



MEA-5GGG-SMA-SM

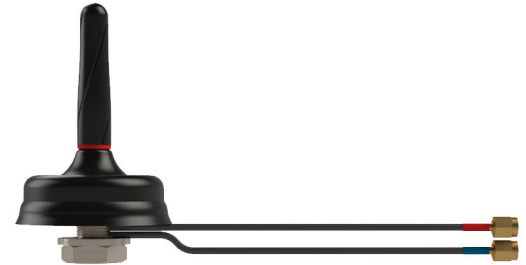
5G NR and GPS/GLONASS Screw Mount

Part #: 100-00244-01

Description

The MEA-5GGG-SMA-SM Screw Mount Antenna is a 2-in-1 antenna solution, with high gain and efficiency ideal for maintaining constant global connectivity. The MEA-5GGG-SMA-SM covers all GPS/GLONASS and 5G NR 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-5GGG-SMA-SM has two cables with a SMA-Male standard connector, 2m 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 Specification

Parameter	Specifications			
Technologies	5G, 4G, 3G and 2G			
Standards	5G NR/4G LTE/FirstNet/CBRS/LPWA/CAT-X/CAT-Mx/CAT-NBx/NB-IoT/3G/2G			
Frequency Range	617-960MHz	1427-2690MHz	3300-5000MHz	5150-5925MHz
Band (MHz)	600,700,850,900	1500, 1600, 1700, 1800, 1900, 2000, 2100, 2300, 2500, 2600	3300, 3500, 3600, 3700, 4500	5200, 5500, 5800
5G NR Bands	n5, n8, 12, n20, n28, n71, n81, n82, n83	n1, n2, n3, n7, n25, n34, n38, n39, n40, n41, n50, n51, n66, n70, n74, n75, n76, n80, n84, n86	n77, n78, n79	
4G LTE Bands	B5, B6, B8, B12, B13, B14, B17, B18, B19, B20, B26, B27, B28, B29, B44, B67, B68, B71, B85	B1, B2, B3, B4, B7, B9, B10, B11, B21, B23, B24, B25, B30, B32, B33, B34, B35, B36, B37, B38, B39, B40, B41, B45, B50, B51, B65, B66, B69, B70, B74, B75, B76	B22, B42, B43, B48, B49, B52	B46, B47, B252, B255
3G CELL Bands	B5, B6, B8, B12, B13, B14, B19, B20, B26	B1, B2, B3, B4, B7, B9, B10, B11, B21, B25, B32, B33, B34, B35, B36, B37, B38, B39, B40	B22	
2G CELL Bands	710, 750, 810T, 850, 900P, 900E, 900R	1800DCS, 1900PCS		
CDMA CELL Bands	BC0, BC2, BC3, BC7, BC9, BC10, BC12, BC18, BC19	BC1, BC4, BC6, BC8, BC13, BC14, BC15, BC16, BC20, BC21		
Return Loss	~-8.4	~-13.6	~-11.7	~-8.1
VSWR	~3.1:1	~1.7:1	~1.8:1	~2.5:1
Efficiency (%)	~50.8	~60.8	~35.3	~25.7
Peak Gain (dBi)	~-1.1	~-3.6	~-1.9	~-1.2
Average Gain (dB)	~-3.4	~-2.3	~-4.9	~-6.3
Impedance (Ohm)	50			
Polarization	Linear			
Radiation Pattern	Omni-Directional			
Max Input Power	35			
Connector Type	SMA-Male Standard (Other Connectors Available)			
Cable Length	300 cm Standard (Any Cable Length Available)			
Cable Type	LL100 Standard (Other Cables Available)			

Features

- Cable 1: 5G NR - - 1427-2690 MHz - 3300-5000 MHz - 5150-5925 MHz
- Cable 2: GPS/GLONASS - 1575-1610 MHz
- High Performance
- Customizable Cable and Connector
- IP67
- IP69

Applications

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



Maxtena Inc.
7361 Calhoun Place, Suite 102
Rockville, MD 20855
1-877-629-8362
info@maxtena.com

www.maxtena.com

Electrical Specification

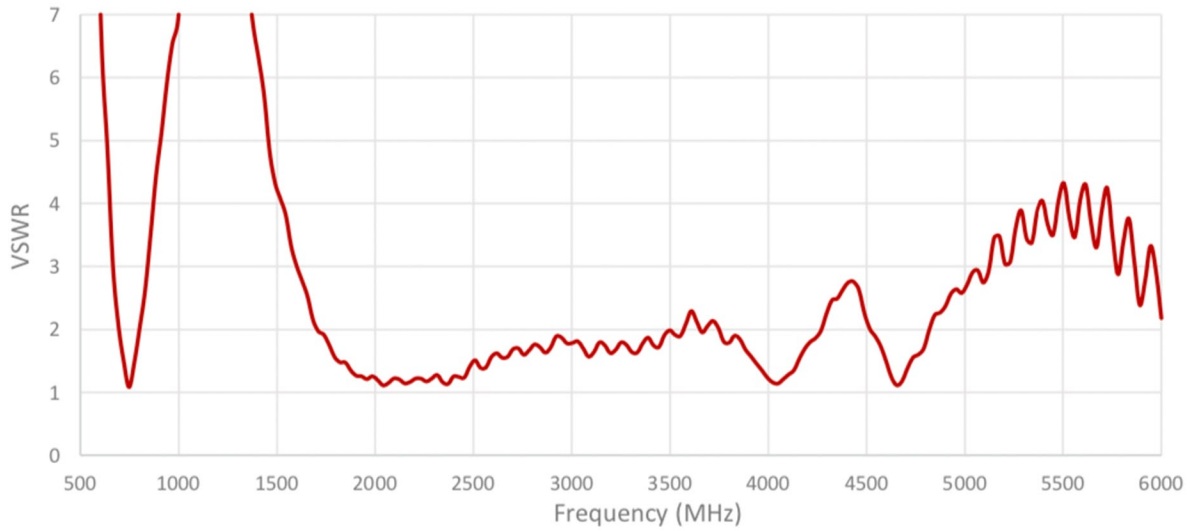
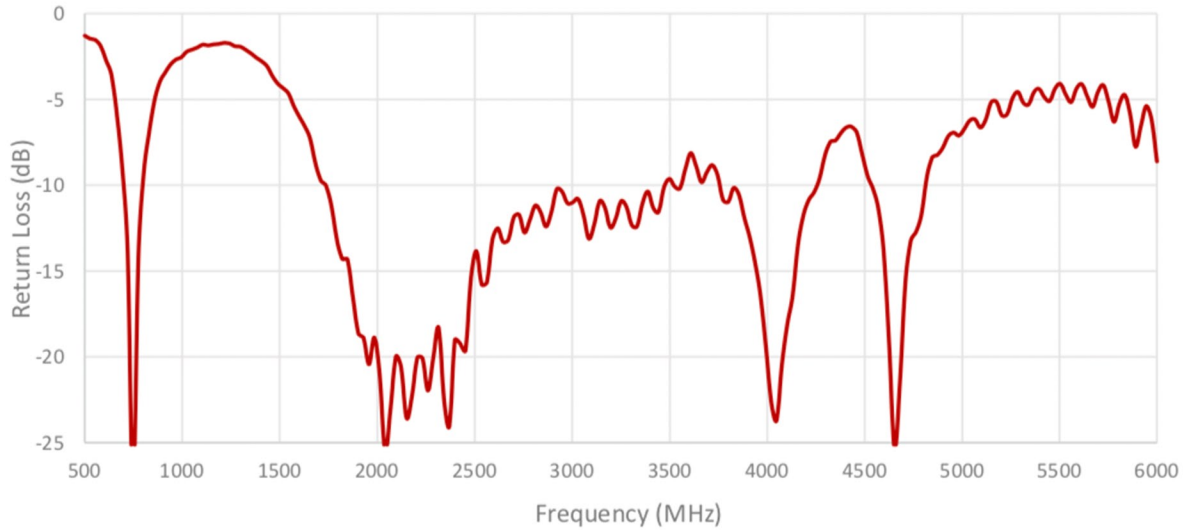
Cable 2	Parameter	Specifications	
	Standards	GPS / GLONASS	
	Band (MHz)	1575	1602
	Frequency Range	1575.42 MHz	1598-1610 MHz
	Return Loss (dB)	<-20	
	VSWR	<1.2:1	
	Impedance (Ohm)	50	
	Radiation Pattern	Hemispherical	
	Polarization	RHCP	
	Saw Filter	No Filter	
	Active Gain (dB)	26 @ 3V / 27dB @ 5V	
	Noise Figure (dB)	1.5	
	Voltage (V)	2.7 - 5.5	
	Current (mA)	15 - 25	
Power Consumption (mW)	40 - 137		
Connector Type	Most RF Connectors (SMA-Male Standard)		
Cable Length	Any Cable Length (200cm Standard)		
Cable Type	Other Cables Available (LL100 Standard)		

Mechanical Specification

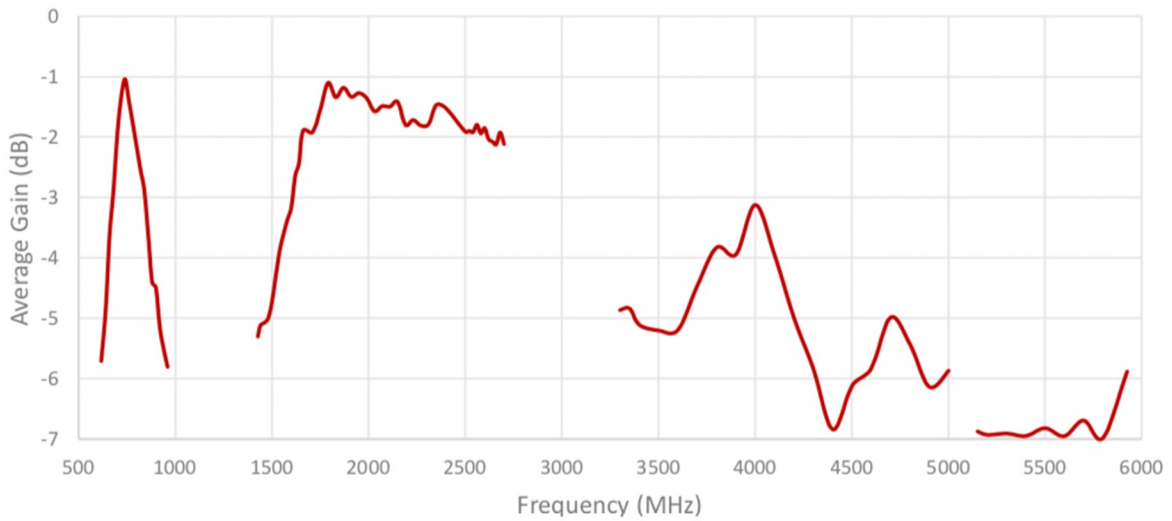
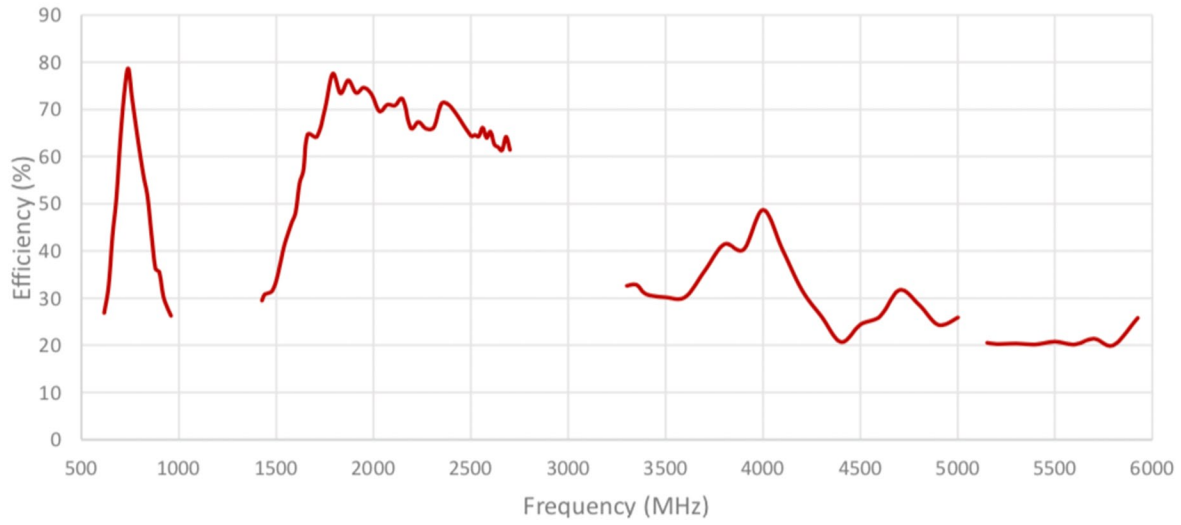
Parameter	Specifications
Antenna Dimensions (mm)	Ø 60 × 81
Operating Temperature (C)	-40 to +85
Storage Temperature (C)	-40 to +85
Mounting Type	Screw Mount
Radome/Color	ASA/ Black
Substance Compliance	RoHS
Max. Tighten Torque (Nm)	6 Nm
Antenna Base	Zamak
Gasket	TPE
Certificates	IP67, IP69

*Mounted on 30 x 30 Metal Plate
100 cm of Cable D302

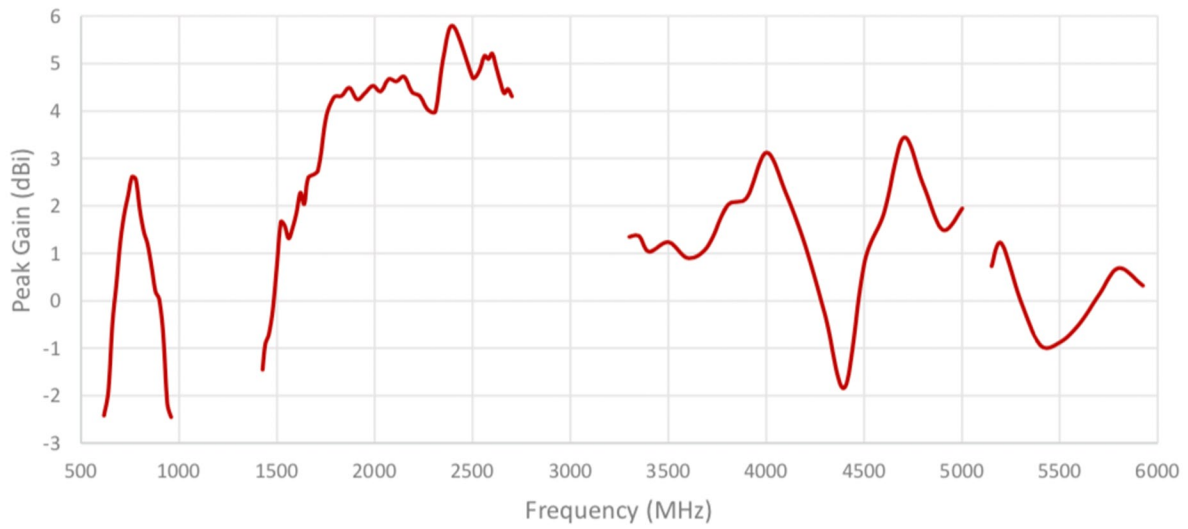
Antenna Parameters



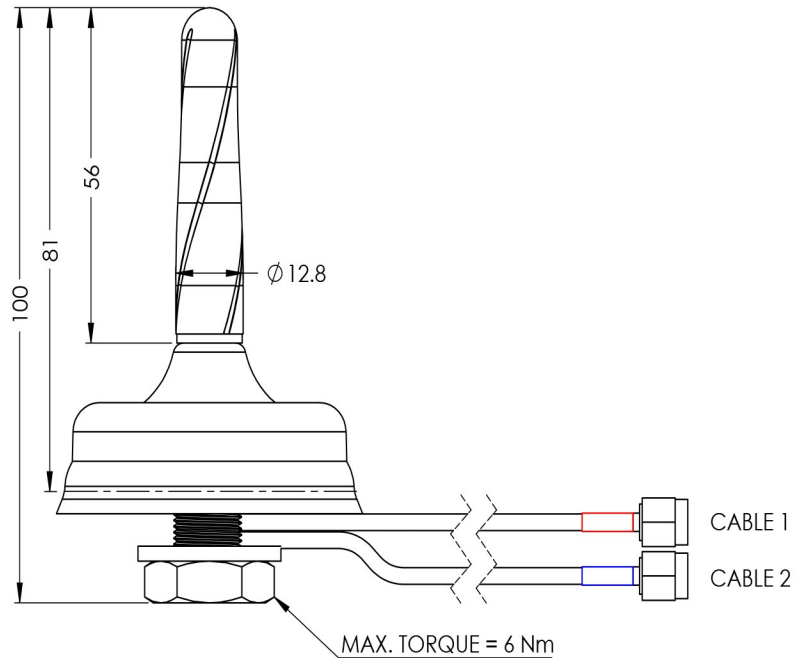
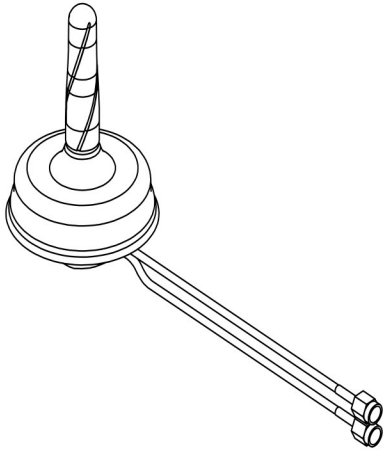
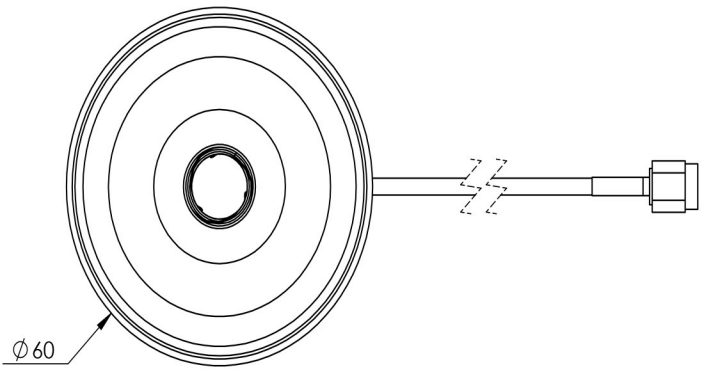
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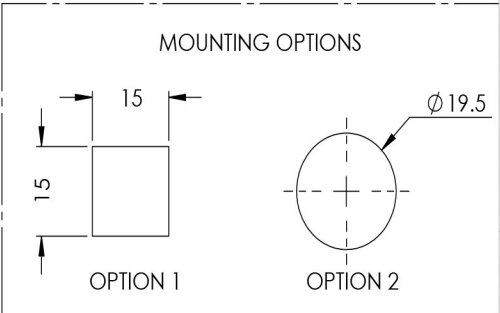


DRAWING REVISION HISTORY			
REV	DESCRIPTION	DATE	BY
A	INITIAL RELEASE	2022-01-28	JET



NOTES:

- FREQUENCY:
CABLE 1 (5G, 4G, 3G, 2G): 617-960 MHz, 1427-2690 MHz, 3300-5000 MHz, 5150-5925 MHz
CABLE 2 (GPS/GLONASS): 1575.42 MHz, 1598-1610 MHz
- DIMENSIONS ARE AFTER MOUNTING
- CUSTOMIZABLE CABLE AND CONNECTOR TYPE
- MOUNTING TYPE: SCREW MOUNT
- MAX. MOUNTING THICKNESS: 4mm
- MATERIALS:
• RADOME: ASA
• RADOME COLOR: BLACK
• ANTENNA BASE: ZAMAK
• GASKET: TPE
- OPERATING TEMPERATURE: -40° C ~ +85° C
- STORAGE TEMPERATURE: -40° C ~ +85° C
- CERTIFICATION: IP67, IP69



ITEM 100-00244 REVISION HISTORY			
REV	DESCRIPTION	DATE	BY
A	INITIAL RELEASE	2022-01-28	JET

100-00244 CONFIGURATION TABLE				
DASH NO	CABLE TYPE	CABLE LENGTH	CONNECTOR TYPE	RADOME COLOR
-01	CABLE 1: LL100 CABLE 2: LL100	200 CM 200 CM	SMA-MALE GOLD SMA-MALE GOLD	BLACK

UNLESS OTHERWISE SPECIFIED:	NAME	DATE
DIMENSIONS ARE IN MM	DRAWN	JET 2022-01-28
TOLERANCES:	CHECKED	ZX 2022-01-28
FRACTIONAL ±	ENG APPR.	NPC 2022-01-28
ANGULAR: MACH ± .5° BEND ±	MFG APPR.	
ONE PLACE DECIMAL ± 1.0	Q.A.	
TWO PLACE DECIMAL ± .50		
INTERPRET GEOMETRIC TOLERANCING PER:	CAD MAINTAINED. CHANGES SHALL BE INCORPORATED BY THE DESIGN ACTIVITY.	
	THIRD ANGLE PROJECTION	
DO NOT SCALE DRAWING		

MAXTENA, INC		
TITLE:		
100-00244		
MEA-5GGG-SMA-SM		
SIZE	DWG. NO.	REV
B	117-00580-01	A
CAGE CODE: 5KQH7	SCALE: NONE	SHEET 1 OF 1

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