



MEA-5G-MIMO-GGG

5G NR MIMO AND GPS/GLONASS SCREW MOUNT

Part #: 100-00250-01

Description

The MEA-5G-MIMO-GGG is a 3-in-1 antenna that combines high performance 5G, MIMO, GPS, GLONASS and Galileo standard. The antenna's excellent radiation pattern, exceptional out-of-band rejection, and low noise figure ensures optimal performance of GNSS systems. It features a 2m cable with an integrated SMA-Male, SMB, or MCX connector (customer choice). This low profile screw mount is ideal for public safety, utilities tracking, and IOT applications. This antenna offers a ultra-low profile design with easy mounting and customizable cables and connector options.

The antenna is designed with rugged ASA black housing and is ideal for the most demanding environmental challenges. The MEA-5G-MIMO-GGG is IP67 rated.

Electrical Specifications

Cable 1 - 5G NR Antenna

Parameter	Specification			
Technologies	5G, 4G, 3G and 2G			
Standards	5G NR/4G LTE/FirstNet/CBRS/LPWA/CAT-X/CAT-Mx/CAT-NBx/NB-IoT/3G/2G			
Frequency (MHz)	617-960	1427-2690	3300-5000	5150-5925
Return Loss (dB)	~ -5.5	~ -12.2	~ -15.2	~ -14.2
VSWR	~ 3.7:1	~ 2.0:1	~ 1.5:1	~ 1.6:1
Efficiency (%)	~ 31.0	~ 41.6	~ 41.6	~ 36.9
Peak Gain (dBi)	~ 1.3	~ 3.4	~ 4.7	~ 4.0
Average Gain (dB)	~ -5.1	~ -3.9	~ -3.8	~ -4.4
Impedance (Ω)	50			
Polarization	Linear			
Radiation Pattern	Omni-Directional			
Max Input Power (W)	35			
Connector Type	SMA-Male (other connectors available)			
Cable Length	200 cm (custom length available)			
Cable Type	LL195 (other cable type available)			



Features

- 3 in 1 antenna : 5G NR , MIMO, GPS/ GLONASS/QZSS/Galileo
- Easy mounting: Screw Mount
- Heavy Duty antenna
- High Performance
- Ground Plane Independent
- Anti-Rotation Mounting
- Customizable Cable and Connector
- IP67
- IP69
- IK09

Applications

- IoT applications
- Transportation
- Tracking/ Mapping devices
- Asset Tracking
- Telematics
- Container & Logistics
- Automotive
- Industrial Applications

Cable 2 - 5GNR Antenna

Parameter	Specification			
Technologies	5G, 4G, 3G and 2G			
Standards	5GNR/4GLTE/FirstNet/CBRS/LPWA/CAT-X/CAT-Mx/CAT-NBx/NB-IoT/3G/2G			
Frequency (MHz)	617-960	1427-2690	3300-5000	5150-5925
Return Loss (dB)	~ -5.6	~ -12.7	~ -15.3	~ -16.0
VSWR	~ 3.7:1	~ 1.9:1	~ 1.5:1	~ 1.5:1
Efficiency (%)	~ 31.2	~ 41.4	~ 42.4	~ 33.1
Peak Gain (dBi)	~ 1.2	~ 3.6	~ 4.6	~ 3.2
Average Gain (dB)	~ -5.1	~ -3.9	~ -3.8	~ -4.8
Impedance (Ω)	50			
Polarization	Linear			
Radiation Pattern	Omni-Directional			
Max Input Power (W)	35			
Connector Type	SMA-Male (other connectors available)			
Cable Length	200 cm (custom length available)			
Cable Type	LL195 (other cable type available)			

Cable 3 - GPS/GLONASS Antenna

Parameter	Specification	
Standards	GPS/QZSS/Galileo	GLONASS
Frequency (MHz)	1575.42	1598-1610
Return Loss (dB)	<= -14	
VSWR	<= 1.5:1	
Impedance (Ω)	50	
Radiation Pattern	Hemispherical	
Polarization	RHCP	
Saw Filter	Post-Filter	
Active Gain (dB)	23 @ 3 V, 24 @ 5V	
Noise Figure (dB)	1.2	
Voltage (V)	2.7 - 5.5	
Current Consumption (mA)	15 - 25	
Power Consumption (mW)	40.5 - 137.5	
Connector Type	SMA-Male (other connectors available)	
Cable Length	200 cm (custom length available)	
Cable Type	LL100 (other cable type available)	

Antenna Measurement Conditions:

Mounted on 30 x 30 cm ground plane

100 cm of cable LMR195

Measured in certified CTIA 3D anechoic chamber

Mechanical and Environmental Specifications

Parameter	Specification
Mounting Type	Screw Mount
Dimensions (mm)	Ø 96 X H 130
Weight (g)	450
Max. Tighten Torque (Nm)	15 Nm
Radome	ASA
Radome Color	White, Black
Antenna Base	Alluminium alloy
Operating Temperature (C)	-40 to +85°
Storage Temperature (C)	-40 to +85°
Protection	IP67, IP69, IK09
Substance Compliance	RoHS

Radiation Performance

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