



MEAX-1227-MM

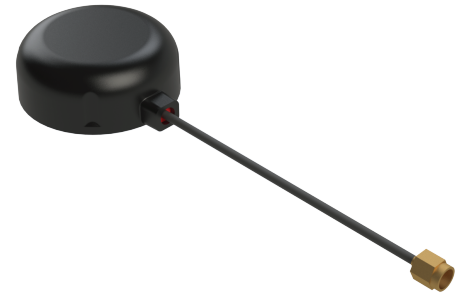
GNSS/L1/L2 Magnetic Mount

Part #: 100-00202-01

Description

The MEA-1227-MM is a multi-frequency, high accuracy, GNSS antenna for the GPS & GLONASS L1 and L2 bands. The antenna's excellent radiation pattern, exceptional out-of-band rejection, and low noise figure ensures optimal performance of GNSS systems. It features a 3 m cable with an integrated SMA, SMB, or MCX connector (customer choice). Our low profile magnetic mount is ideal for robotics, rail, UAV, industrial and IOT applications.

This antenna offers a ultra-low profile design with easy mounting and customizable cables and connector options. The MEA-1227-MM is IP67 rated.



Electrical Specification

Parameter	Specification	
Frequency Range	1227 MHz, 1246 MHz	1561.09, 1575.42, 1602.00 MHz
Bands	L2	L1
Bandwidth	1175MHz – 1260MHz	1561-1606 MHz
Return Loss	-17.1 dB	-16.2 dB
VSWR	1.5:1	1.7:1
Passive Peak Gain	4.9 dBi	4.4 dBi
Impedance	50 Ω	
Radiation Pattern	Hemispherical	
Axial Ratio	≤ 3 dB	
Polarization	RHCP	
Voltage Range	1.5 - 6 V	
Active Gain	28dB @ 3V	
Noise Figure	1.6 @ 3V	
Current Consumption	16 mA @ 3V	
Power Consumption	48 mW @ 3V	
Saw Filter Type	Pre-Filter	
Out of Band Rejection	40 dB	
ESD Protection	2 kV	

Features

- GPS/GLONASS - L1 & L2 frequency coverage
- Superb out of band rejection
- Outstanding filtering
- High Precision
- Easy mounting: Magnetic Mount
- Low Profile - Ø 54 × 21.5 mm
- Ground Plane Independent
- Customizable Cable and Connector
- Dimensions Ø 54 × 21.5 mm
- IP67, IP69

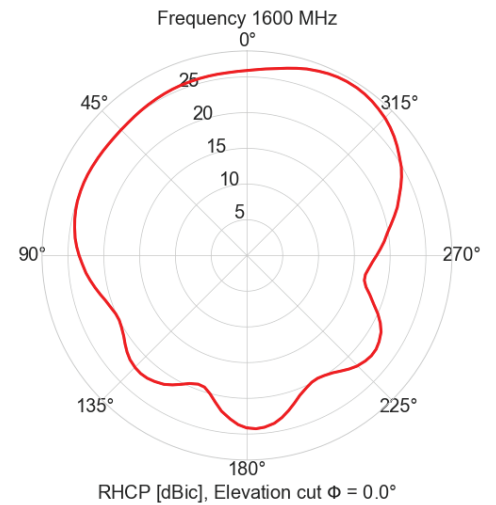
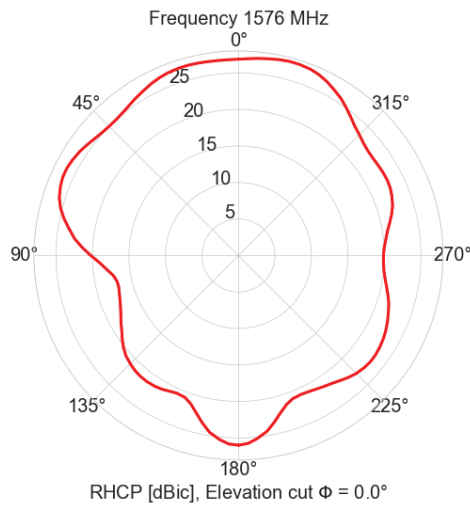
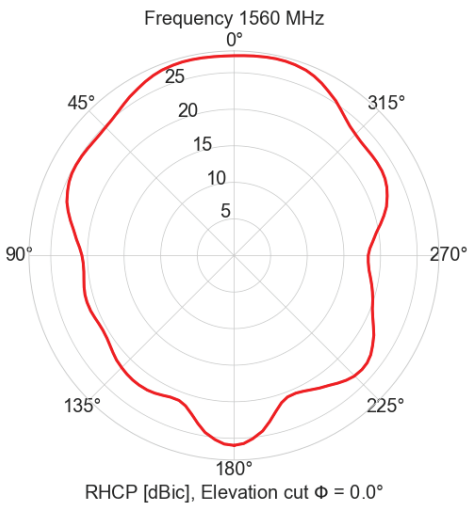
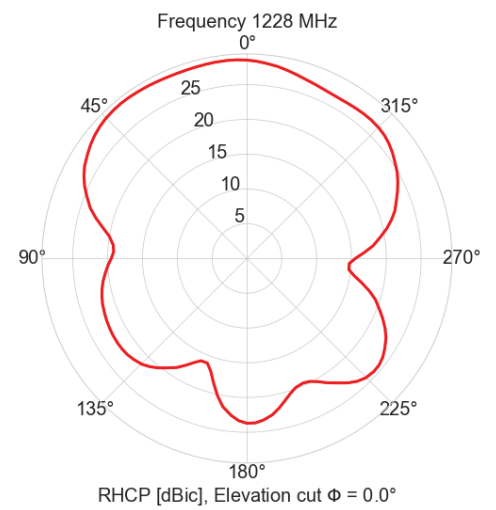
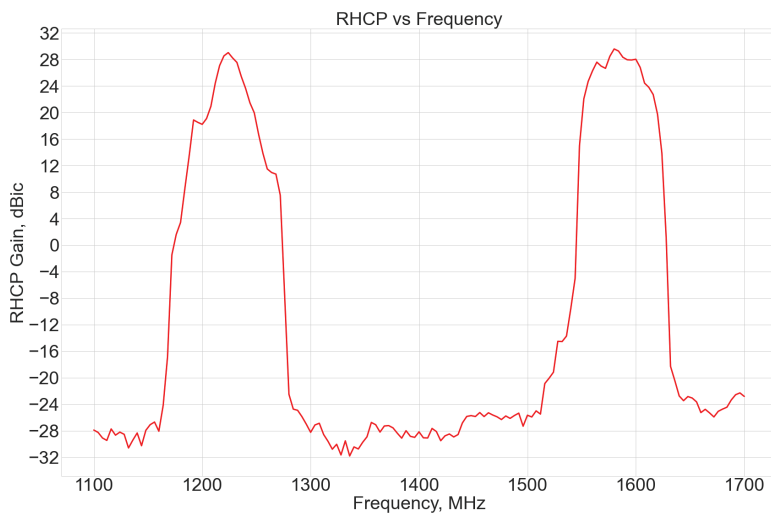
Applications

- Vehicle and fleet tracking
- Military & security
- Asset tracking
- Embedded applications
- Navigation devices
- Oil & gas industries
- Mining equipment
- LBS & M2M applications
- Law enforcement

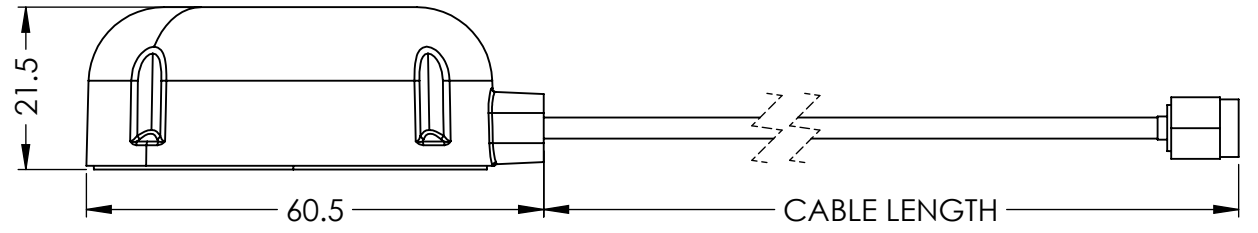
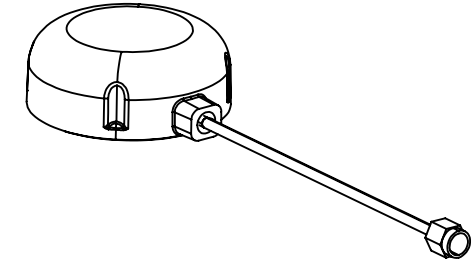
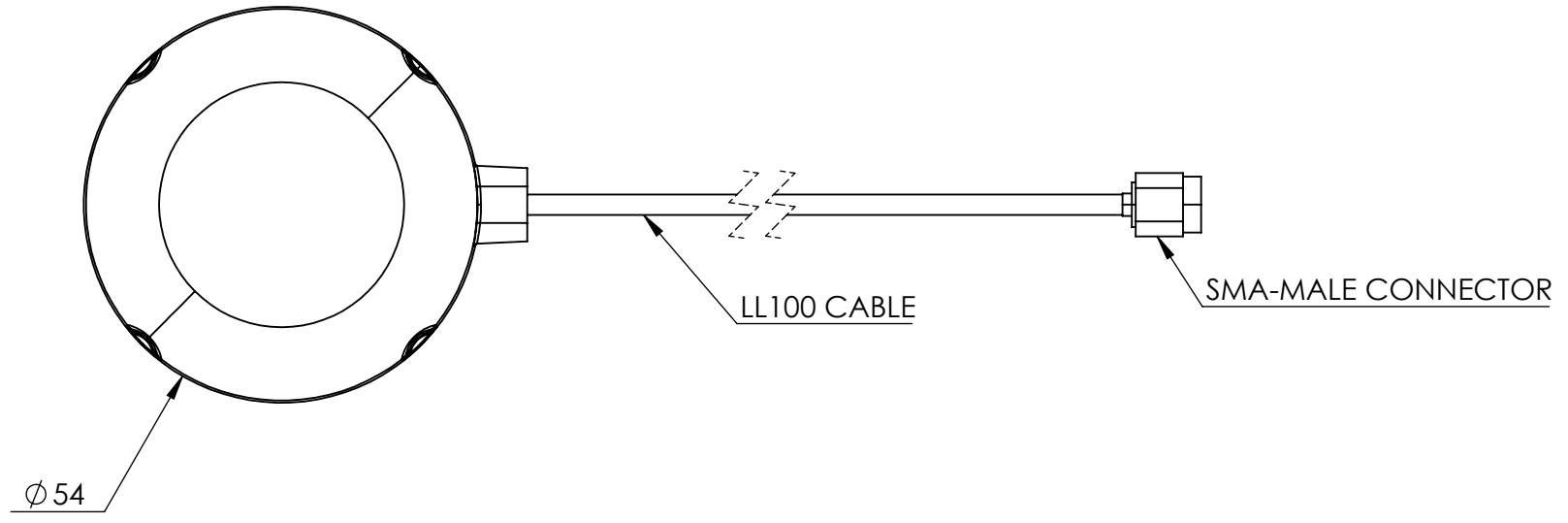
Mechanical Specification

Parameter	Specification
Antenna Dimensions	Ø 54 × 21.5 mm
Operating Temperature	-40°C to + 85°C
Mounting Type	Magnetic Mount
Connector	SMA-Male
Cable	LL100 Standard
Radome	ASA UV Stable / White, Black
Substance Compliance	RoHS
Certificates	IP67, IP69

*Mounted on Ground Plane of 30 x 30 cm



DRAWING REVISION HISTORY			
REV	DESCRIPTION	DATE	BY
A	INITIAL RELEASE	2021-10-01	JET



- NOTES:
- FREQUENCY: 1227 MHz, 1561-1606 MHz
 - CUSTOMIZABLE CABLE AND CONNECTOR TYPE
 - MOUNTING TYPE: MAGNETIC MOUNT
 - MATERIALS:
 - RADOME: ASA UV STABLE
 - RADOME COLOR: BLACK or WHITE
 - OPERATING TEMPERATURE: -40°C ~ +85°C
 - STORAGE TEMPERATURE: -40°C ~ +85°C
 - CERTIFICATION: IP67, IP69

ITEM 100-00202 REVISION HISTORY			
REV	DESCRIPTION	DATE	BY
A	INITIAL RELEASE	2021-10-01	JET

100-00202 CONFIGURATION TABLE				
DASH NO	CABLE TYPE	CABLE LENGTH	CONNECTOR TYPE	RADOME COLOR
-01	LL100	300 CM	SMA-MALE	BLACK

UNLESS OTHERWISE SPECIFIED:

DIMENSIONS ARE IN MM
TOLERANCES:
FRACTIONAL: ±
ANGULAR: MACH ± .5° BEND ±
ONE PLACE DECIMAL ± 1.0
TWO PLACE DECIMAL ± .50

INTERPRET GEOMETRIC TOLERANCING PER:

THIRD ANGLE PROJECTION

DO NOT SCALE DRAWING

	NAME	DATE
DRAWN	JET	2021-10-01
CHECKED	ZX	2021-10-01
ENG APPR.	NPC	2021-10-01
MFG APPR.		
Q.A.		

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

MAXTENA, INC

TITLE: 100-00202 MEA-1227-MM

SIZE: B DWG. NO. 117-00520-01 REV: A

CAGE CODE: 5KQH7 SCALE: NONE SHEET 1 OF 1