

M1516HCT-P-UFL

L1 GPS GLONASS PASSIVE ANTENNA

Part #: 108-00072-01

Description

The M1516HCT-P-UFL is a dual band, high performance antenna designed for both GPS and GLONASS, 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 M1516HCT-P-UFL comes with an integrated coaxial cable with UFL connector. Cable length and connector can be customized upon request. This antenna requires the sale of service ahead of the sale of antennas, 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.

Electrical Specifications*

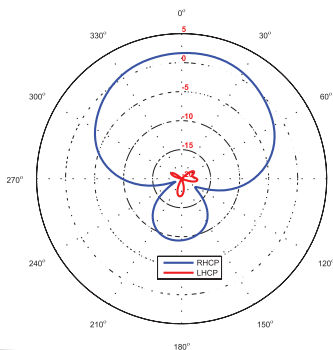
Parameter	Design Specifications
Frequency	1575 MHz (GPS) 1602 MHz (GLONASS)
Polarization	RHCP
Antenna element peak gain	1.5 dBic (GPS) 1.5 dBic (GLONASS)
Axial Ratio	0.5 dB (typical) / 1 dB (max)
VSWR	1.5 (max)
Impedance	50 Ohm
Operating temp.	from -40°C to 85°C
Overall dimensions	33 mm (height) x 13.2 mm (diameter)
Weight	3 grams

* Declared peak gain and reported radiation pattern are intended for a rotationally symmetrical plastic radome.

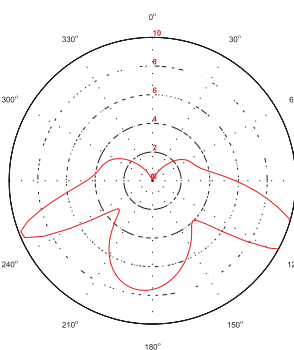
GPS Band Typical Performance

Parameter	Design Specifications
Antenna element peak gain	1.5 dBic (typical)
Efficiency	40% (typical)
Axial Ratio (@ Zenith)	0.5 dB (max)

GPS RHCP Gain



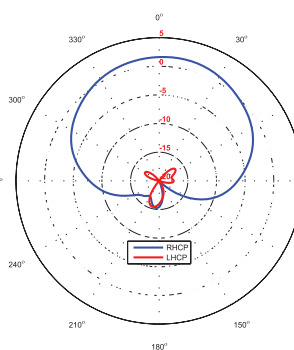
GPS Axial Ratio



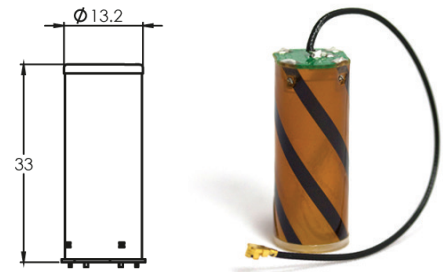
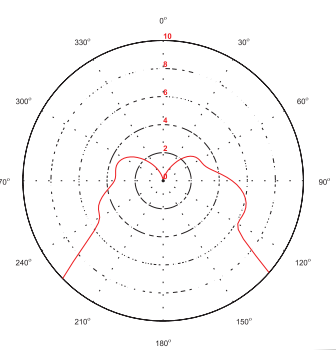
GLONASS Band Typical Performance

Parameter	Design Specifications
Antenna element peak gain	1.5 dBic (typical)
Efficiency	40% (typical)
Axial Ratio (@ Zenith)	0.5 dB (max)

GLONASS RHCP Gain



GLONASS Axial Ratio



Mechanical Specifications

dimensions are in mm

Features

- Very low axial ratio
- Ultra light weight - 3 grams
- Ground plane independent
- GPS/GLONASS bands

Applications

- Vehicle and fleet tracking
- Military & security
- Asset tracking
- Oil & gas industries
- Navigation devices
- Mining equipment
- LBS & M2M applications
- Handheld devices
- Law enforcement