

M1227HCT-P-SMA

L1/L2 Passive Antenna

Description

The M1227HCT-P-SMA is a high performance antenna designed for L1/L2 GPS 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-P-SMA is a screw-on design, featuring an integrated SMA connector. The product is ideal for applications requiring minimal integration effort or for retrofitting existing products. The design is equipped with an O-ring that makes the antenna waterproof once installed on a mating surface.

Electrical Specifications

Parameter	Design Specifications
Frequency Bands	1217-1250 MHz (L2)
	1565-1610 MHz (L1)
Polarization	RHCP
Peak Gain	2.0 dBic @ 1227 MHz (typical)
	1.5 dBic @ 1575 MHz (typical)
Axial Ratio	0.5 dB (typical)
Impedance	50 ohm
Interference Rating	200 V/m in band
Operating temp.	from -40°C to 85°C
RF connector	SMA

Mechanical Specifications

Dimensions are in mm



Image does not reflect the actual size of the antenna

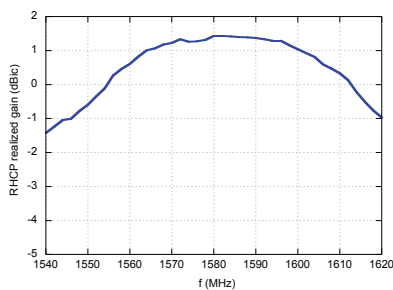
Features

- L1/L2 bands
- Very low axial ratio
- Pattern constant with frequency
- Ground plane independent
- Ultra light weight
- SMA interface

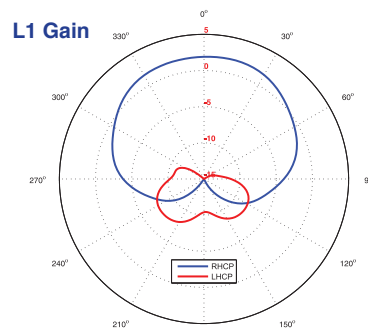
Applications

- Precision navigation
- Precision timing
- Military & security
- Asset tracking
- Mobile computing
- Oil & gas industries
- Navigation devices
- Law enforcement
- LBS & M2M applications

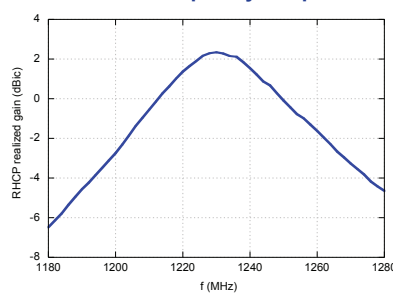
L1 Band Frequency Response



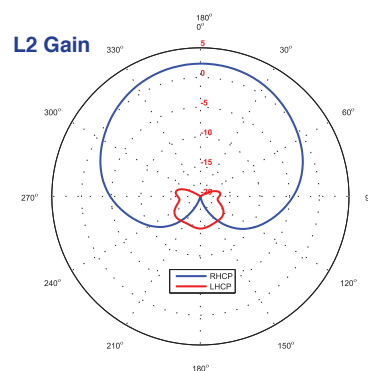
L1 Gain



L2 Band Frequency Response



L2 Gain



L1 Band Typical Performance

Parameter	Design Specifications
Element Efficiency	60%
Peak Gain	2 dBic
Axial Ratio	0.5 dB (Typical)/ 1 dB (Max)
VSWR	<1.5

L2 Band Typical Performance

Parameter	Design Specifications
Element Efficiency	60%
Peak Gain	2 dBic
Axial Ratio	0.5 dB (Typical)/ 1 dB (Max)
VSWR	<1.5