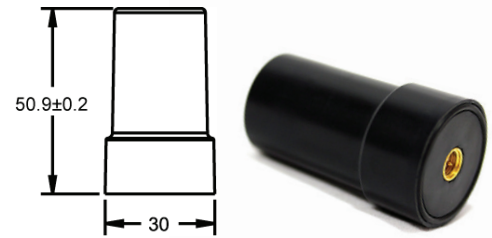


M1227HCT-A-SMA

L1/L2 GPS GLONASS ACTIVE ANTENNA

Ordering Part #: 100-00004-01



Description

The M1227HCT-A-SMA is a high performance antenna designed for L1/L2 GPS-GLONASS bands, built on proprietary Maxtena Helicore® technology. This technology provides exceptional pattern control, polarization purity and high efficiency in a very compact form factor. The M1227HCT-A-SMA 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. The product is ideal for applications requiring minimal integration effort or for retrofitting existing products. The antenna is equipped with an O-ring that makes the antenna waterproof once installed on a mating surface.

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 @ 3.3V) 30 dBic @ 1575 MHz (typical @ 3.3V) 30 dBic @ 1602 MHz (typical @ 3.3V)
Out-of-band rejection	>50 dB
Current drain	35 mA (max @ 3.3V)
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
Overall dimensions	50.9 mm (height) x 30 mm (diameter)
Weight	17 grams

Mechanical Specifications

dimensions are in mm

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 - 17 grams

Applications

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

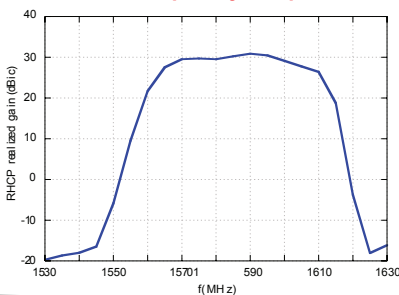
L1 Band Typical Performance

Parameter	Design Specifications
Element efficiency	60%
Total peak gain	30 dBic
Axial Ratio	0.5 dB (typical) / 1 dB (max)
VSWR	<1.5

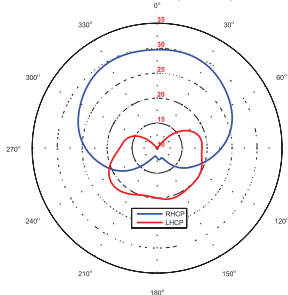
L2 Band Typical Performance

Parameter	Design Specifications
Element efficiency	60%
Total peak gain	30 dBic
Axial Ratio	0.5 dB (typical) / 1 dB (max)
VSWR	<1.5

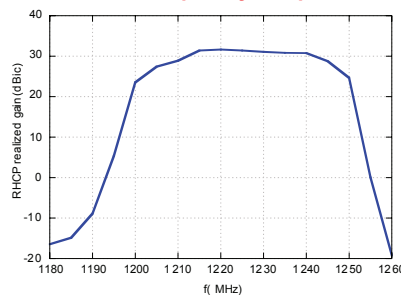
L1 Band Frequency Response



L1 Gain (dBic)



L2 Band Frequency Response



L2 Gain (dBic)

