

# **Mechanical Specifications**

dimensions are in mm

## **Description**

The M1516HCT-P-SMA 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-SMA is a screw-on design, featuring an integrated SMA connector. The ultra light design is rated IP-67 when mounted for added protection. This product is ideal for applications requiring high quality reception of both GPS and GLONASS signals.

# **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
RF connector	SMA
Overall dimensions	48 mm (height) x 18.5 mm (diameter)
Weight	11 grams

### **Features**

- · Very low axial ratio
- IP-67 mounted
- Ultra light weight 11 grams
- · Ground plane indepedent

### **Applications**

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

# **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)

# **GLONASS Band Typical Performance**

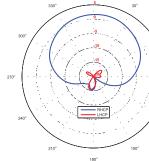
Parameter	Design Specifications
Antenna element peak gain	1.5 dBic (typical)
Efficiency	40% (typical)
Axial Ratio (@ Zenith)	0.5 dB (max)

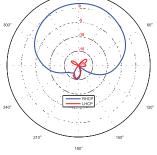
**GPS Axial Ratio** 

**GLONASS RHCP Gain** 

**GLONASS Axial Ratio** 

# **GPS RHCP Gain**







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