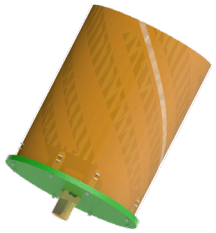
M1227HCT-A-EMB

RUGGED L1/L2 GPS GLONASS ACTIVE ANTENNA

Ordering Part #: 108-00044-01



Description

The M1227HCT-A-EMB is Maxtena's latest high performance active rugged antenna designed for L1/L2 GPS and GLONASS bands. The antenna is designed for applications requiring greater accuracy than what L1 only antennas can provide. The antenna is built on proprietary Maxtena Helicore® technology. This technology provides exceptional pattern control, polarization purity and high efficiency in a very compact form factor. It is a screw-on design, featuring an integrated SMA connector. This antenna has superior filtering performance and is rated for 50 V/m out of band interference.

Features

- L1/L2 GPS-GLONASS bands
- Superior out-of-band rejection
- 50 V/m jamming resistant
- Very low noise figure
- SMA mount
- Ground plane independent
- GIS & RTK applications
- Ultra light weight

Applications

- Precision navigation
- Precision timing
- Military & security
- Asset tracking
- Oil & gas industries
- Navigation devices
- Mining equipment
- LBS & M2M applications
- Handheld devices
- Law enforcement

Electrical Specifications

Parameter	Design Specifications
Frequency	1217-1250 MHz (L2) 1565-1610 MHz (L1)
Polarization	RHCP
Passive peak gain	2 dBic @ 1227 MHz (typical) 2 dBic @ 1575 MHz (typical)
Total gain	30 dBic @ 1227 MHz (typical) 28 dBic @ 1575 MHz (typical) 28 dBic @ 1602 MHz (typical)
Out-of-band rejection	>50 dB
Current drain	25 mA (typical)
Voltage	3-12 V
Noise figure	1.5 dB (typical)
RF interference rating	50 V/m out of band
Operating temp.	from -40˚C to 85˚C

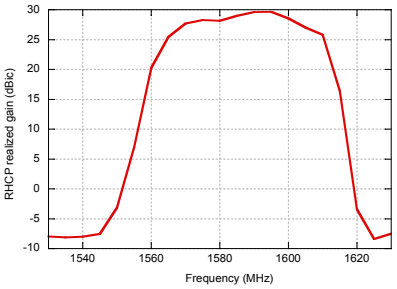
L1 Band Typical Performance

Parameter	Design Specifications
Total peak gain	28 dBic
Axial Ratio	0.5 dB (typical) / 1 dB (max)
VSWR	<1.5

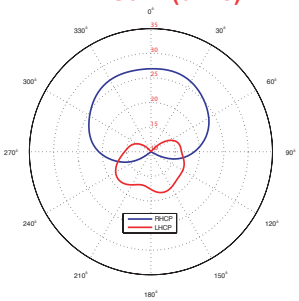
L2 Band Typical Performance

Parameter	Design Specifications
Total peak gain	30 dBic
Axial Ratio	0.5 dB (typical) / 1 dB (max)
VSWR	<1.5

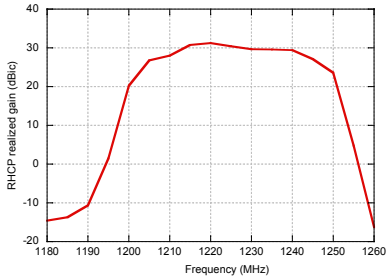
L1 Band Frequency Response



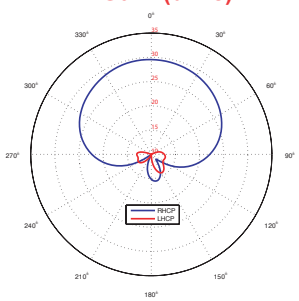
L1 Gain (dBic)



L2 Band Frequency Response



L2 Gain (dBic)



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WIRELESS INNOVATIONS COMPANY

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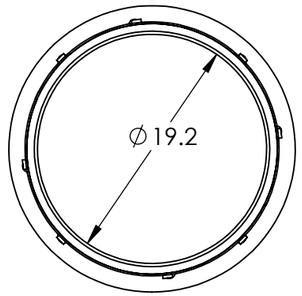
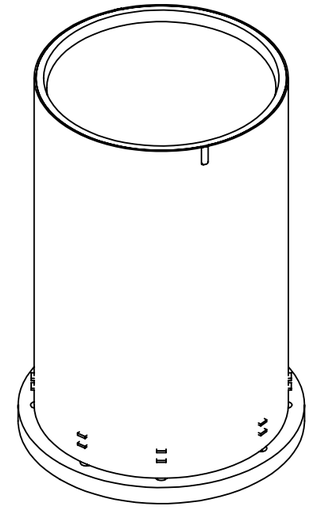
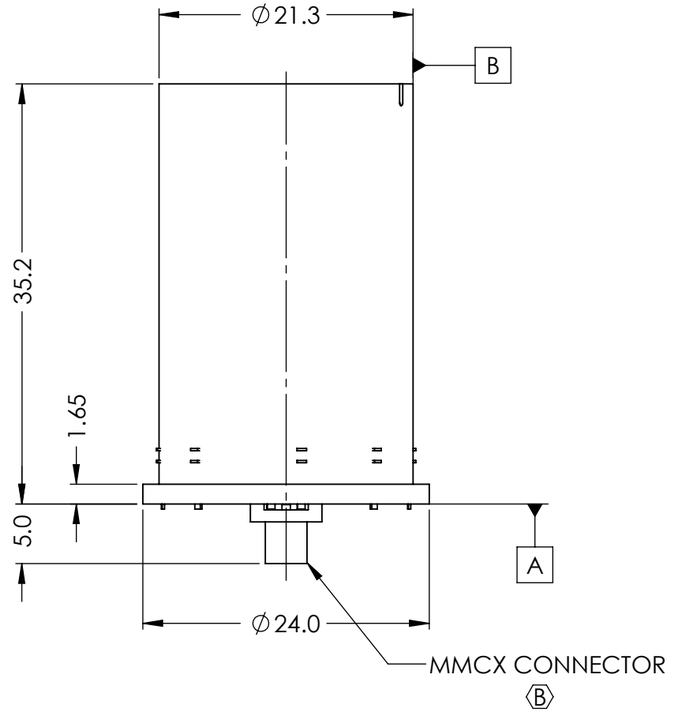
DRAWING REVISION HISTORY			
REV	DESCRIPTION	DATE	BY
A	INITIAL RELEASE	2019-11-18	ZX
B	CORRECT CONECTOR NAME	2021-04-02	MP

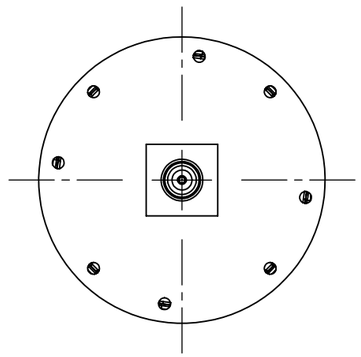
TOP





FRONT





BOTTOM

ITEM 108-00044-01 REVISION HISTORY			
REV	DESCRIPTION	DATE	BY
A	INITIAL RELEASE	2016-02-22	SMS

UNLESS OTHERWISE SPECIFIED:		NAME	DATE
DIMENSIONS ARE IN MM TOLERANCES: FRACTIONAL ± ANGULAR: MACH ± .5° BEND ± ONE PLACE DECIMAL ± 1.0 TWO PLACE DECIMAL ± .20	DRAWN	MP	2021-04-02
	CHECKED		
	ENG APPR.		
	MFG APPR.		
INTERPRET GEOMETRIC TOLERANCING PER:	Q.A.		

THIRD ANGLE PROJECTION

DO NOT SCALE DRAWING

CAD MAINTAINED. CHANGES SHALL BE INCORPORATED BY THE DESIGN ACTIVITY.

MAXTENA, INC

TITLE:
108-00044-01
M1227HCT-A-EMB

SIZE	DWG. NO.	REV
B	117-00308-01	B

CAGE CODE: 5KQH7	SCALE: NONE	SHEET 1 OF 1