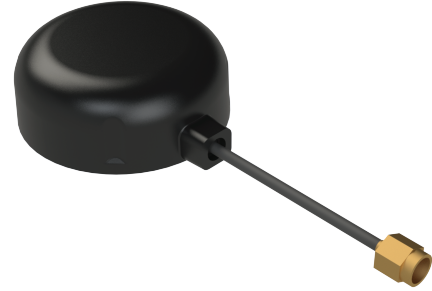




# MEAX-1400-MM

GNSS/L1/L5 Magnetic Mount

Part #: 100-00186-01



## Description

The MEA-1400-MM is a multi-frequency, high accuracy, GNSS antenna for the GNSS L1 and L5 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 is ideal for asset tracking, industrial and IOT applications. This antenna offers a ultra-low profile design with easy mounting and customizable cables and connector options. The MEA-1400-MM is IP67 rated.

## Electrical Specifications

Parameter	Specification	
Frequency Range	1164 MHz - 1189 MHz	1561 MHz - 1606 MHz
Bandwidth	25 MHz	45 MHz
Bands	1164 MHz - 1189 MHz covers GPS L5, Galileo E5a, BeiDou B2a, QZSS L5 and IRNSS L5	1561 MHz - 1606 MHz covers GPS(L1), GLONAS(L1), BeiDou(B1) QZSS(L1C), Galileo(E1), SBAS (L1)
Return Loss	~-12.8 dB	~-12.6 dB
V.S.W.R	~1.8:1	~1.6:1
Efficiency	70.6%	78.6%
Peak Gain	~5.1 dBi	~5.2 dBi
Average Gain	~-1.4 dB	~-1.0 dB
Impedance	50 Ω	
Radiation Pattern	Hemispherical	
Axial Ratio	≤ 3dB	
Polarization	RHCP	
Voltage Range	2.3 – 6 V	
Active Gain	28 dB @ 3V	
Noise Figure	1.6 dB @ 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	

\*Antenna Measurement Conditions:  
Mounted on metal plate of 30x30cm

## Features

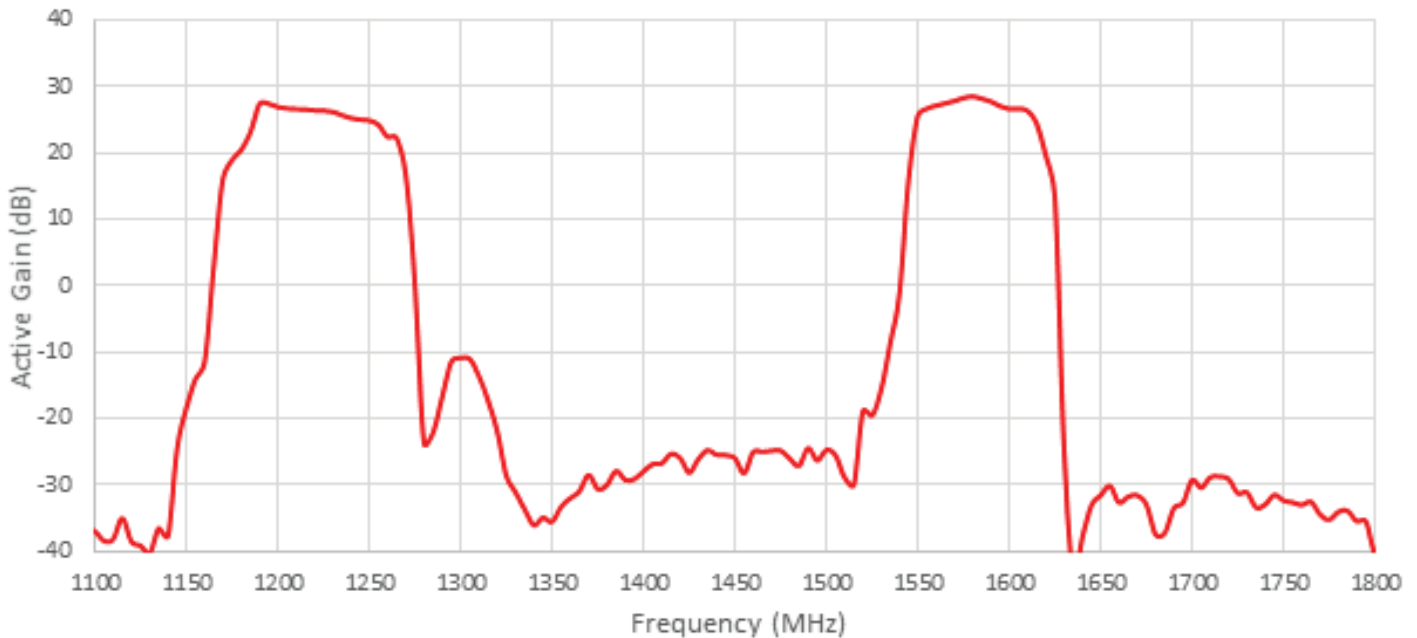
- Magnetic Mount
- 28 dB Gain
- Pre-Filter
- Low Noise Figure
- Low Power Consumption
- Customizable Cable and Connector
- GPS/GLO/BEI/QZSS/Galileo/IRNSS/SBAS/L1L5 (1176 and 1561-1606 MHz)
- Ø 54 x 21.2 mm

## Applications

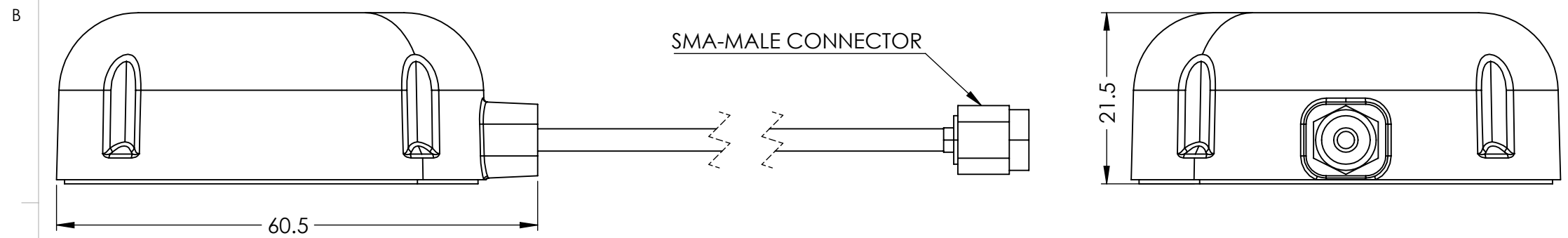
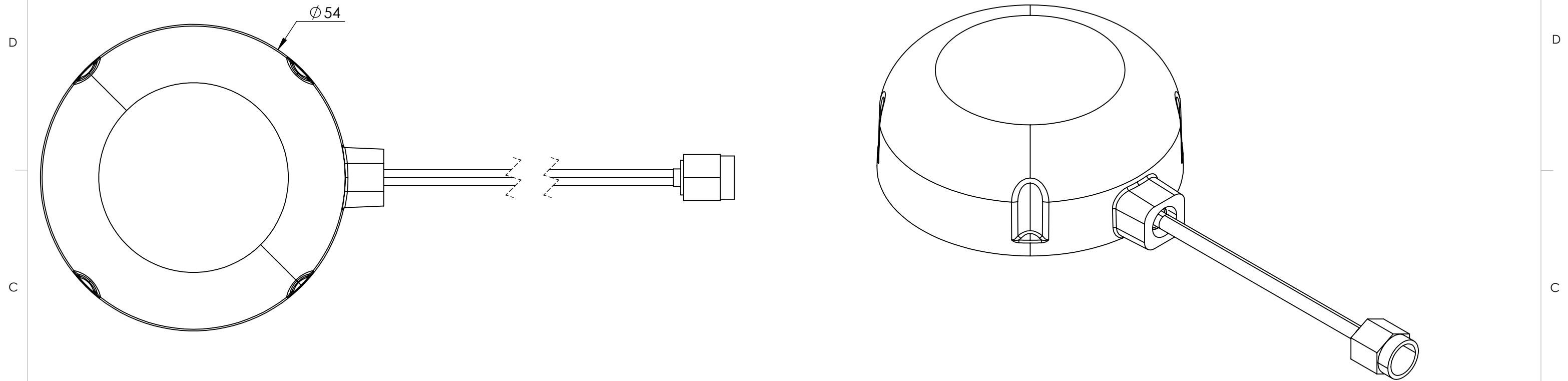
- Vehicle and fleet tracking
- Military & security
- Asset tracking
- Embedded applications
- Oil & gas industries
- Navigation devices
- Mining equipment
- LBS & M2M applications
- Handheld devices
- Law enforcement

## Mechanical Specifications

Parameter	Specification
Antenna Dimensions	Ø 54 x 21.5 mm
Mounting Type	Magnetic Mount
Operating Temperature	-40 °C to +85 °C
Radome Type	ASA UV Stable
Radome Color	Black
Connector Type	SMA-Male Standard (Other Connectors Available)
Cable Type	LL100 Standard (Other Cables Available)
Substance Compliance	RoHS
Certificates	IP67, IP69



DRAWING REVISION HISTORY			
REV	DESCRIPTION	DATE	BY
A	INITIAL RELEASE	2021-07-15	SZ



- NOTES:
1. FREQUENCY: 1176 MHz, 1561-1606 MHz
  2. CUSTOMIZABLE CABLE AND CONNECTOR TYPE
  3. MOUNTING TYPE: MAGNETIC MOUNT
  4. MATERIALS:
    - RADOME: ASA UV STABLE
    - RADOME COLOR: BLACK OR WHITE
  5. OPERATING TEMPERATURE: -40°C ~ +85°C
  6. STORAGE TEMPERATURE: -40°C ~ +85°C
  7. CERTIFICATIONS: IP67, IP69

ITEM 100-00186 REVISION HISTORY			
REV	DESCRIPTION	DATE	BY
1	INITIAL RELEASE	2021-07-15	SZ

100-00186 CONFIGURATION TABLE				
DASH NO	CABLE TYPE	CABLE LENGTH	CONNECTOR TYPE	RADOME COLOR
-01	LL100	300 cm	SMA-MALE GOLD	BLACK

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

	NAME	DATE
DRAWN	SZ	2021-07-15
CHECKED	ZX	2021-07-15
ENG APPR.	NPC	2021-07-15
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: 100-00186  
MEA-1400-MM

SIZE: B DWG. NO. 117-00479-01 REV A

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

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