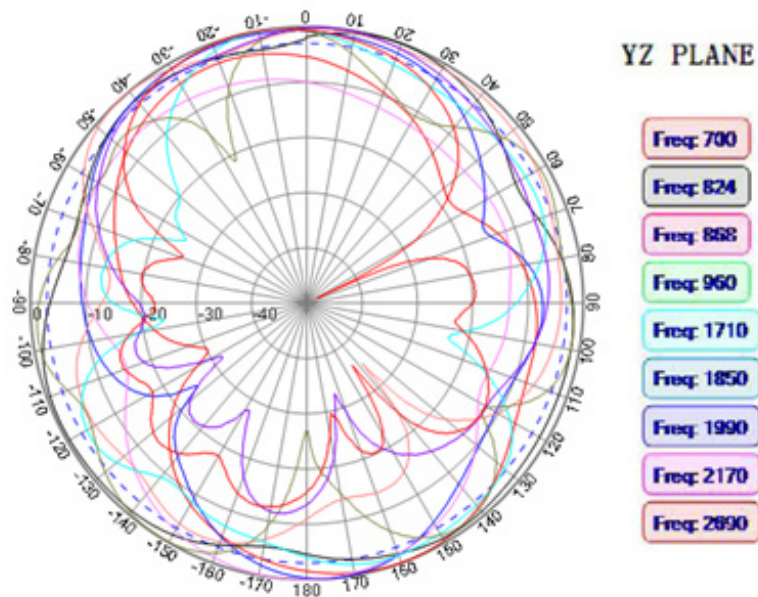
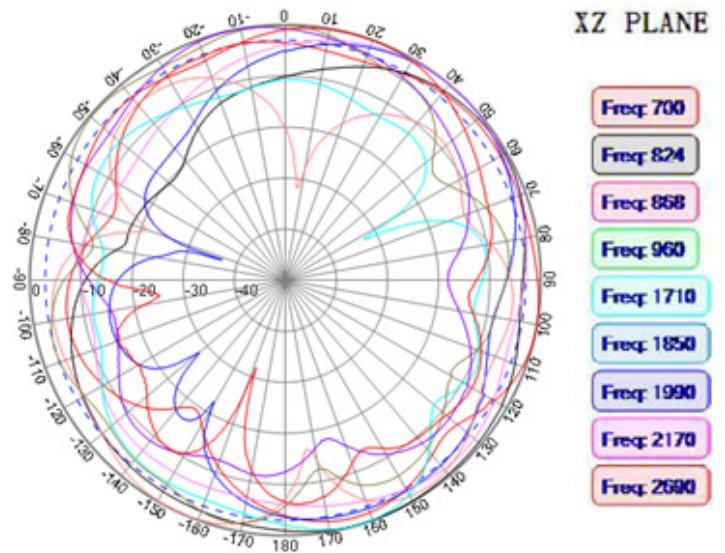
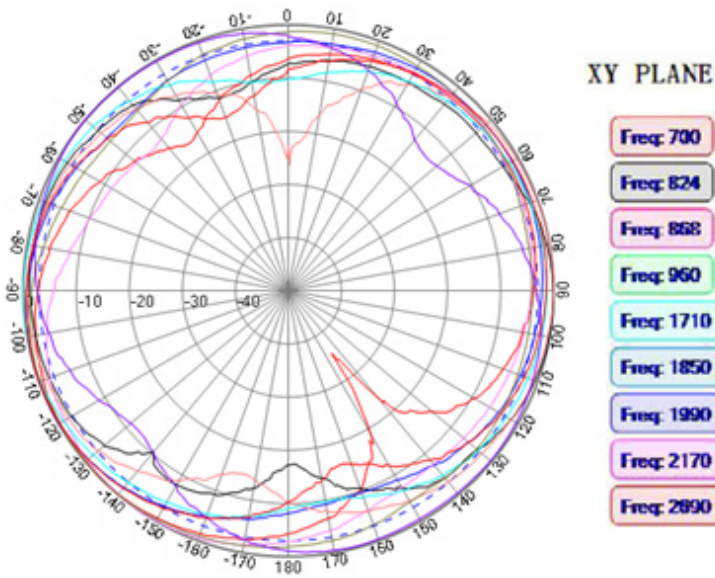
AEACBD081016-C2LG



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

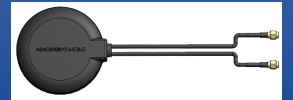
## 2D Radiation Patterns

LTE Antenna





# External Combo Antenna LTE/GPS



AEACBD081016-C2LG

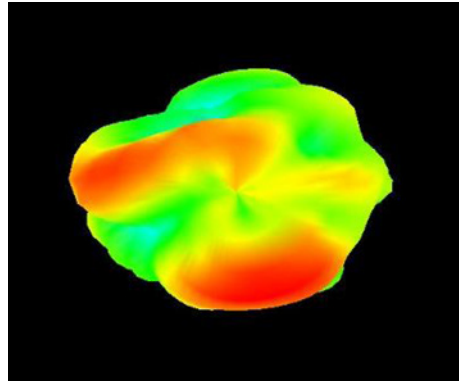


Ø81.6 x 16.2 mm  
RoHS/RoHS II Compliant  
MSL = 1

## 3D Radiation Patterns

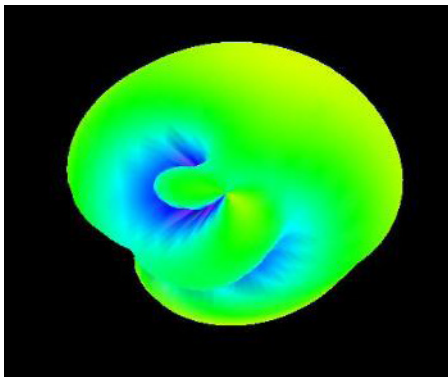
### GPS Antenna

1575.42 MHz

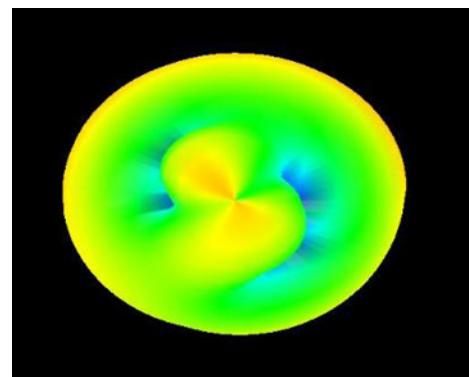


### LTE Antenna

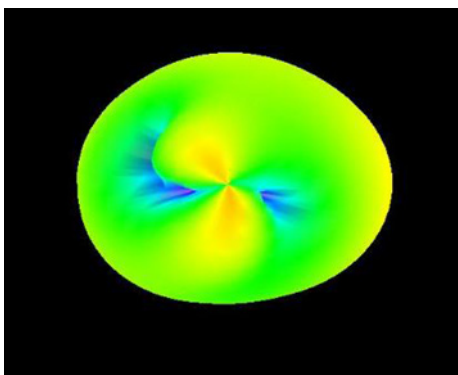
700 MHz



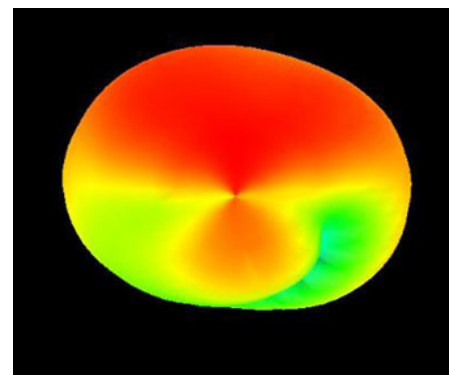
824 MHz



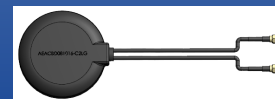
868 MHz



960 MHz



# External Combo Antenna LTE/GPS



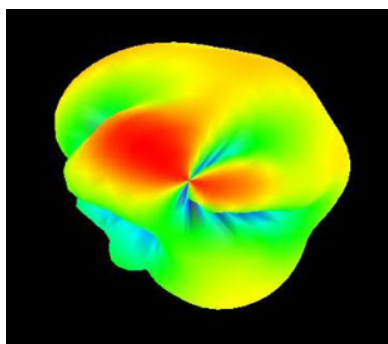
AEACBD081016-C2LG



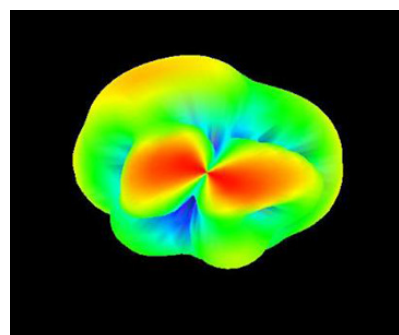
Ø81.6 x 16.2 mm  
RoHS/RoHS II Compliant  
MSL = 1

## 3D Radiation Patterns

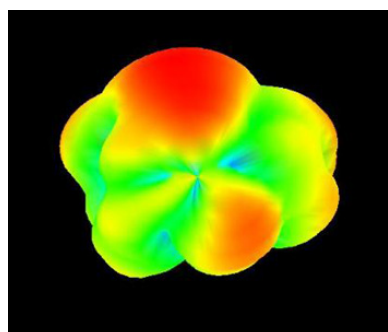
1710 MHz



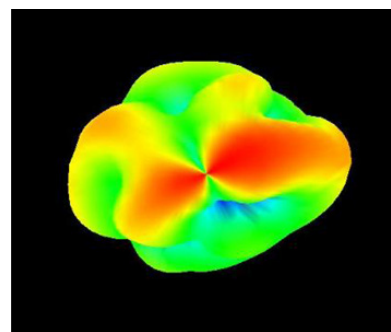
1850 MHz



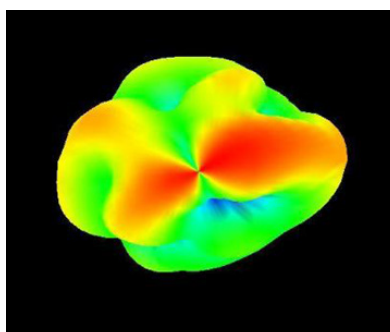
1990 MHz



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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5101 Hidden Creek Ln Spicewood TX 78669  
Phone: 512-371-6159 | Fax: 512-351-8858  
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