



MEA-GNSS-LTE-MM

2 IN 1 LTE/GNSS ANTENNA

Ordering Part #: 100-00103-03



The MEA-GNSS-LTE is a 2 in 1 low profile antenna solution by Maxtena that combines GNSS and LTE antennas in one. Our low profile 2 in 1 solution is ideal for asset tracking, industrial and IOT applications. This antenna offers a ultra low profile rugged IP67 rated design with easy magnet mounting and customizable cables and connector options. The small size make this antenna a desirable solution for covert installations.

GPS-GLONASS Antenna Electrical Specifications

Frequency Range (MHz)	1575.42 / 1602 MHz
VSWR	2.0 : 1 Max
Impedance	50 Ohm
Polarization	Linear
Gain @ Zenith	1 dBi Typ. @ 1575 MHz 1 dBi Typ. @ 1602 MHz

LNA Electrical Properties

Frequency Range (MHz)	1575.42 / 1602 MHz
VSWR	2.0 : 1 Max
Impedance	50 Ohm
Antenna Gain (@ 3.3V)	28 dB Typ. / 25 dB Min
DC Power Input	3~5 V
Noise Figure	2.5 dB Typ.
Power Consumption (@ 3.3V)	9 mA Typ.

LTE Antenna Electrical Specifications

Frequency Range (MHz)	698~960 / 1710~2170 / 2300~2690 MHz
VSWR	698~960 MHz \leq 3.7 1710~2170 MHz \leq 3.5 2300~2690 MHz \leq 3.0
Impedance	50 Ohm
Peak Gain	1.0 dBi Typ. @ 698~960 MHz 2.0 dBi Typ. @ 1710~2170 MHz 2.0 dBi Typ. @ 2300~2690 MHz
Average Efficiency	698~960 MHz \geq 28% 1710~2170 MHz \geq 30% 2300~2690 MHz \geq 30%

Mechanical Specifications

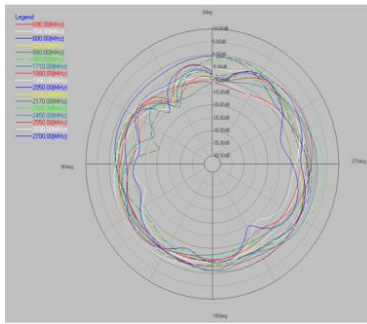
Antenna Dimensions (mm)	Diameter 51.4 x (h) 11.7 mm
Mounting Function	Magnet Mount
Operating Temperature	-40 °C + 85 °C
Housing Material & Color	PC & Black
Cable	RG-174
Cable Length	1 Meter
Connector	SMA / FAKRA or customer specification
Waterproof	IPX5

Radiation Specifications

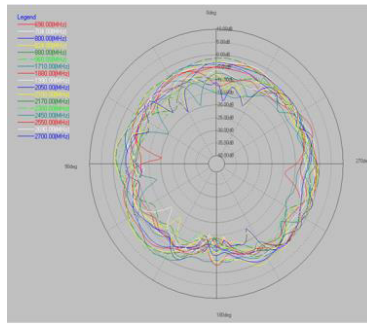
LTE / GNSS (GPS-GLONASS)

LTE

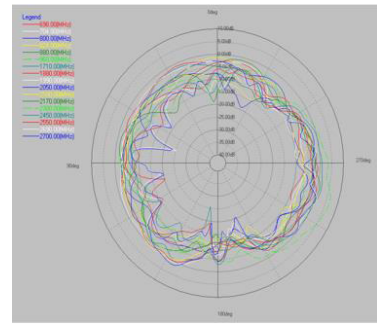
X-Y



X-Z

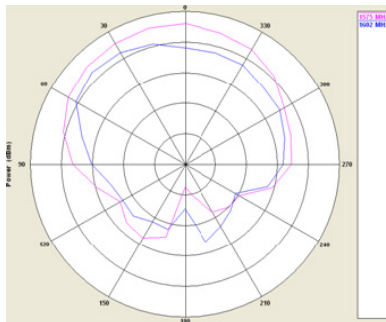


Y-Z

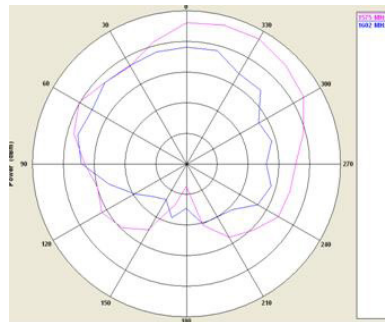


GPS-GLONASS

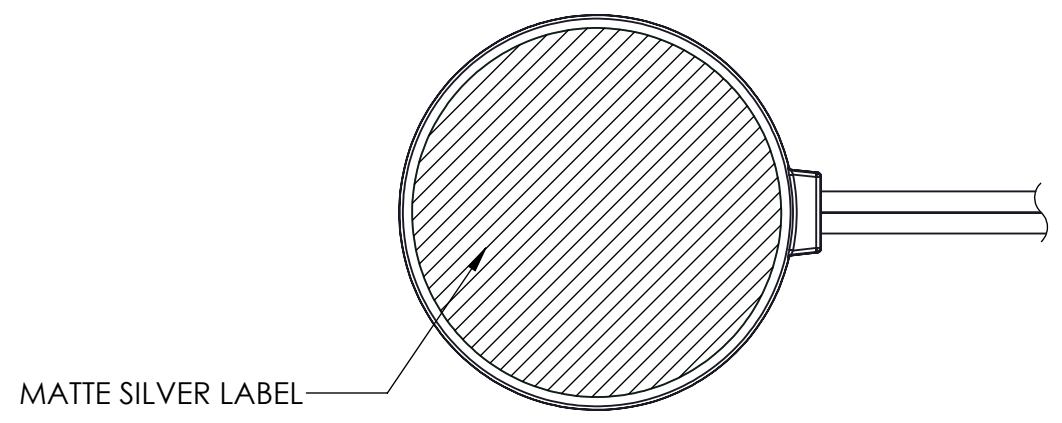
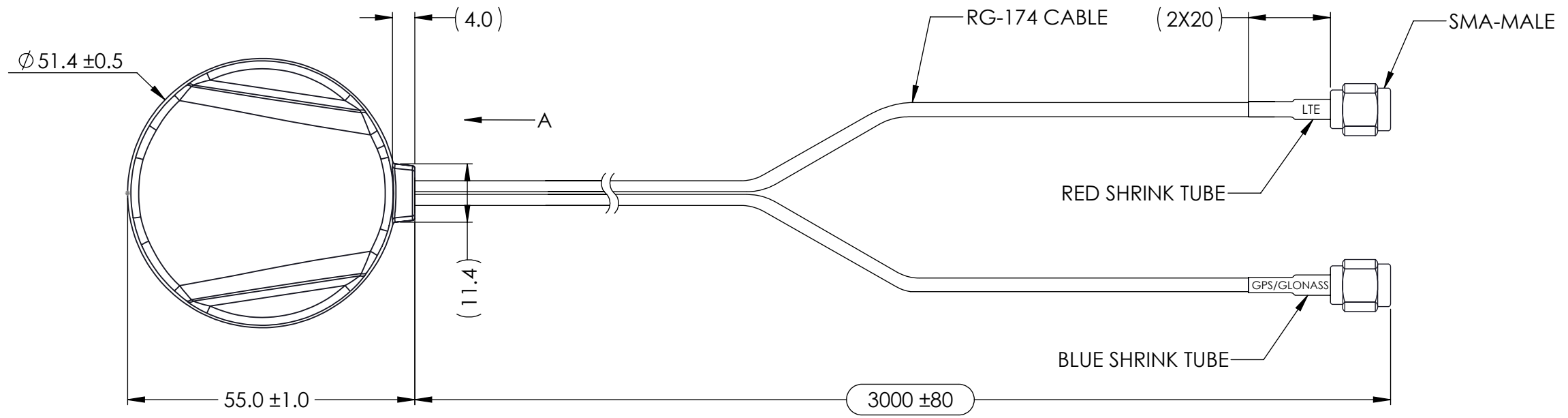
X-Z



Y-Z



DRAWING REVISION HISTORY			
REV	DESCRIPTION	DATE	BY
A	INITIAL RELEASE	2020-11-12	QZ



- NOTES:
- FREQUENCY:
GPS-GLONASS ACTIVE ANTENNA: 1575.42MHZ/1602 MHZ
LTE PASSIVE ANTENNA: 698~960/1710~2170/2300~2700 MHZ
 - CONNECTOR: SMA-MALE
 - WATERPROOF: IPX5.
 - INSPECTION DIMENSIONS MARK AS (DIM) , REFERENCE DIMENSIONS MARK AS (DIM).

ITEM 100-00103-03 REVISION HISTORY			
REV	DESCRIPTION	DATE	BY
A	INITIAL RELEASE	2020-11-12	QZ

PROPRIETARY AND CONFIDENTIAL

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UNLESS OTHERWISE SPECIFIED:	NAME	DATE
DIMENSIONS ARE IN MM	DRAWN	QZ 2020-11-12
TOLERANCES:	CHECKED	ZX 2020-11-30
FRACTIONAL ±	ENG APPR.	NPC 2020-12-01
FRACTIONAL ±	MFG APPR.	
ANGULAR: MACH ± .5° BEND ±	Q.A.	
ONE PLACE DECIMAL ± 1.0		
INTEGER: ±2		
INTERPRET GEOMETRIC TOLERANCING PER:	CAD MAINTAINED. CHANGES SHALL BE INCORPORATED BY THE DESIGN ACTIVITY.	
	DO NOT SCALE DRAWING	

MAXTENA, INC		
TITLE: 100-00103-03 MEA-GNSS-LTE-MM		
SIZE B	DWG. NO. 117-00374-03	REV A
CAGE CODE: 5KQH7	SCALE: NONE	SHEET 1 OF 1