# M1575HCT-22P High Performance GPS Antenna

#### **Description**

The M1575HCT-22P is a high performance passive antenna designed for the GPS L1 band, and built on Maxtena proprietary Helicore® technology. This technology provides exceptional pattern control, polarization purity and high efficiency in a very compact form factor. The M1575HCT-22P is designed for embedded applications and features an integrated 3-pin connector. This product is designed for applications requiring high quality reception of GPS signals. The ultralight design weighs only 2 grams making this antenna ideal for the most demanding, mechanically constrained platforms including handheld devices, asset tracking, seismic recording instruments and many more. This antenna requires the sale of service ahead of the sale of antenna, such as feasibility studies, prototyping, and chamber measurement. The antenna is mounted on the inside of the applications housing, allowing it to be hidden. The antenna element is custom tuned to the applications enclosure.

## **Mechanical Specifications**

Parameter	Design Specifications
RF connector	3 pin connector
dimensions are in mm	

## **Electrical Specifications**

Parameter	Design Specifications
Frequency	1575 MHz
Polarization	RHCP
Antenna element peak gain	0 dBic
Efficiency	30 %
Bandwidth (-1dB)	20 MHz
Axial ratio	1 dB (typical) / 1.5 dB (max)
VSWR	1.5 (max)
Impedance	50 Ohm
Operating temp.	from -40°C to 85°C





Image does not reflect actual size of the antennas

## Features

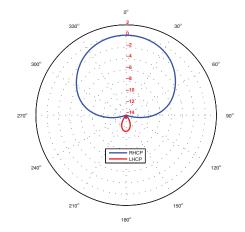
- GPS band
- · Very low axial ratio
- Easy integrate 3-Pin connector
- Ultralight weight 2 grams
- · Ground plane independent

#### **Applications**

- · Vehicle & fleet tracking
- · Military & security
- Asset tracking
- · Seismic recording instruments
- Oil & gas industries
- Navigation devices
- Mining equipment
- LBS & M2M applications
- Handheld devices

#### **Realized Gain Plot**

measured at 1575 MHz



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