

MEAX-LTE-MIMO-MM

5G NR MIMO Magnetic Mount antenna

Part #: 100-00413-01

Description

The MEAX-LTE-MIMO-MM Magnet Mount Antenna is a high-performance, 2-in-1 antenna solution designed for maintaining constant network connectivity across all 5G and MIMO frequency standards. This antenna is ideal for telematics systems, remote surveillance, asset tracking, and various IoT applications, ensuring robust performance even in the most challenging installations. Its magnet mount design allows for easy installation and maximum durability. The antenna comes with two cables featuring SMA-Male connectors (3m standard length) and is fully customizable, offering additional connector types, cable lengths, and cable types to meet specific needs.



Electrical Specifications

Parameter	Specifications			
Technologies	5G, 4G, 3G and 2G			
Standards	5G NR/4G LTE/FirstNet/CBRS/LPWA/CAT-X/CAT-Mx/CAT-NBx/NB-LoT/3G/2G			
Frequency (MHz)	617-960	1427-2690	3300-5000	5150-5925
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, n12, 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		

Features

- Magnetic Mount installation
- Low Profile & sleek design
- High Gain performance
- Ground Plane Independent
- Customizable Cable and Connector
- Cable 1 and 2: 5G NR (617-960, 1427-2690, 3300-5000 and 5150-5925 MHz)
- Compact size 89 x 76 x 27 mm
- IP67, IP69
- IP67, IP69

Applications

- GNSS
- Automotive
- IOT
- Drones

Cable 1	Parameter	Specifications			
	Frequency (MHz)	617-960	1427-2690	3300-5000	5150-5925
	Return Loss (dB)	~-7.0	~-11.2	~-7.1	~-6.4
	VSWR	~3.1:1	~2.1:1	~3.1:1	~3.0:1
	Efficiency (%)	~-50.2	~-56.3	~-30.4	~-25.1
	Peak Gain (dBi)	~-2.1	~-6.3	~-3.7	~-2.8
	Average Gain (dB)	~-3.3	~-2.5	~-5.8	~-6.1
	Impedance (Ohm)	50			
	Polarization	Linear			
	Radiation Pattern	Omni-Directional			
Max Input Power (W)	35				
Connector Type	SMA-Male Standard (Other Connectors Available)				
Cable Length	300 cm Standard (Any Cable Length Available)				
Cable Type	D302 Standard (Other Cables Available)				

Cable 2	Parameter	Specifications			
	Frequency (MHz)	617-960	1427-2690	3300-5000	5150-5925
	Return Loss (dB)	~-7.3	~-10.8	~-7.6	~-8.4
	VSWR	~3.1:1	~2.1:1	~2.9:1	~2.3:1
	Efficiency (%)	~-50.9	~-58.7	~-38.0	~-36.7
	Peak Gain (dBi)	~-1.6	~-6.3	~-5.1	~-4.4
	Average Gain (dB)	~-3.2	~-2.3	~-4.4	~-4.4
	Impedance (Ohm)	50			
	Polarization	Linear			
	Radiation Pattern	Omni-Directional			
Max Input Power (W)	25				
Connector Type	SMA-Male Standard (Other Connectors Available)				
Cable Length	300 cm Standard (Any Cable Length Available)				
Cable Type	D302 Standard (Other Cables Available)				

Antenna Measurement Conditions

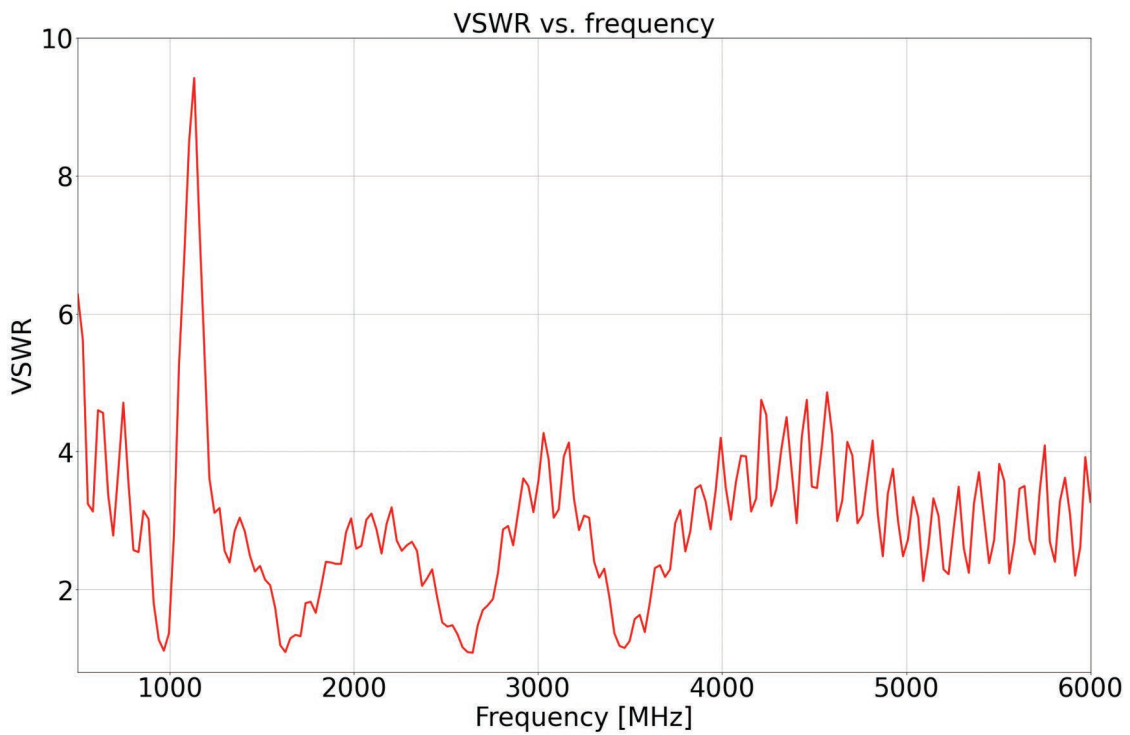
Mounted on 30 x 30 Metal Plate
 100 cm of Cable D302
 Measured in Certified CTIA 3D Anechoic Chamber

Mechanical Specifications

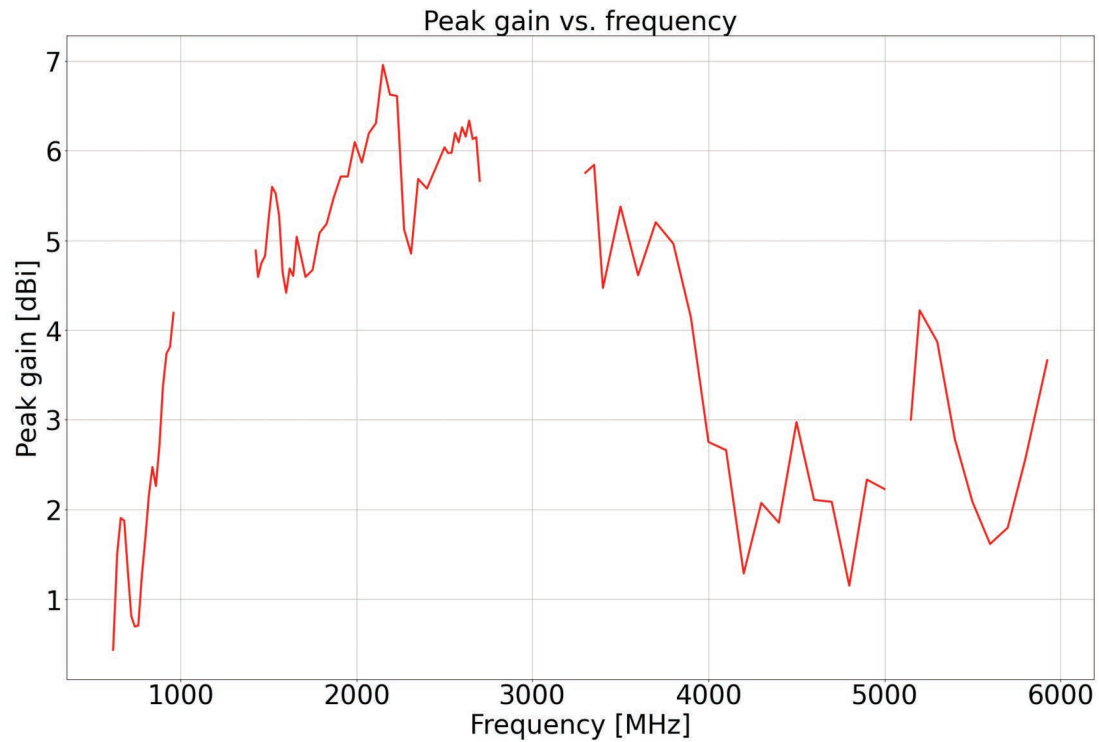
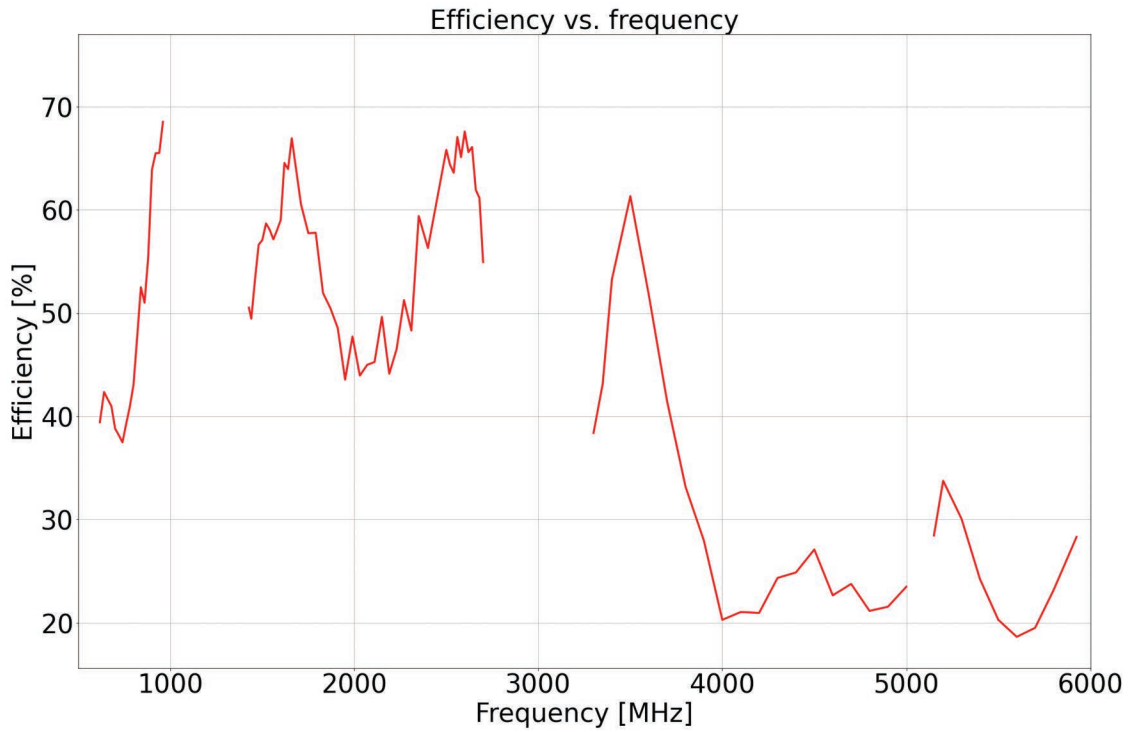
Parameter	Specifications
Mounting Type	Magnetic Mount
Dimensions (mm)	89 x 76 x 27
Radome Type	ASA UV Stable
Radome Color	Black, White
Operating Temperature (C)	-40 to +85
Storage Temperature (C)	-40 to +85
Ingress Protection	IP67, IP69
Substance Compliance	RoHS

Antenna Parameters

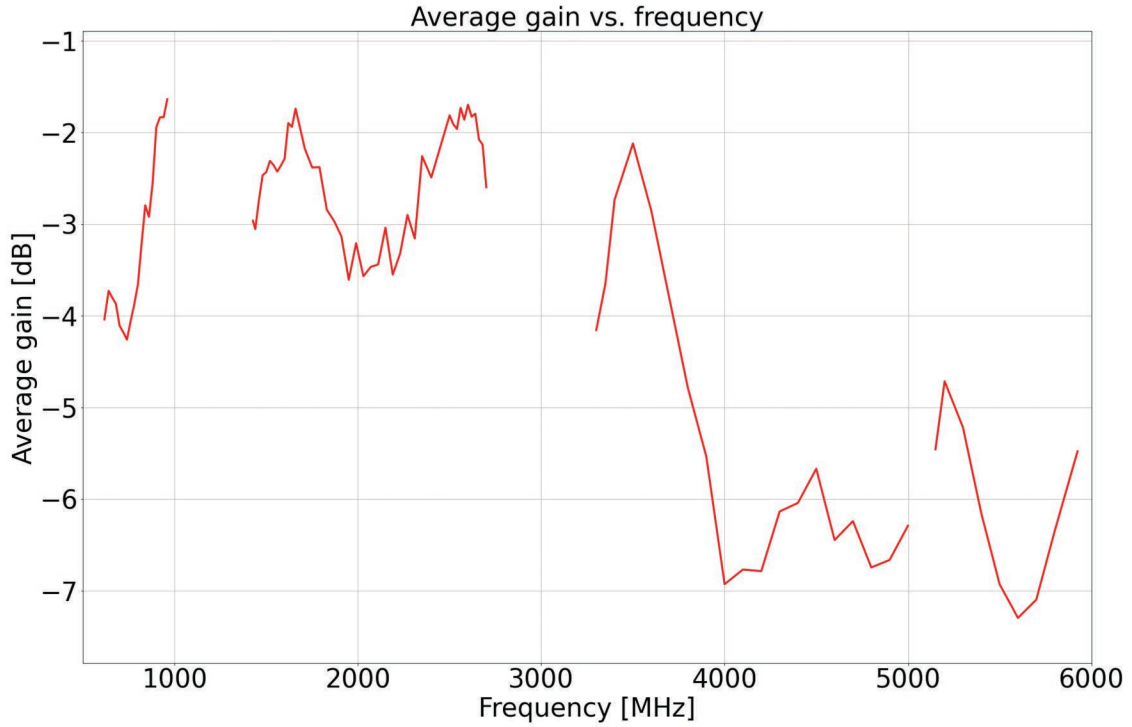
Table 1: 5GNR-1



Antenna Parameters



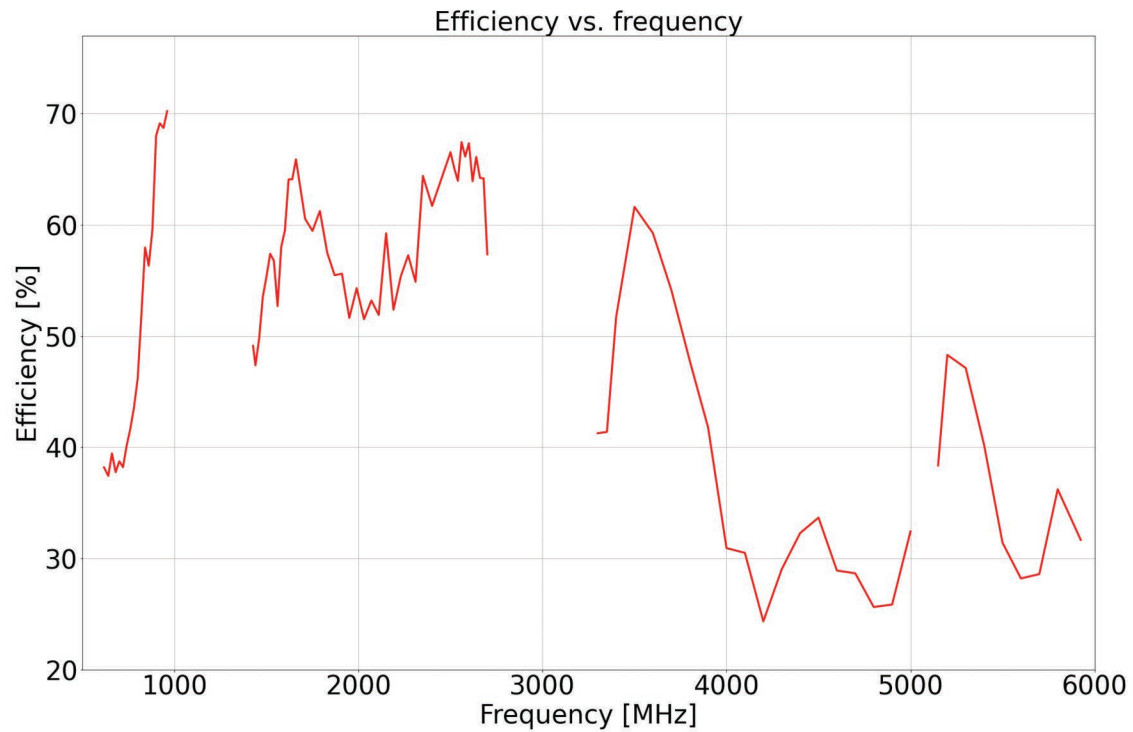
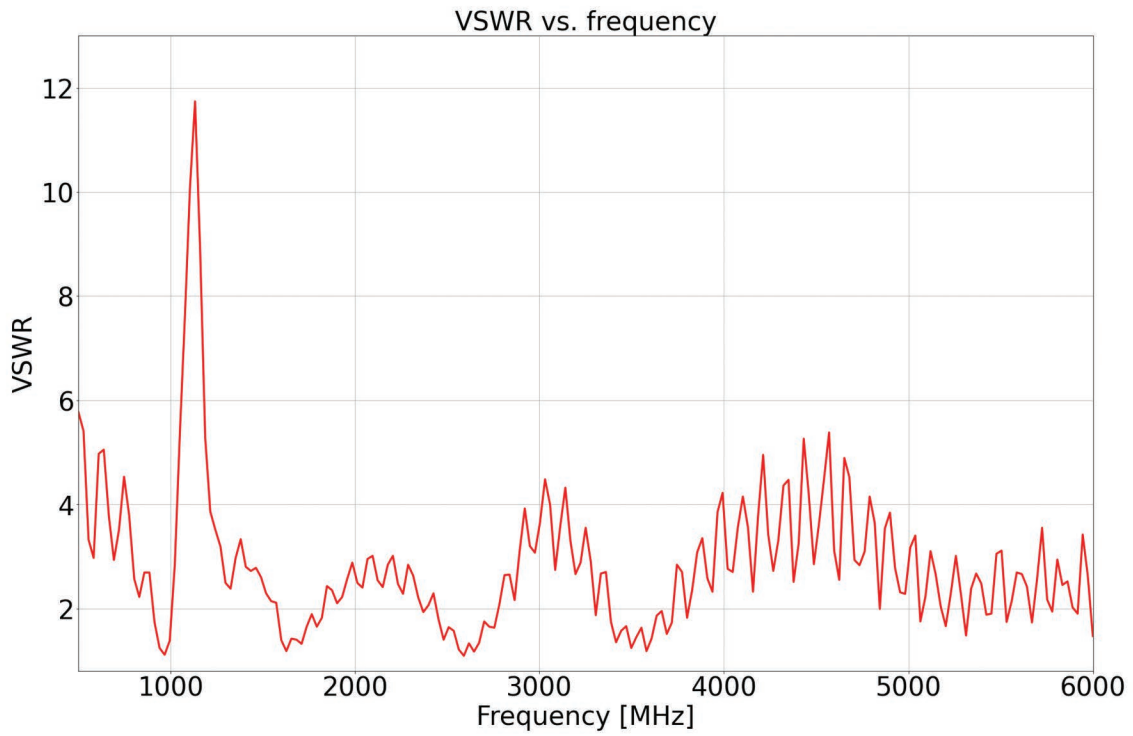
Antenna Parameters



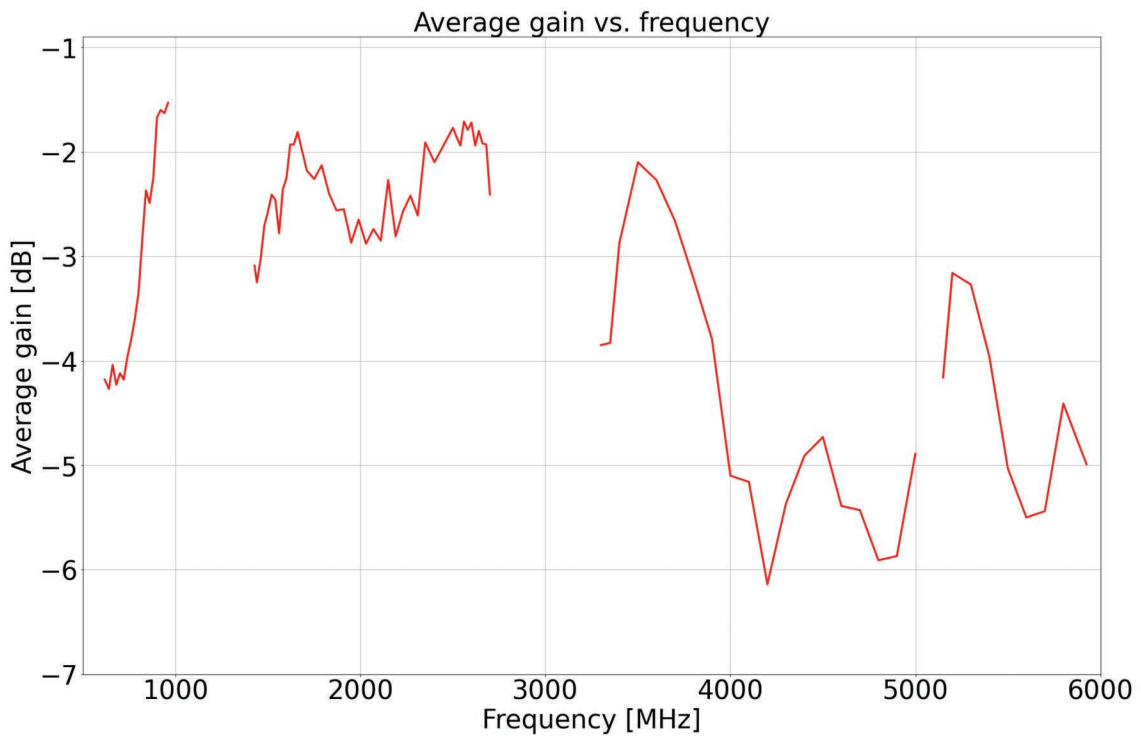
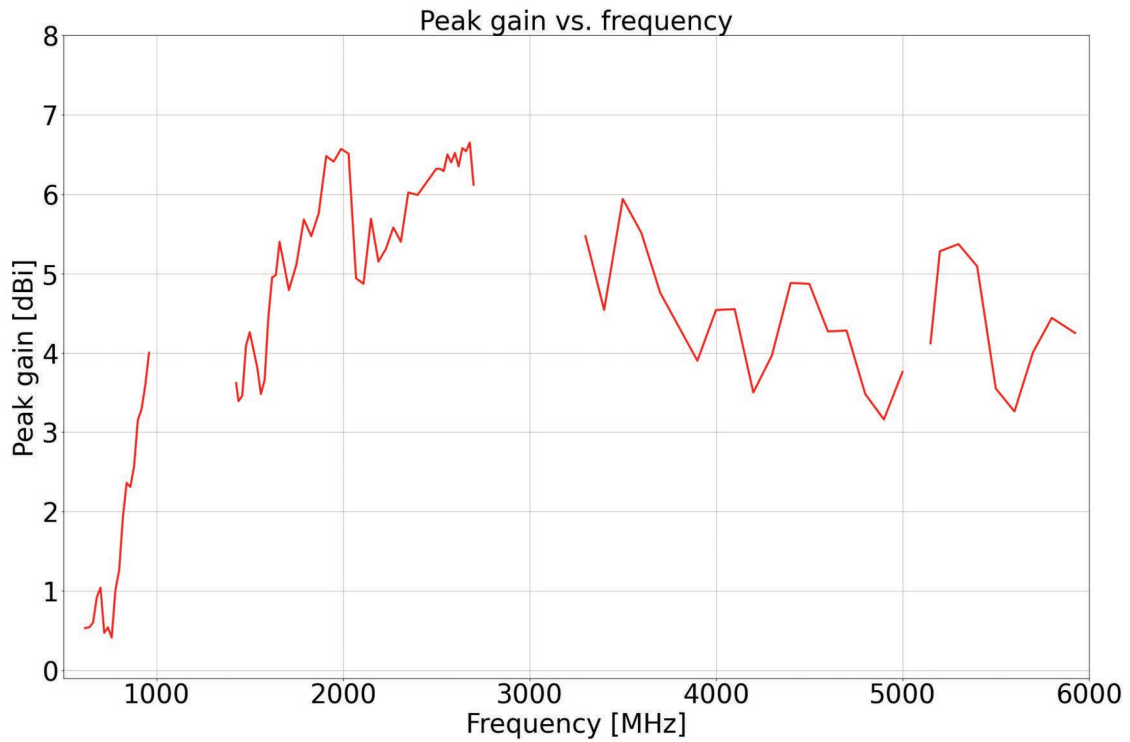
Cable 2: 5GNR-2



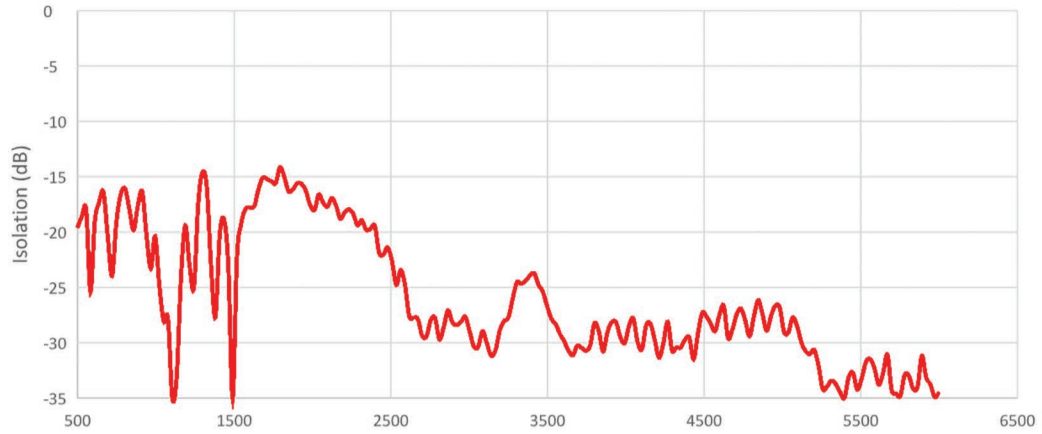
Antenna Parameters



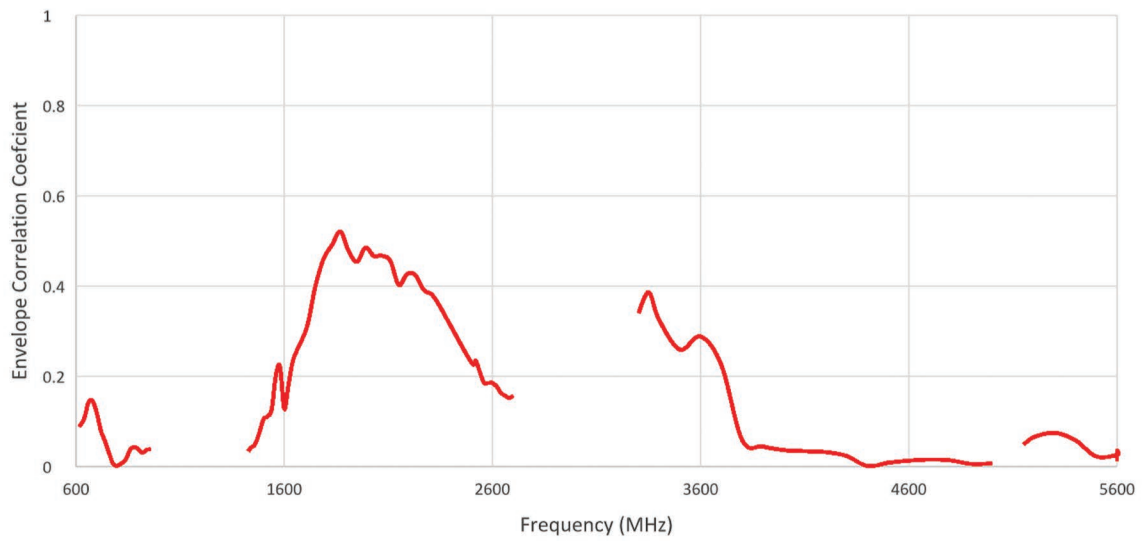
Antenna Parameters



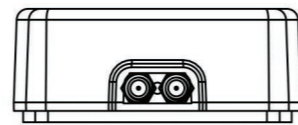
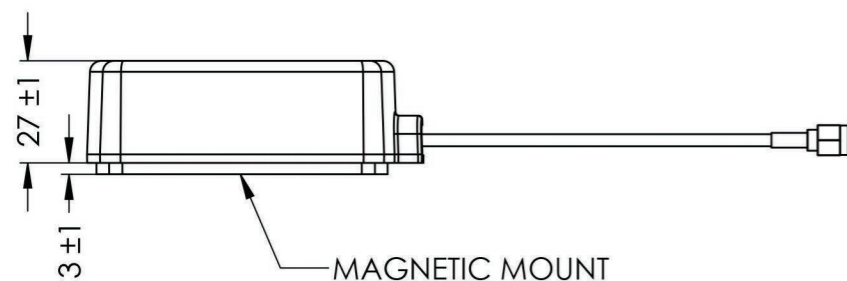
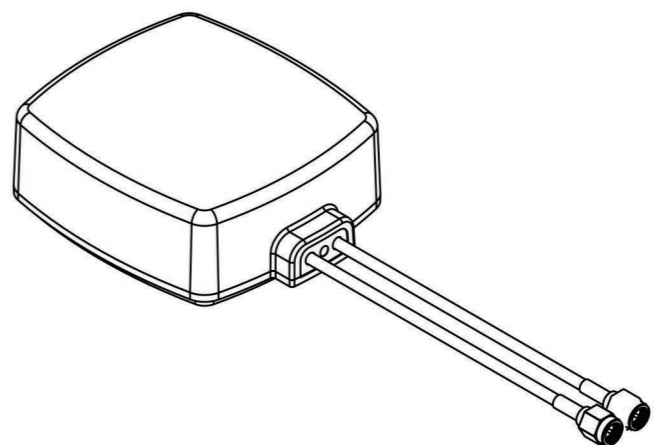
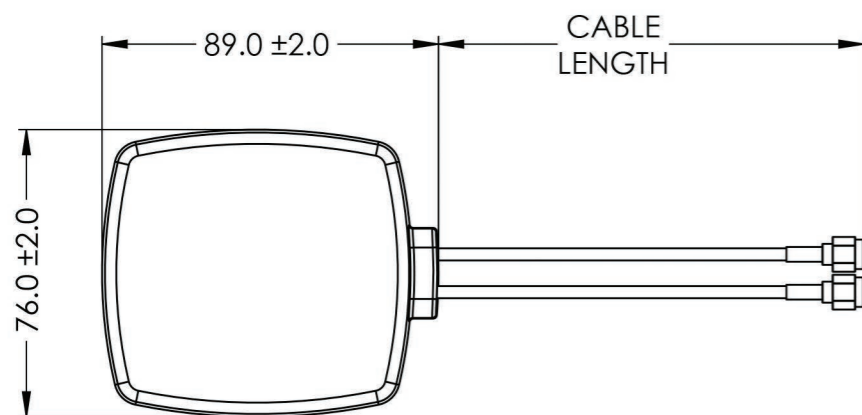
ISOLATION FOR CABLES 1 AND 2



ENVELOPE CORRELATION COEFFICIENT FOR CABLES 1 AND 2



DRAWING REVISION HISTORY			
REV	DESCRIPTION	DATE	BY
A	INITIAL RELEASE	2024-07-19	MP



NOTES:

- FREQUENCY:
 - CABLE 1-2: 5GNR (617-960 MHz, 1427-2690 MHz, 3300-5000 MHz AND 5150-5925 MHz)
- CUSTOMIZABLE CABLE AND CONNECTOR OPTIONS
- MOUNTING TYPE: MAGNETIC MOUNT
- DIMENSIONS ARE AFTER MOUNTING
- MATERIALS:
 - RADOME: ABS UV STABLE
 - RADOME COLOR: BLACK OR WHITE
- OPERATING TEMPERATURE: -40°C ~ +85°C
- STORAGE TEMPERATURE: -40°C ~ +85°C
- CERTIFICATIONS: IP67, IP69

ITEM 100-00413-01 REVISION HISTORY			
REV	DESCRIPTION	DATE	BY
A	INITIAL RELEASE	2024-07-19	MP

100-00413-01 CONFIGURATION TABLE				
DASH NO	CABLE TYPE	CABLE LENGTH	CONNECTOR TYPE	RADOME COLOR
-01	CABLE 1-2: D302	300CM	SMA MALE	BLACK

UNLESS OTHERWISE SPECIFIED:	NAME	DATE
DIMENSIONS ARE IN MM	DRAWN MP	2024-07-19
TOLERANCES:	CHECKED BO	2024-07-22
FRACTIONAL ±	ENG APPR. AV	2024-07-22
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.	
	DO NOT SCALE DRAWING	

MAXTENA, INC		
TITLE: 100-00413-01 MEA-LTE-MIMO-MM		
SIZE B	DWG. NO. 117-00798-01	REV A
CAGE CODE: 5KQH7	SCALE: NONE	SHEET 1 OF 1