

# **MEA-LGI-SMA** 5GNR, Iridium and GNSS Screw Mount Part #: 189-00065-01

## Description

The MEA-LGI-SMA Screw Mount Antenna is a 3-in-1 low profile antenna solution, with a very high-performance ideal for maintaining constant network connectivity. The MEA-LGI-SMA covers all 5GNR, Iridium and GPS/GLONASS/QZSS/Galileo standard 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 offering IP67 rated housing and anti-rotation mounting. The MEA-LGI-SMA has a three 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.



**Cable 1 - 5GNR Antenna**

Technology	5G, 4G, 3G and 2G
Frequency Range	617-960 MHz
Band	600, 700, 850, 900 MHz
Return Loss	-8.9 dB
VSWR	2.6:1
Efficiency	55.0%
Peak Gain	2.3 dBi
Average Gain	-2.7 dB
Frequency Range	1427-2690 MHz
Band	1500, 1600, 1700, 1800, 1900, 2000, 2100, 2300, 2500, 2600 MHz
Return Loss	-9.2 dB
VSWR	2.4:1
Efficiency	51.2%
Peak Gain	5.1 dBi
Average Gain	-3.1 dB
Frequency Range	3300-5000 MHz
Band	3300, 3500, 3600, 3700, 4500 MHz
Return Loss	-8.2
VSWR	2.7:1
Efficiency	25.7%
Peak Gain	2.6 dBi
Average Gain	-6.7 dB
Frequency Range	5150-5925 MHz
Band	5200, 5500, 5800 MHz
Return Loss	-7.5 dB
VSWR	2.5:1
Efficiency	28.3%
Peak Gain	2.7dBi
Average Gain	-5.5 dB
Impedance	50 Ohm
Polarization	Linear
Radiation Pattern	Omni-Directional
Max. Input Power	25 W

## Features

- 3in1 antenna: 5GNR, Iridium and GNSS
- Ultra-Wide band antenna
- High performance
- Easy mounting: Screw Mount
- Optimized for Iridium network
- Anti-Rotation Mounting
- Ground Plane Independent
- Customizable Cable and Connector
- Low profile 80 × 74 × 25.6 mm
- IP67
- IP69

## Applications

- IoT applications
- Telematic
- Navigation
- Satellite Communications
- LTE applications

**Cable 2 - Iridium Antenna**

Frequency Range	1616 - 1627 MHz
Band	1621 MHz
Return Loss	-12.5 dB
VSWR	1.6:1
Efficiency	68.1%
Peak Gain	5.2 dBic
Average Gain	-1.8 dB
Radiation Pattern	Hemispherical
Polarization	RHCP

**Cable 3 - GNSS Ceramic Active Antenna**

Frequency Range	1575.42 MHz	1598-1606 MHz
Band	1575 MHz	1602 MHz
Return Loss	≤ -15.0 dB	
VSWR	≤ 1.4:1 dB	
Efficiency	68.1%	
Impedance	50 Ohms	
Active Gain	28 dB @ 2.7 V	
Radiation Pattern	Hemispherical	
Polarization	RHCP	
Saw Filter Type	Pre-filter	
Noise Figure	1.5 dB Typ	
Voltage	1.5 – 3.6 V	
Current Consumption	9 mA Typ	
Power Consumption	24.3 mW Typ	
ESD Protection	2kV	

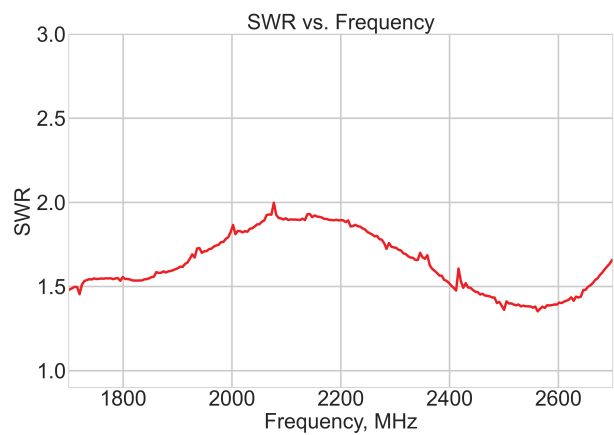
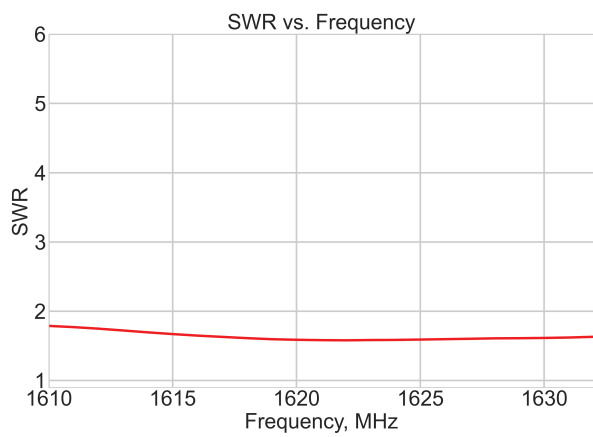
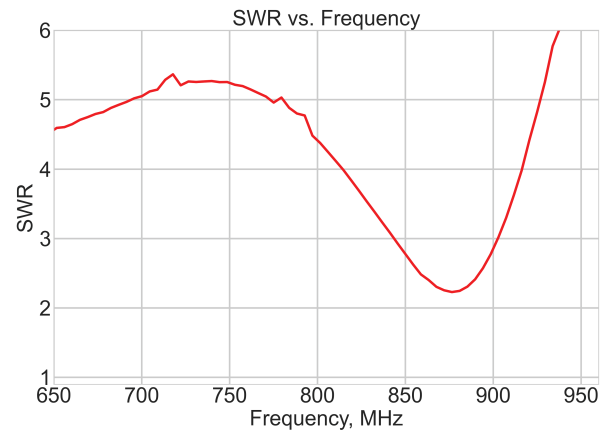
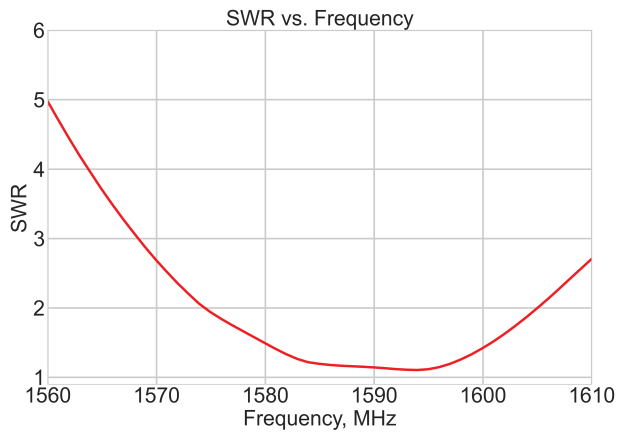
**Mechanical Specifications**

Antenna Dimensions	80 x 74 x 25.6 mm
Operating Temperature	-40 °C to +85 °C
Certificates	Iridium Certified, IP67, IP69
Connector	SMA male
Antenna Color	Black, White
Radome Type	PC + ASA
Substance Compliance	RoHS
Cable Length	300 cm
Mounting style	Screw mount
Max. Tighten Torque	5 Nm

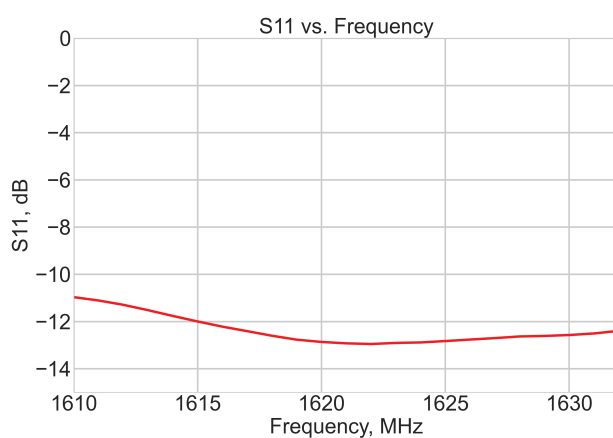
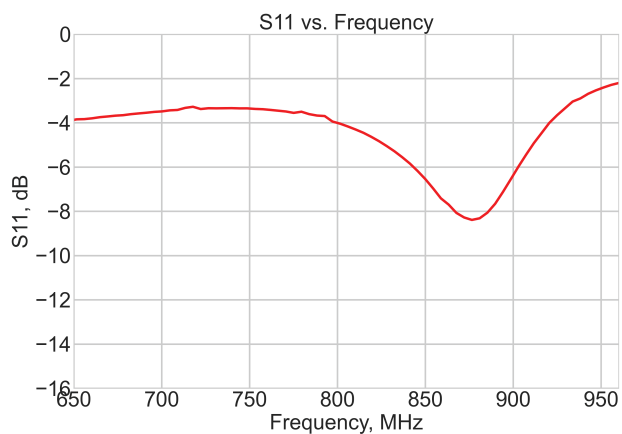
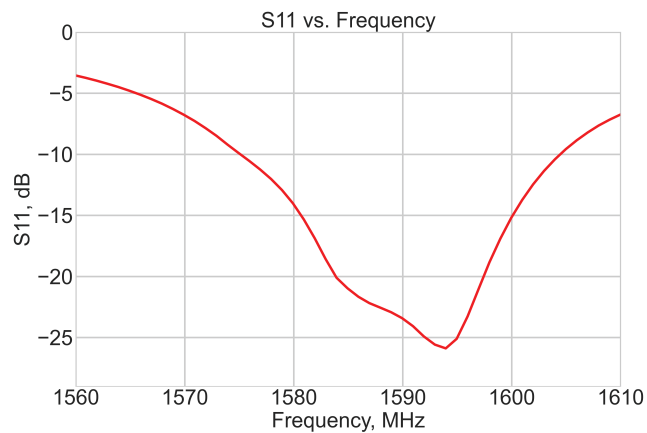
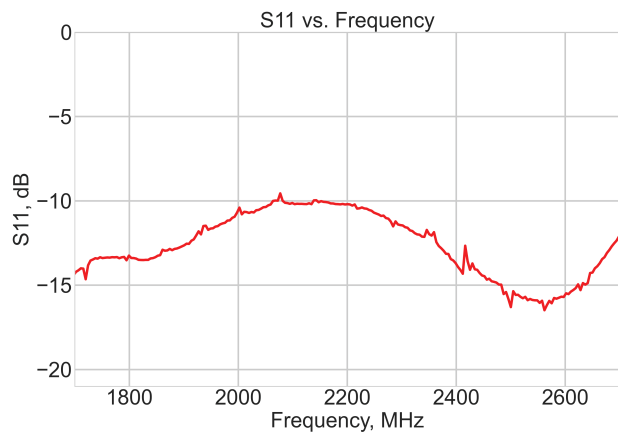
\*Antenna Measurement Conditions:  
Mounted on metal plate of 30x30cm



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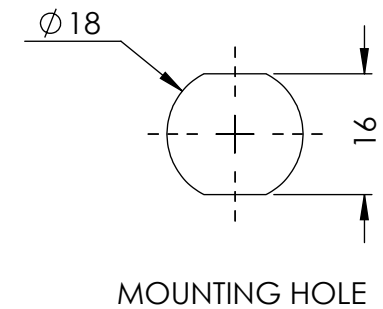
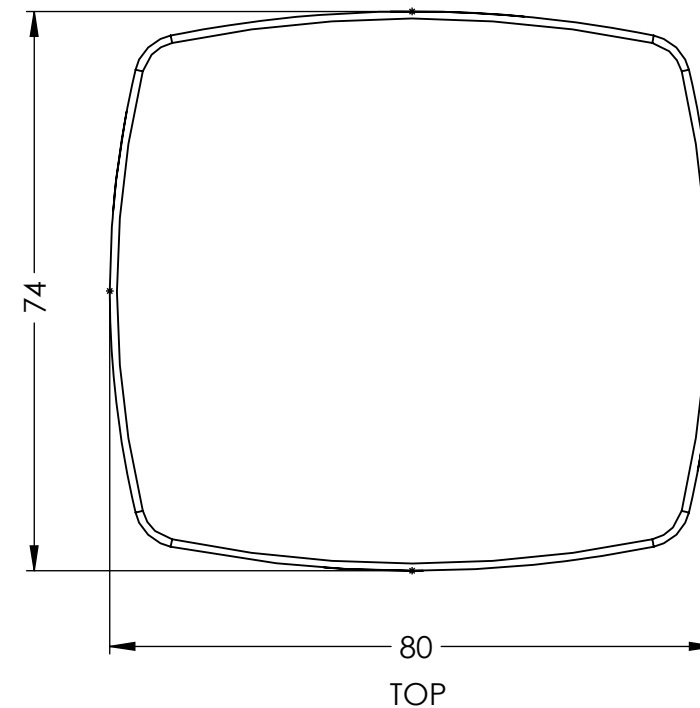
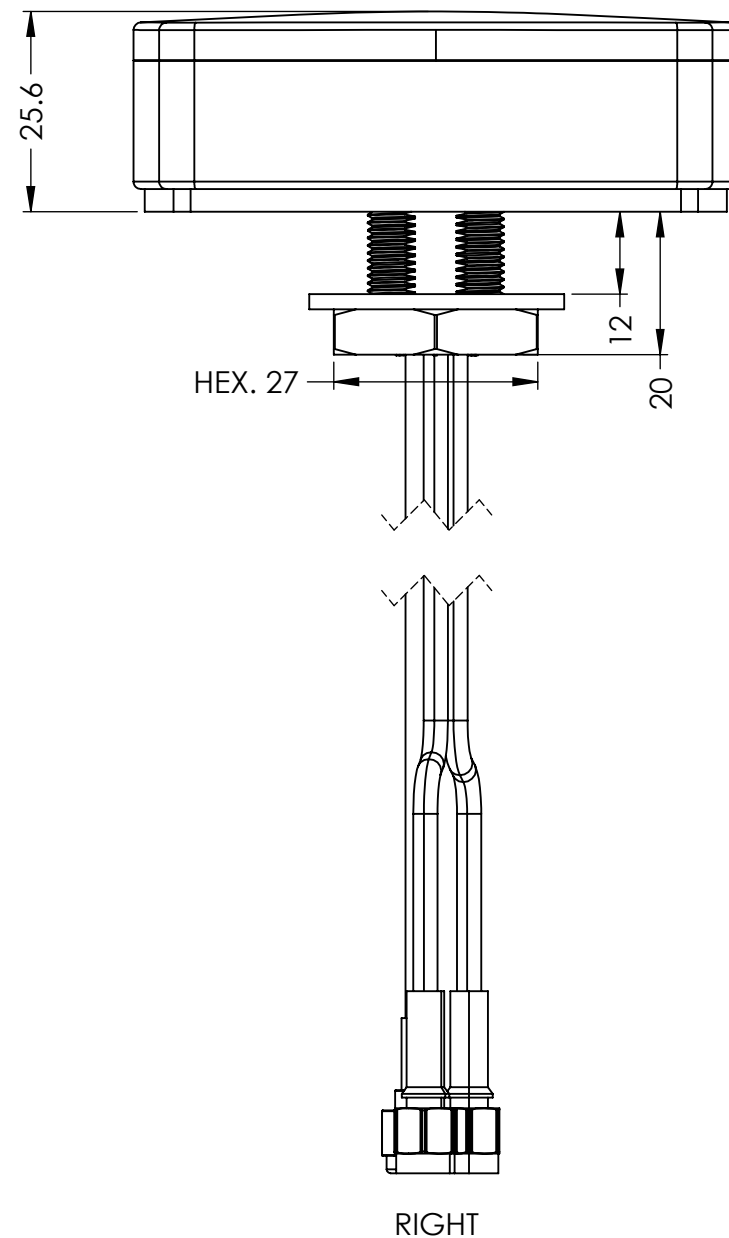
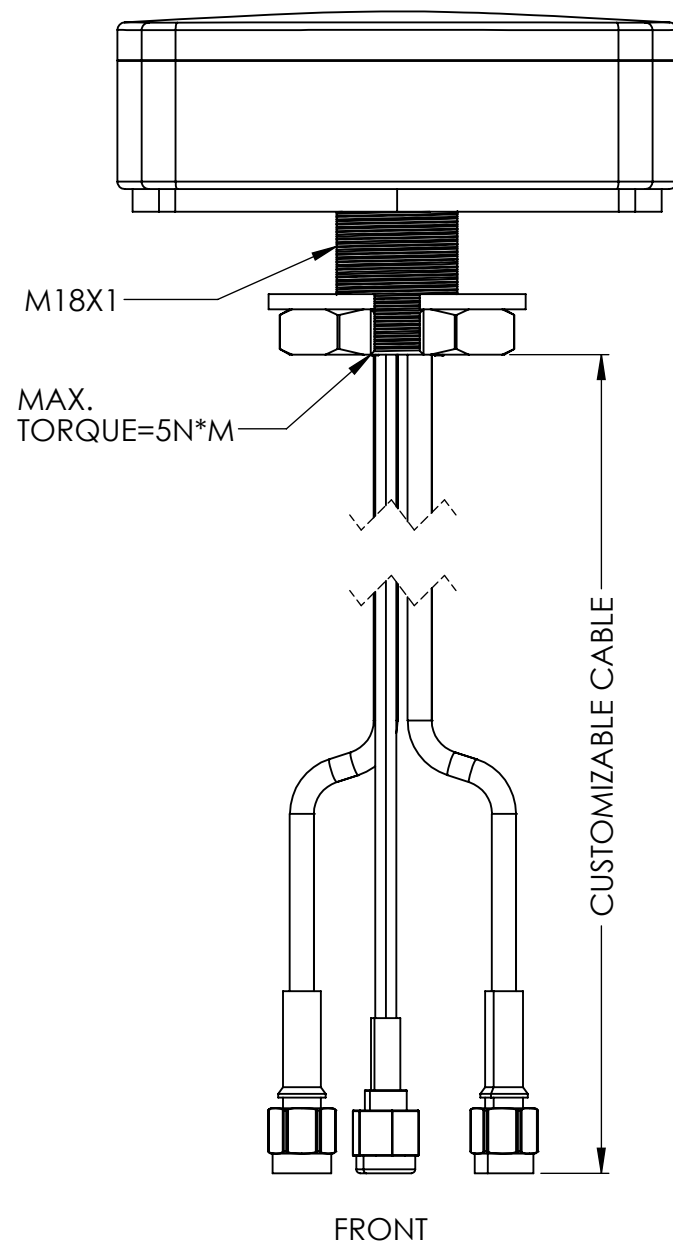


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DRAWING REVISION HISTORY			
REV	DESCRIPTION	DATE	BY
A	INITIAL RELEASE	2021-03-17	QZ



- NOTES:
1. FREQUENCY:
    - CABLE 1 (5G NR): 617-960 MHz; 1427-2690 MHz; 3300-5000 MHz; 5150-5925 MHz
    - CABLE 2 (IRIDIUM): 1616-1627 MHz
    - CABLE 3 (GPS/ GLONASS/ QZSS/ GALILEO): 1575-1606 MHz
  2. DIMENSIONS ARE AFTER MOUNTING
  3. MAX. MOUNTING THICKNESS: 12MM
  4. RADOME TYPE: PC+ASA
  5. RADOME COLOR: BLACK, WHITE
  6. CUSTOMIZABLE CABLE AND CONNECTORS
  7. CERTIFICATES: IP67, IP69
  8. OPERATING TEMPERATURE: -40 °C ~ 85 °C
  9. STORAGE TEMPERATURE: -40 °C ~ 85 °C

ITEM 189-00065 REVISION HISTORY			
REV	DESCRIPTION	DATE	BY
A	INITIAL RELEASE	2021-03-17	QZ

189-00065 CONFIGURATION TABLE			
DASH NO	RADOME COLOR	CABLE & LENGTH	CONNECTOR TYPE
-01	BLACK	CABLE 1 : D302,2M; CABLE 2 : D302,2M; CABLE 3 : D100,2M	SMA MALE

UNLESS OTHERWISE SPECIFIED:	NAME		DATE		MAXTENA, INC					
DIMENSIONS ARE IN MM	DRAWN	QZ	2021-03-18		TITLE:  189-00065 MEA-LGI-SMA					
TOLERANCES:	CHECKED	ZX	2021-05-27							
FRACTIONAL±	ENG APPR.	NPC	2021-05-27							
ANGULAR: MACH ± .5° BEND ±	MFG APPR.									
INTEGER ± 2	Q.A.									
ONE PLACE DECIMAL ± 1.0	CAD MAINTAINED. CHANGES SHALL BE INCORPORATED BY THE DESIGN ACTIVITY.				SIZE		DWG. NO.		REV	
TWO PLACE DECIMAL ± .50					B		117-00463-01		A	
INTERPRET GEOMETRIC TOLERANCING PER:					CAGE CODE: 5KQH7		SCALE: NONE		SHEET 1 OF 1	
										
THIRD ANGLE PROJECTION										
DO NOT SCALE DRAWING										