



MEA-LTE-GNSS-UHF

CELLULAR/LTE, TETRA/UHF AND GNSS SCREW MOUNT

Part #: 100-00248-01

Description

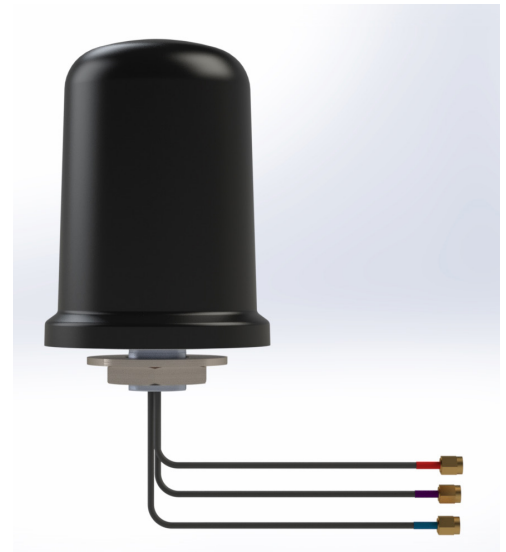
The MEA-LTE-GNSS-UHF is a 3-in-1 antenna that combines high performance 4G LTE, 3G, 2G, Tetra/UHF, GPS, GLONASS and Galileo standard. The antenna's excellent radiation pattern, exceptional out-of-band rejection, and low noise figure ensures optimal performance of GNSS systems. It features a 2m cable with an integrated SMA, 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-LTE-GNSS-UHF is IP67 rated.

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)	~ -6.1	~ -10.3	~ -10.6
VSWR	~ 3.0:1	~ 2.0:1	~ 1.9:1
Efficiency (%)	~ 41.3	~ 42.4	~ 43.0
Peak Gain (dBi)	~ 1.9	~ 3.0	~ 2.9
Average Gain (dB)	~ -3.9	~ -3.8	~ -3.7
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	LL195 (other cable type available)		



Features

- 3in1 antenna : CELLULAR / LTE, TETRA/UHF, and GPS/GLONASS/QZSS/Galileo
- Easy mounting: screw mount
- Heavy duty antenna
- High performance
- Anti-rotation mounting
- Customizable cable and connector
- IP67
- IP69
- IK09

Applications

- Public safety
- IoT applications
- Critical communication
- Public safety
- Transportation
- Tracking/mapping devices

Cable 2 - TETRA/UHF Antenna

Parameter	Specification
Standards	TETRA/UHF
Frequency (MHz)	380-470
Return Loss (dB)	~ -16.6
VSWR	~ 1.5:1
Efficiency (%)	~ 64.4
Peak Gain (dBi)	~ 2.1
Average Gain (dB)	~ -1.9
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	LMR195 (other cable type available)

Cable 3 - GPS/GLONASS Antenna

Parameter	Specification	
Standards	GPS/QZSS/Galileo	GLONASS
Frequency (MHz)	1575.42	1598-1606
Passive Gain (dBi)	~ 3.6	
Impedance (Ω)	50	
Radiation Pattern	Hemispherical	
Voltage Range (V)	1.5 - 3.6	
Active Gain (dB)	28 @ 2.7 V	
Noise Figure (dB)	1.8 @ 2.7 V	
Current Consumption (mA)	9 @ 2.7 V	
Power Consumption (mW)	24.3 @ 2.7 V	
Saw Filter Type	Pre-Filter	
Out of Band Rejection (dB)	~ 43	
ESD Protection (kV)	6	
Connector Type	SMA-Male (other connectors available)	
Cable Length	200 cm (custom length available)	
Cable Type	LL100 (other cable type available)	

Antenna Measurement Conditions:

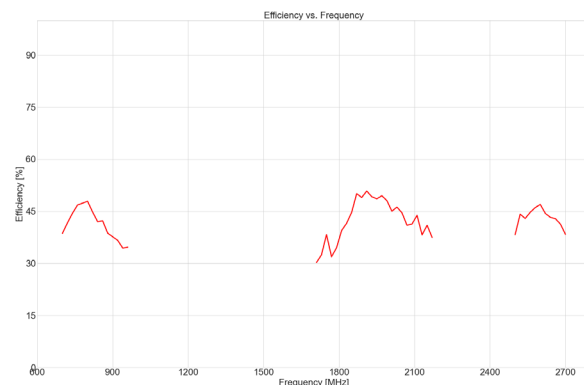
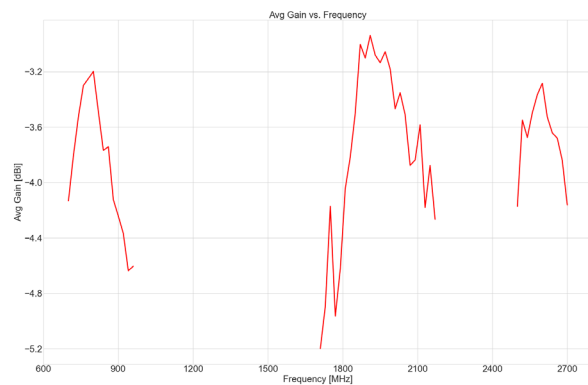
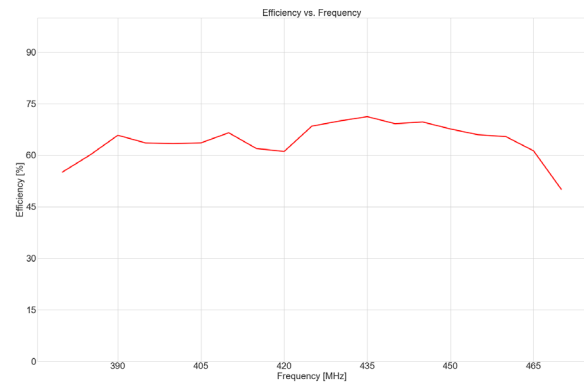
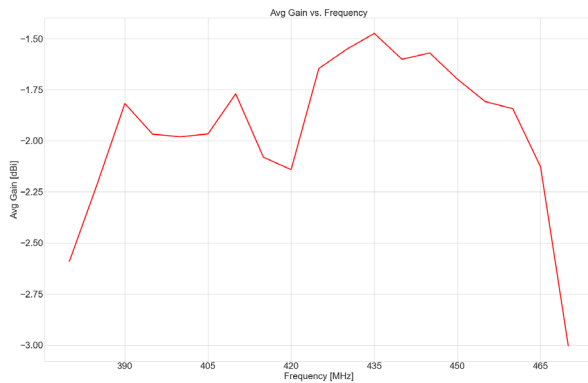
Mounted on 60 x 60 cm ground plane
 200 cm of cable LL195
 Measured in certified CTIA 3D anechoic chamber

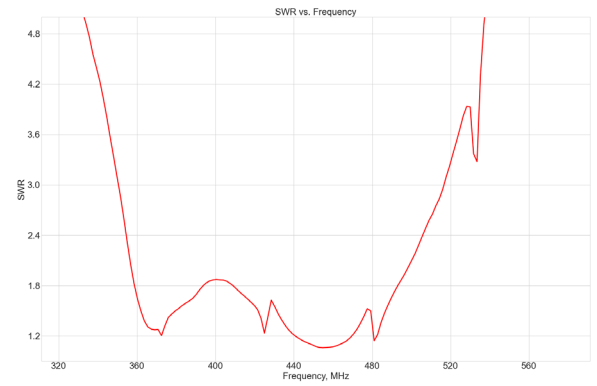
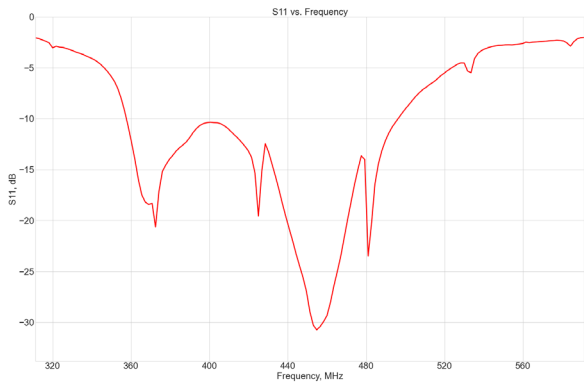
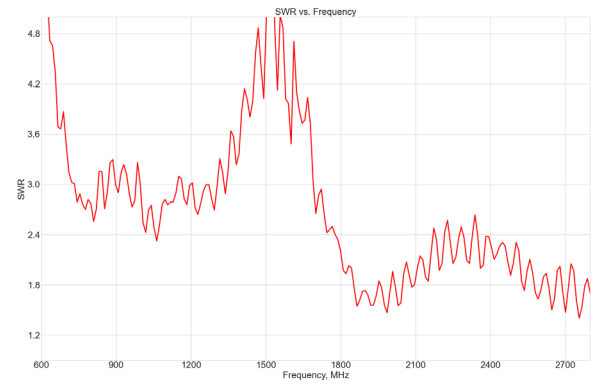
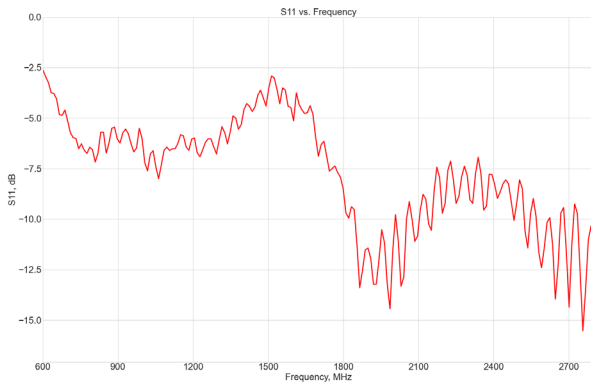
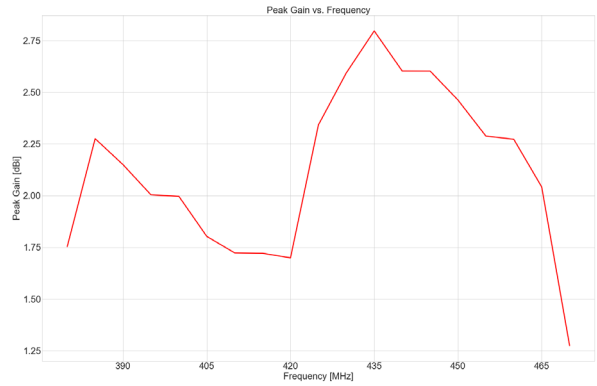
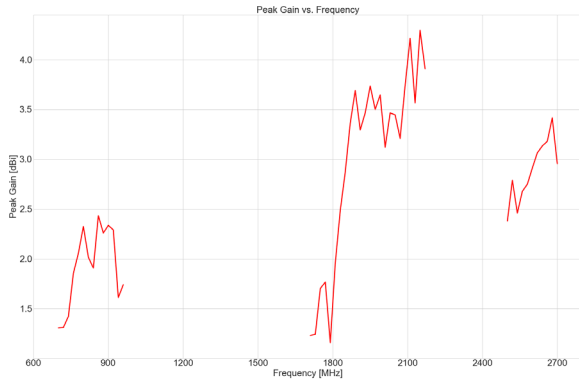
Mechanical and Environmental Specifications

Parameter	Specification
Mounting Type	Screw Mount
Dimensions (mm)	Ø 96 X H 130
Weight (g)	525
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

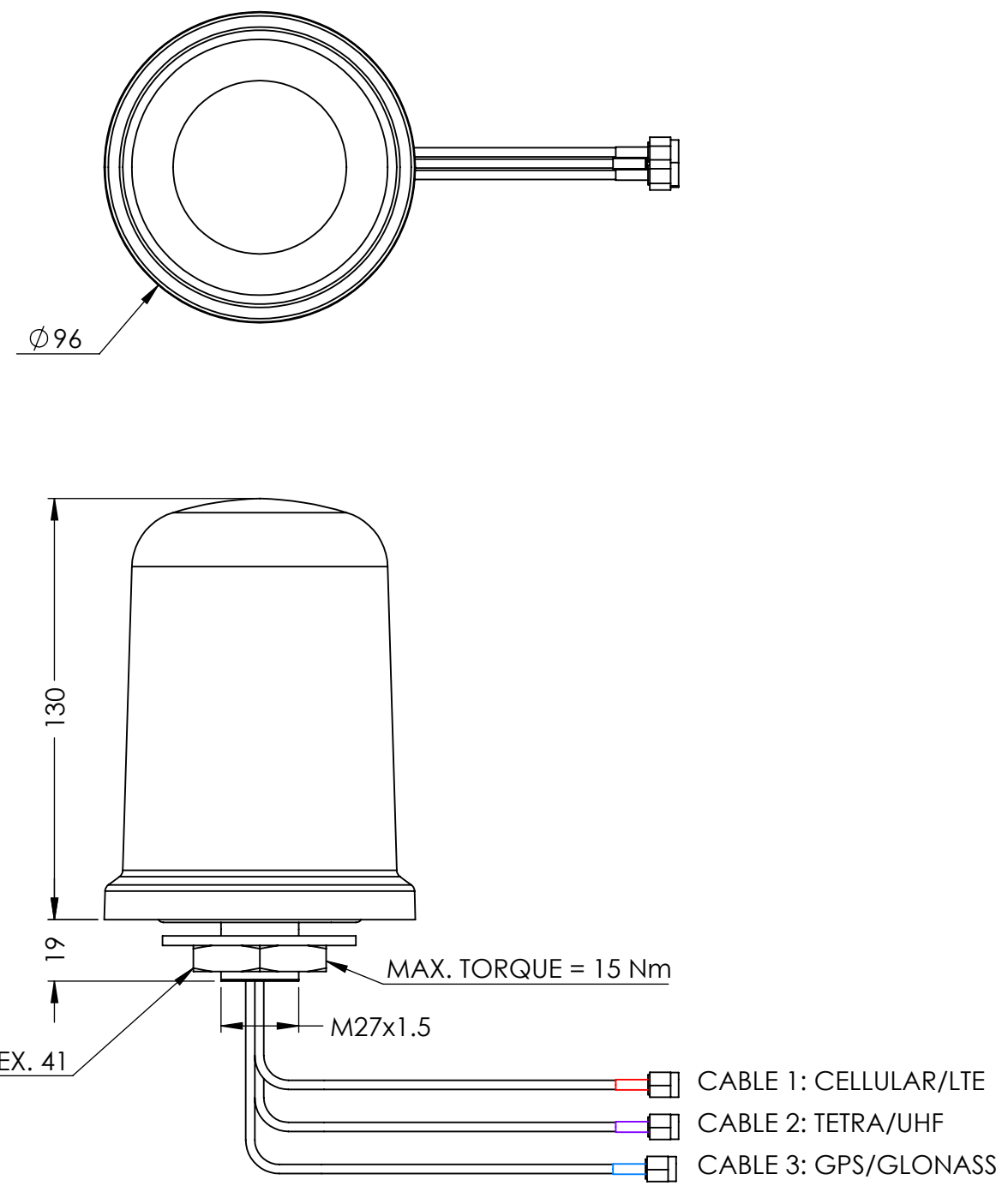
Radiation Performance

MEA-LTE-GNSS-UHF

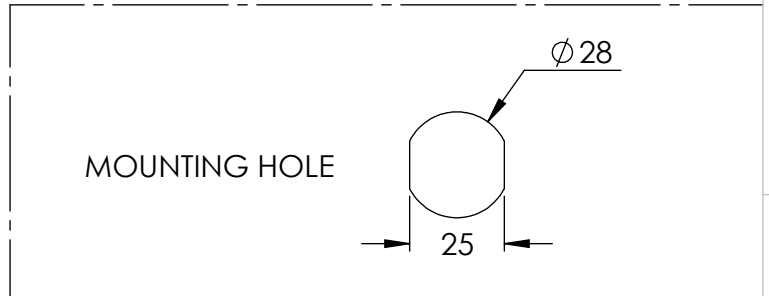




DRAWING REVISION HISTORY			
REV	DESCRIPTION	DATE	BY
A	INITIAL RELEASE	2022-02-18	JET



- NOTES:
- FREQUENCY:
 - CABLE 1 (CELLULAR/LTE): 698-960 MHz, 1710-2170 MHz, 2500-2700 MHz
 - CABLE 2 (TETRA/UHF): 380-470 MHz
 - CABLE 3 (GPS/QZSS/GALILEO, GLONASS): 1575.42 MHz, 1598-1606 MHz
 - DIMENSIONS ARE AFTER MOUNTING
 - CUSTOMIZABLE CABLE AND CONNECTOR TYPE
 - MOUNTING TYPE: SCREW MOUNT
 - MAX. MOUNTING THICKNESS: 7 mm
 - MATERIALS:
 - RADOME: ASA
 - RADOME COLOR: BLACK or WHITE
 - ANTENNA BASE: ALUMINIUM ALLOY
 - OPERATING TEMPERATURE: -40° C ~ +85° C
 - STORAGE TEMPERATURE: -40° C ~ +85° C
 - CERTIFICATION: IP67, IP69, IK09



100-00248 CONFIGURATION TABLE				
DASH NO	CABLE TYPE	CABLE LENGTH	CONNECTOR TYPE	RADOME COLOR
-01	CABLE 1: LL195 CABLE 2: LL195 CABLE 3: LL100	200 CM 200 CM 200 CM	SMA-MALE GOLD SMA-MALE GOLD SMA-MALE GOLD	BLACK

ITEM 100-00248 REVISION HISTORY			
REV	DESCRIPTION	DATE	BY
A	INITIAL RELEASE	2022-02-18	JET

UNLESS OTHERWISE SPECIFIED:		
	NAME	DATE
DRAWN	JET	2022-02-18
CHECKED	ZX	2022-02-18
ENG APPR.	NPC	2022-02-18
MFG APPR.		
	Q.A.	

INTERPRET GEOMETRIC TOLERANCING PER:

THIRD ANGLE PROJECTION

DO NOT SCALE DRAWING

CAD MAINTAINED. CHANGES SHALL BE INCORPORATED BY THE DESIGN ACTIVITY.

MAXTENA, INC		
TITLE: 100-00248 MEA-LTE-GNSS-UHF		
SIZE B	DWG. NO. 117-00587-01	REV A
CAGE CODE: 5KQH7	SCALE: NONE	SHEET 1 OF 1

PROPRIETARY AND CONFIDENTIAL

Mouser Electronics

Authorized Distributor

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

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