MEA-1400-SM

GNSS/L1L5 Screw Mount

Part #: 100-00165-01

Description

The MEA-1400-SM Screw Mount Antenna is a 2-in-1 antenna solution, with high gain and efficiency ideal for maintaining constant global connectivity. The MEA-1400-SM covers all GPS/GLONASS/Galileo and L1 L5 frequencies. This is an ideal antenna for telematics systems, remote surveillance, asset tracking and any IOT system applications. 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-1400-SM has one cable with a SMA-Male standard connector, 3m standard cable length and is fully customizable by offering additional connector types, cable lengths and cable types. This antenna is low profile, rugged and IP67 rated.

Electrical Specifications

Parameter	Specification	
Frequency Range	1176.45 MHz	1561.09,1575.42,1602 MHz
Bandwidth	1176 MHz	1561-1606 MHz
Return Loss	-12.8 dB	-12.6 dB
VSWR	1.8:1	1.6:1
Efficiency	60.6%	68.6%
Passive Peak Gain	3.1 dBi	4.2 dBi
Average Gain	-1.8 dB	-1.5 dB
Impedance	50 Ω	
Radiation Pattern	Hemispherical	
Axial Ratio	≤ 3 dB	
Polarization	RHCP	
Voltage Range	1.5 - 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	

Features

- GNSS L1/L55
- High Precision Navigation
- Screw Mount
- Low Profile
- Low Noise Figure
- Low Power Consumption
- Anti-Rotation Mechanism
- Customizable Cable and Connector
- Dimensions 80 × 74 × 25.6 mm
- IP67, IP69

Applications

- Asset Tracking
- Telematics
- Container & Logistics
- Automotive
- Industrial Applications
- IOT Applications

Mechanical Specification

Parameter	Specification
Antenna Dimensions	80 × 74 × 25.6 mm
Operating Temperature	-40˚C to 85˚C
Connector Type	SMA-Male Standard
Mounting Type	Screw Mount
Radome	ASA UV Stable
Radome color	Black, White
Substance Compliance	RoHS
Certificates	IP67, IP69

*Mounted on Ground Plane of 30 x 30 cm

SWR vs. Frequency

S11 vs. Frequency

S11 vs. Frequency

SWR vs. Frequency

MAXTENA
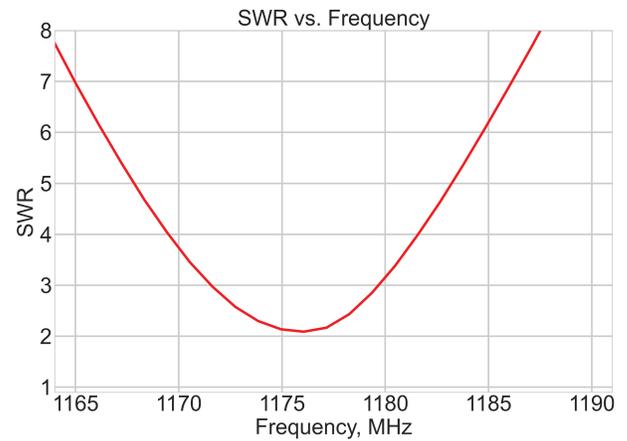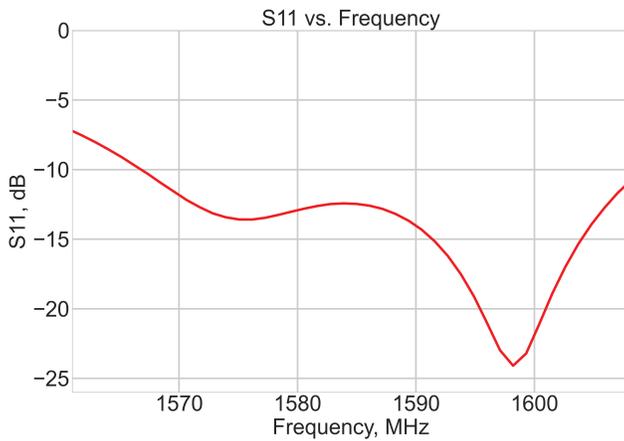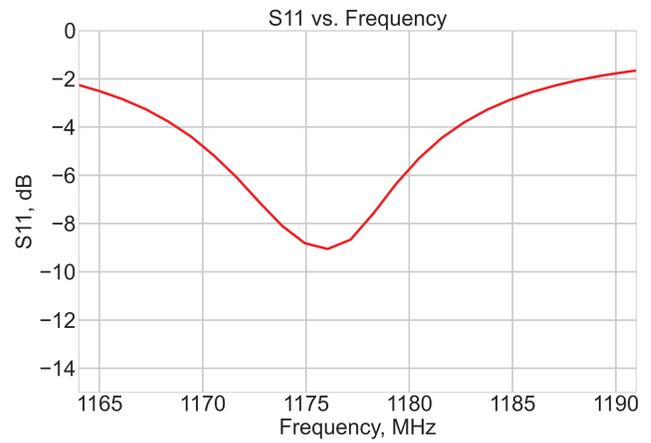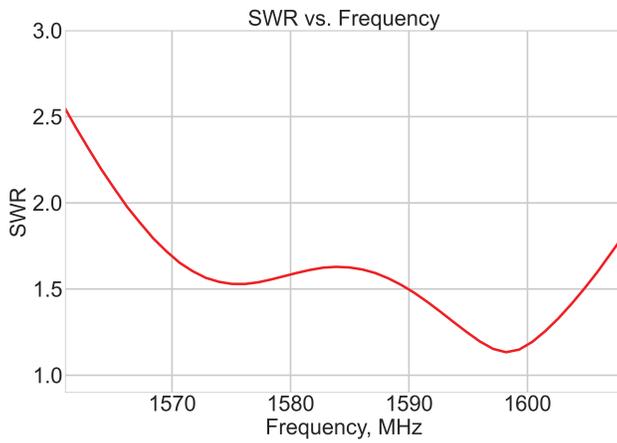
NOTES:
1. FREQUENCY (GPS/GLONASS/BeiDou/QZSS/Galileo/ IRNSS/SBAS/L1L5): 1164 - 1191 AND 1563-1608 MHz
2. DIMENSIONS ARE AFTER MOUNTING
3. Max. MOUNTING THICKNESS: 12MM
4. CUSTOMIZABLE CABLE AND CONNECTOR TYPE
5. CUSTOMIZABLE RADOME COLOR: BLACK or WHITE
6. MECHANICAL:
   - MOUNTING TYPE: SCREW MOUNT
   - RADOME MATERIAL: ASA UV STABLE
   - OPERATING TEMPERATURE: -40 °C ~ 85 °C
   - STORAGE TEMPERATURE: -40 °C ~ 85 °C
   - CERTIFICATES: IP67, IP69

M18X1

MAX. TORQUE=5N*M

25.6

MAX 12

HEX. 27

20

CUSTOMIZABLE CABLE

FRONT

RIGHT

74

80

TOP

MOUNTING HOLE

Ø18

16
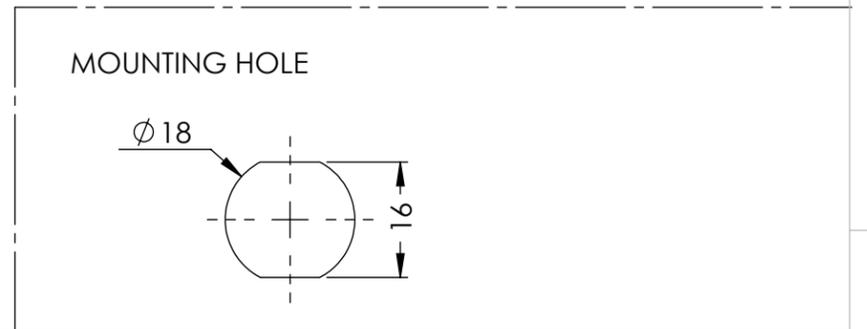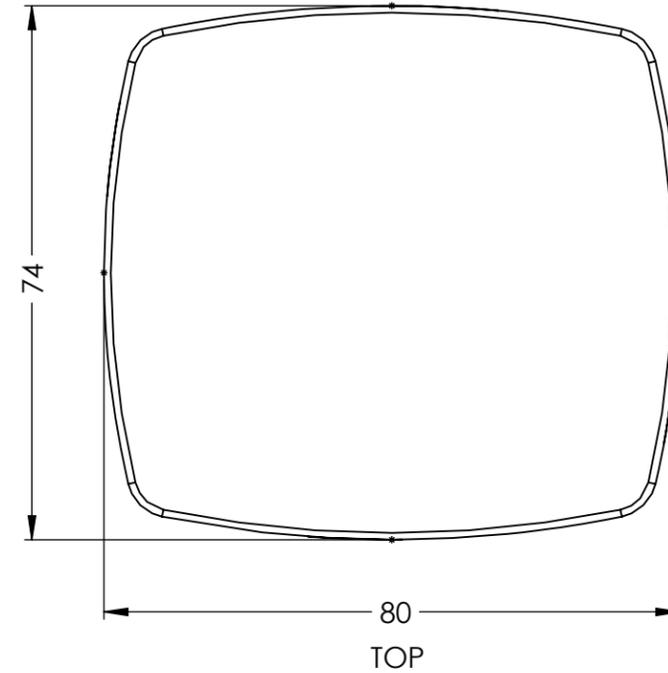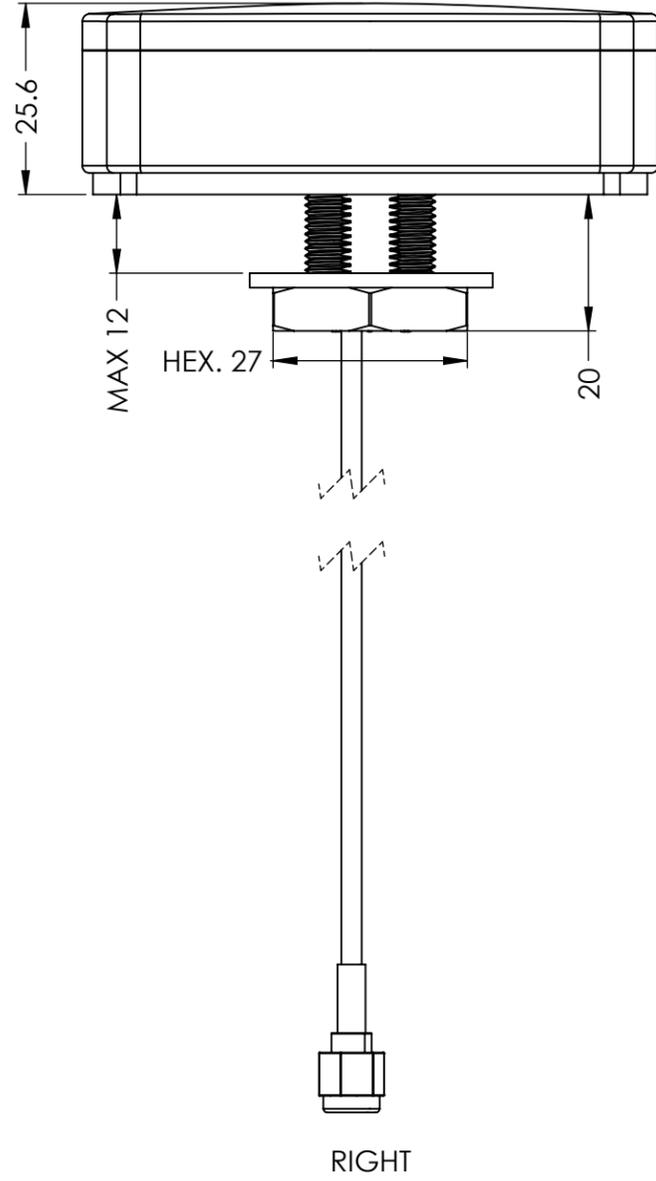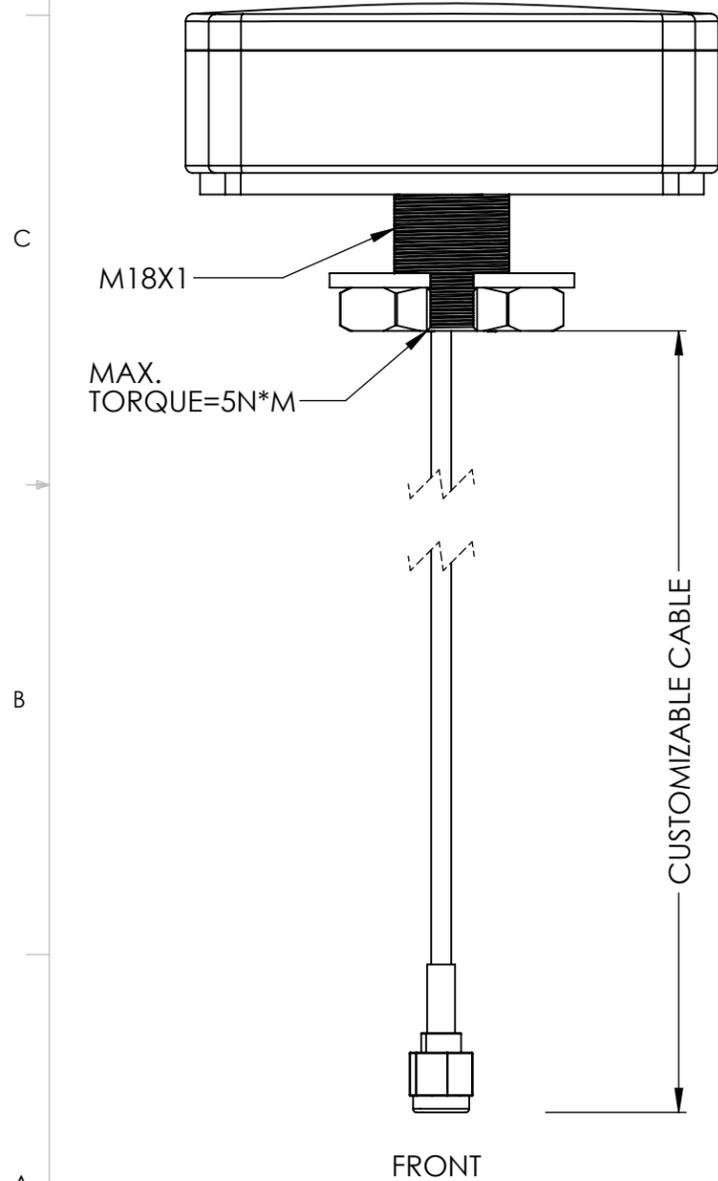
100-00165 CONFIGURATION TABLE				
DASH NO	CABLE TYPE	CABLE LENGTH	CONNECTOR TYPE	RADOME COLOR
-01	LL100	300 cm	SMA-MALE	BLACK