



MEA-5G-1575-1606

5G NR GPS/GLONASS SCREW MOUNT

Part #: 100-00238-01



Description

The MEA-5G-1575-1606 screw mount antenna is a 2-in-1 solution, with high gain and efficiency ideal for maintaining constant global connectivity. The MEA-5G-1575-1606 covers GPS and 5G frequencies. This is an ideal antenna for telematics systems, remote surveillance, asset tracking and any IOT system application. The high performance and low profile make this antenna ideal for the most challenging installations.

This screw mount antenna is easy to install with maximum durability. The MEA-5G-1575-1606 has two 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. This antenna is low profile, rugged and both IP67 and IP69 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)	~ -9.6	~ -10.1	~ -11.0	~ -14.9
VSWR	~ 2.3:1	~ 2.1:1	~ 2.0:1	~ 1.5:1
Efficiency (%)	~ 47.1	~ 44.9	~ 24.2	~ 21.5
Peak Gain (dB)	~ 2.9	~ 2.1	~ 0.5	~ -1.0
Average Gain (dB)	~ -3.5	~ -3.7	~ -6.2	~ -6.8
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	LL100 (other cable type available)			

Features

- 5G NR & GPS/GLONASS/QZSS/Galileo frequency coverage
- Easy mounting: screw mount
- Ground plane independent
- Customizable cable and connector
- Low profile Ø 50 x 50.8 mm
- IP67 & IP69

Applications

- IoT applications
- Telematics
- Navigation
- Satellite communications
- LTE applications

Electrical Specifications

Cable 2 - GPS GLONASS Antenna

Parameter	Specification	
Standards	GPS/QZSS/Galileo	GLONASS
Band (MHz)	1575	1602
Frequency (MHz)	1575.42	1598-1606
Patch Size (mm)	25 x 25 x 4	
Return Loss (dB)	<= -15.0 dB	
VSWR	<= 1.4:1 dB	
Impedance	50	
Radiation Pattern	Hemispherical	
Polarization	RHCP	
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 (m)	200 cm (custom length available)	
Cable Type	LL100 (other cable type available)	

Antenna Measurement Conditions:

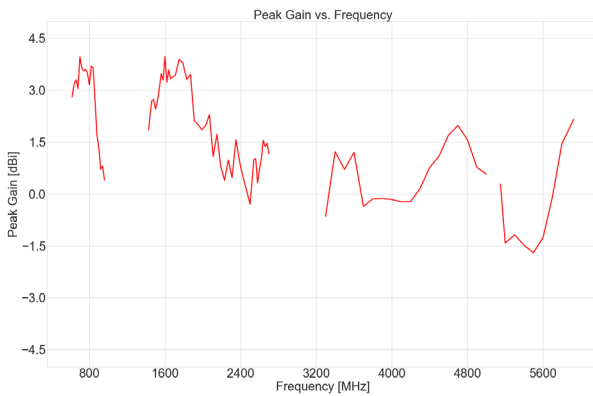
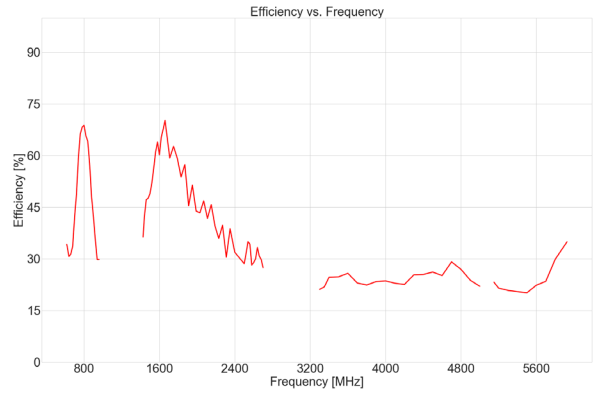
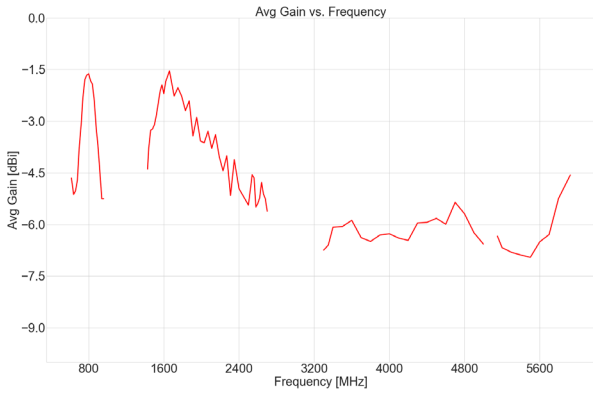
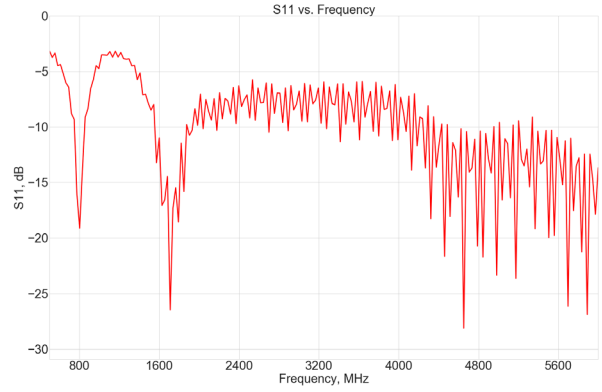
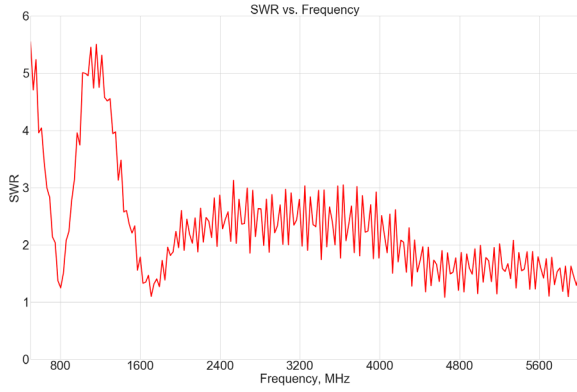
Mounted on metal plate of 30 x 30 cm
100 cm of cable LL100
Measured in certified CTIA 3D anechoic chamber

Mechanical and Environmental Specifications

Parameter	Specification
Mounting Type	Screw Mount
Dimensions (mm)	54 x 54 x 50
Weight (g)	125
Radome Type	PC/ABS UV Stable
Radome Color	Black
Antenna Base	Zamak
Gasket	Double Sided Foam
Operating Temperature (C)	-40 to +85°
Storage Temperature (C)	-40 to +85°
Protection	IP67, IP69K
Substance Compliance	RoHS

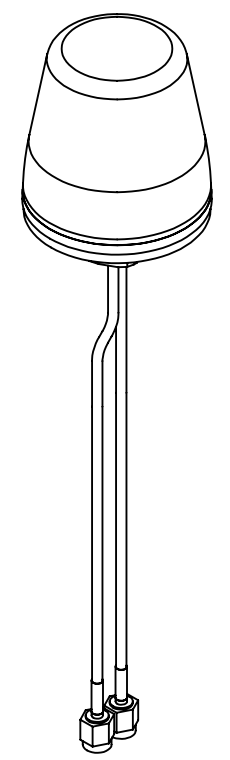
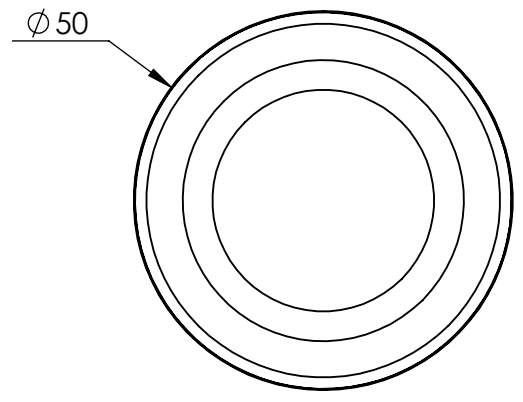
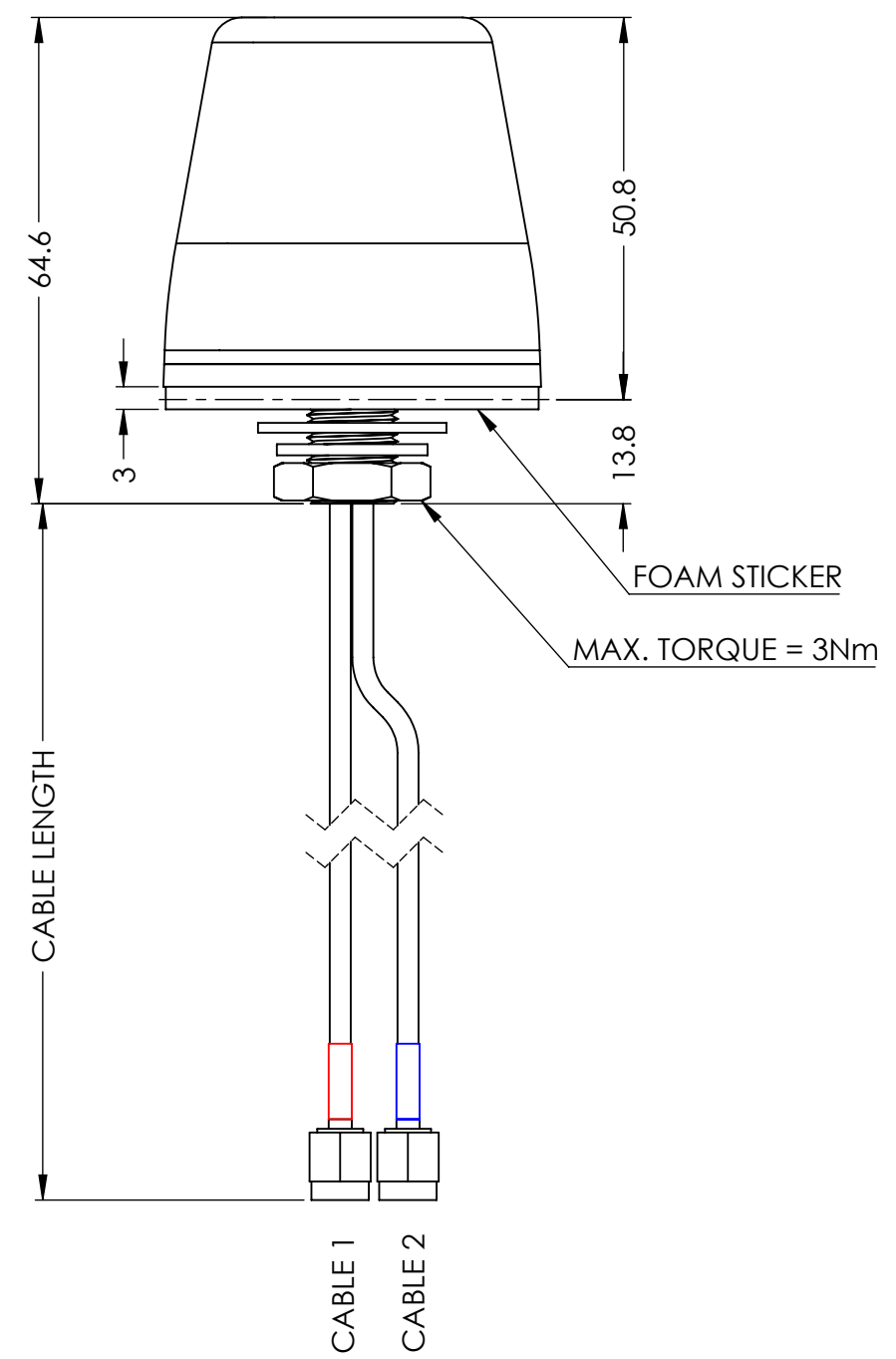
Radiation Performance

MEA-5G-1575-1606



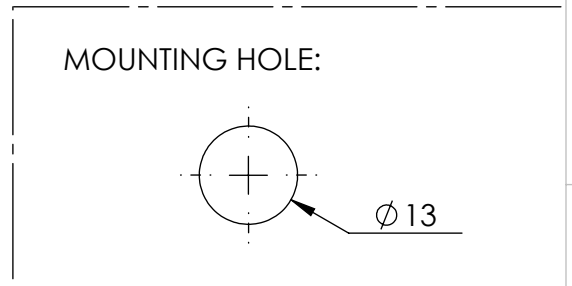
DRAWING REVISION HISTORY			
REV	DESCRIPTION	DATE	BY
A	INITIAL RELEASE	2022-01-28	JET

D
C
B
A



NOTES:

- FREQUENCY:
 CABLE 1 (5G NR): 617-960 MHz, 1427-2690 MHz, 3300-5000 MHz, 5150-5925 MHz
 CABLE 2 (GPS/GLONASS): 1575.42 MHz, 1598-1606 MHz
- DIMENSIONS ARE AFTER MOUNTING
- CUSTOMIZABLE CABLE AND CONNECTOR TYPE
- MOUNTING TYPE: SCREW MOUNT
- MAX. MOUNTING THICKNESS: 4.5mm
- MATERIALS:
 - RADOME: ASA
 - RADOME COLOR: BLACK
 - ANTENNA BASE: ZAMAK
 - GASKET: DOUBLE SIDED FOAM
- OPERATING TEMPERATURE: -40° C ~ +85° C
- STORAGE TEMPERATURE: -40° C ~ +85° C
- CERTIFICATION: IP67, IP69



ITEM 100-00238 REVISION HISTORY			
REV	DESCRIPTION	DATE	BY
A	INITIAL RELEASE	2022-01-28	JET

100-00238 CONFIGURATION TABLE				
DASH NO	CABLE TYPE	CABLE LENGTH	CONNECTOR TYPE	RADOME COLOR
-01	CABLE 1: D302 CABLE 2: D100	200 CM 200 CM	SMA-MALE GOLD SMA-MALE GOLD	BLACK

UNLESS OTHERWISE SPECIFIED:		NAME	DATE
DIMENSIONS ARE IN MM		DRAWN	JET 2022-01-28
TOLERANCES:		CHECKED	ZX 2022-01-28
FRACTIONAL ±		ENG APPR.	NPC 2022-01-28
ANGULAR: MACH ± .5° BEND ±		MFG APPR.	
ONE PLACE DECIMAL ± 1.0		Q.A.	
TWO PLACE DECIMAL ± .50			
INTERPRET GEOMETRIC TOLERANCING PER:		CAD MAINTAINED. CHANGES SHALL BE INCORPORATED BY THE DESIGN ACTIVITY.	
THIRD ANGLE PROJECTION			
DO NOT SCALE DRAWING			

MAXTENA, INC			
TITLE: 100-00238 MEA-5G-1575-1606			
SIZE	DWG. NO.	REV	
B	117-00574-01	A	
CAGE CODE: 5KQH7		SCALE: NONE	SHEET 1 OF 1

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