



MEA-3in1-SMA

4G LTE, 2.4/5.0 GHz ISM and GNSS

Part #: 100-00267-01



Description

The MEA-3-IN-1-SMA magnet/adhesive antenna is a 3-in-1 low profile antenna solution, with a very high-performance ideal for maintaining constant network connectivity. The MEA-3-IN-1-SMA covers all 4G/LTE and 2.4/5.0GHz ISM, and GNSS standard frequencies. This is an ideal antenna for telematics systems, remote surveillance, asset tracking and any IOT system applications. Its high performance and low profile make this antenna ideal for the most challenging installations.

This magnet/Adhesive antenna is easy to install with maximum durability offering IP67 rated housing and anti-rotation mounting. The MEA-3-IN-1-SMA has a three cables with a SMA-Male standard connectors, 2m standard cable length and is fully customizable by offering additional connector types, cable lengths and cable types.

Electrical Specifications

Cable 1 - Cellular/LTE Antenna

Parameter	Specification		
Standards	2G, 3G and 4G		
Frequency (MHz)	698-960	1710-2170	2500-2700
Return Loss (dB)	~ -11.7	~ -7.9	~ -21.6
VSWR	~ 2.1:0	~ 2.4:1	~ 1.2:1
Efficiency (%)	~ 45.5	~ 26.2	~ 31.0
Peak Gain (dB)	~ 3.5	~ 2.2	~ 4.2
Average Gain (dB)	~ -3.7	~ -5.9	~ -5.0
Impedance (Ω)	50		
Polarization	Linear		
Radiation Pattern	Omni-Directional		
Max Input Power (W)	25		
Connector Type	SMA-Male (other connectors available)		
Cable Length	200 cm (custom length available)		
Cable Type	D302 Standard (other cable type available)		

Features

- 4GLTE, 2.4/5.0 GHz ISM, and GPS/ GLONASS frequency coverage
- High performance
- Easy mounting: Magnet/Adhesive Mount
- IP67
- Customized Cable and Connector

Applications

- LTE applications
- Navigation and telematics systems
- IoT applications
- Automotive connectivity
- Multimedia
- Fleet management
- HD video and audio streaming

Cable 2 - 2.4/5.0/6.0 GHz ISM Antenna

Parameter	Specification	
Standards	WiFi, BT, ZigBee, ISM, SigFox, LoRa, BLE	
Band	2.4 GHz	5.0 GHz
Frequency (MHz)	2410-2490	4920-5925
Return Loss (dB)	~ -18.0	~ -12.8
VSWR	~ 1.3:1	~ 1.7:1
Efficiency (%)	~ 38.4	~ 25.6
Peak Gain (dB)	~ 3.8	~ 2.8
Average Gain (dB)	~ -4.2	~ -6.0
Impedance (Ω)	50	
Polarization	Linear	
Radiation Pattern	Omni-Directional	
Max Input Power (W)	25	
Connector Type	SMA-Male (other connectors available)	
Cable Length	200 cm (custom length available)	
Cable Type	D302 Standard (other cable type available)	

Cable 3 - GPS/GLONASS Antenna

Parameter	Specification	
Standards	GPS/QZSS/Galileo	GLONASS
Band (MHz)	1575	1602
Frequency (MHz)	1575.42	1598-1606
Patch Size (mm)	18 x 18 x 4	
Return Loss (dB)	<= -15.0 dB	
VSWR	<= 1.4:1	
Impedance (Ω)	50	
Polarization	RHCP	
Radiation Pattern	Hemispherical	
Saw Filter	Pre-Filter	
Active Gain (dB)	28 @ 2.7 V	
Noise Figure (dB)	1.5 Typ	
Voltage (V)	1.5 - 3.6	
Current (mA)	9 Typ	
Power Consumption (mW)	24.3 Typ	
ESD Protection	2kV	
Connector Type	SMA-Male (other connectors available)	
Cable Length	200 cm (custom length available)	
Cable Type	D100 Standard (other cable type available)	

Antenna Measurement Conditions:

Mounted on metal plate of 30 x 30 cm

200 cm of cable D302

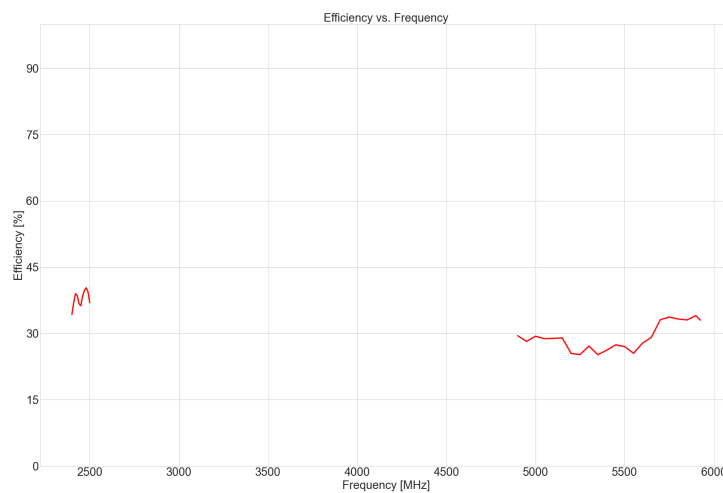
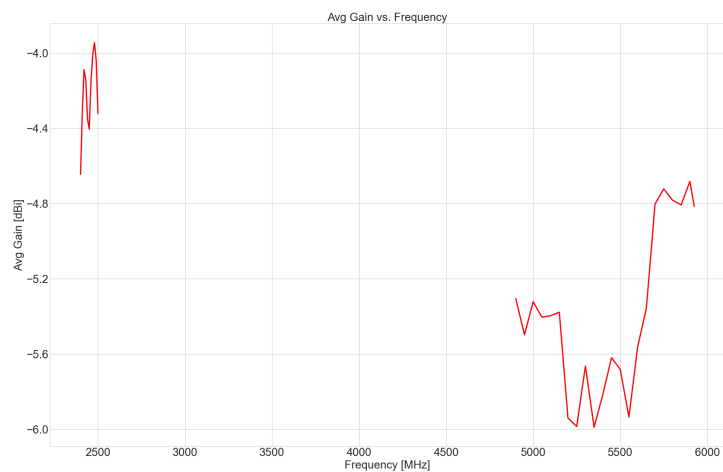
Measured in certified CTIA 3D anechoic chamber

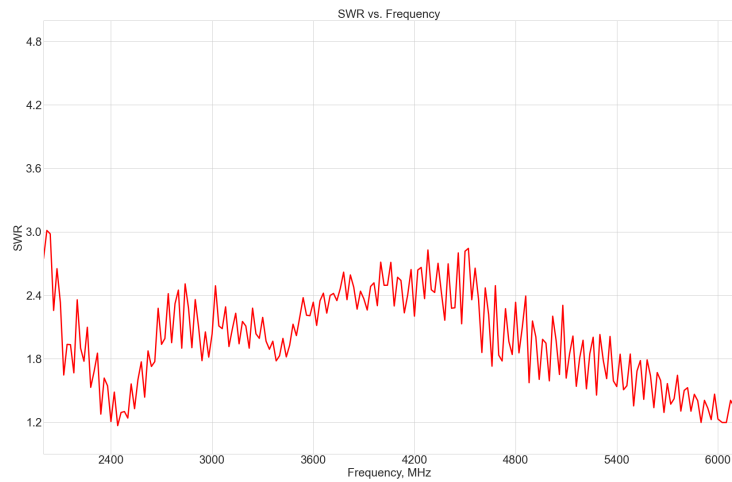
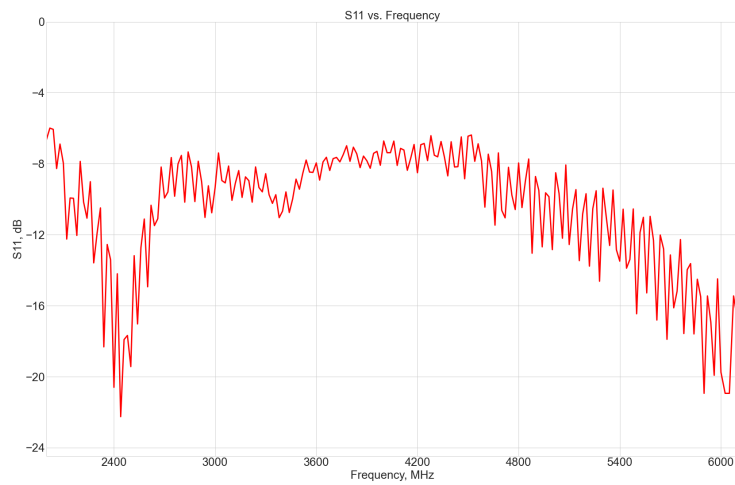
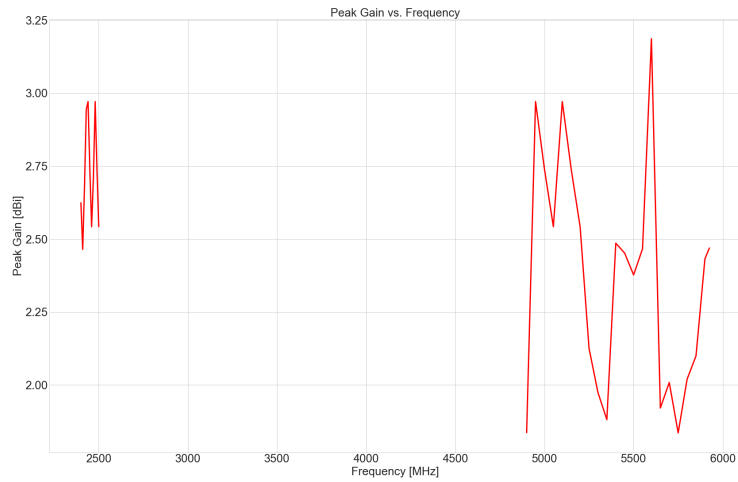
Mechanical and Environmental Specifications

Parameter	Specification
Mounting Type	Magnetic/Adhesive Mount
Dimensions (mm)	80 x 76 x 13
Radome Type	ABS UV Stable
Radome Color	White, Black
Operating Temperature (C)	-40 to +85°
Storage Temperature (C)	-40 to +85°
Certification	IP67
Substance Compliance	RoHS

Radiation Performance

MEA-3in1-SMA





Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Maxtena:

[MEA-3in1-SMA](#)