



M1516HCT-15A-SMA

ACTIVE GPS GLONASS ANTENNA

Ordering Part #: 100-00107-01



Description

The M1516HCT-15A-SMA is a high performance dual stage LNA active antenna designed for the GPS and GLONASS 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 M1516HCT-15A-SMA is a screw-on design, featuring an integrated SMA connector. The ultra light design is rated IP67 when mounted and unmounted for added protection and includes an internal O-ring. This product is ideal for applications requiring high quality reception of GPS signals.

General Specifications

Parameter	Design Specifications
Operating temp.	from -40°C to 85°C
Weight	10.6 grams (typical)
RF connector	Screw mount SMA

Environmental Specifications

Parameter	Compliance
RoHS	Compliant
MIL-STD-810G	Compliant

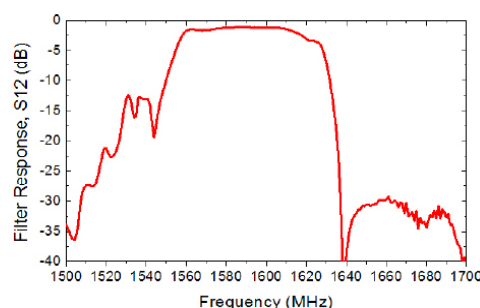
Electrical Specifications

Parameter	Design Specifications
Frequencies	1575.42 MHz (GPS) 1602 MHz (GLONASS)
Polarization	RHCP
Total active gain	28 dBic (typical) @ 3.3 V
Passive gain	-3 dBic (typical)
Beamwidth	140° (both axes)
Axial ratio	1 dB (max) @ zenith
Input P1dB	-31 dBm
Noise figure	0.8 dB (typical) LNA chain only
Supply voltage	1.5 - 3.7 V
DC current	30 mA (typical) @ 3.3 V
Filtering	>30 dB rejection @1575 +/- 100 MHz

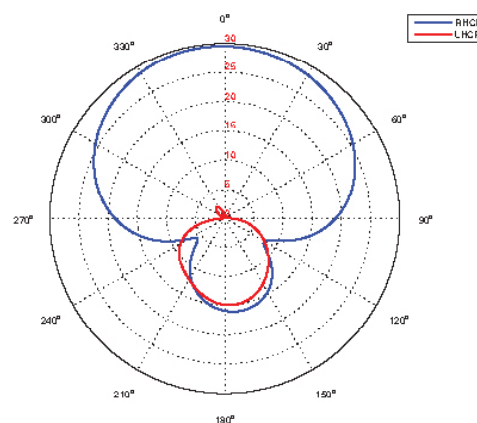
Applications

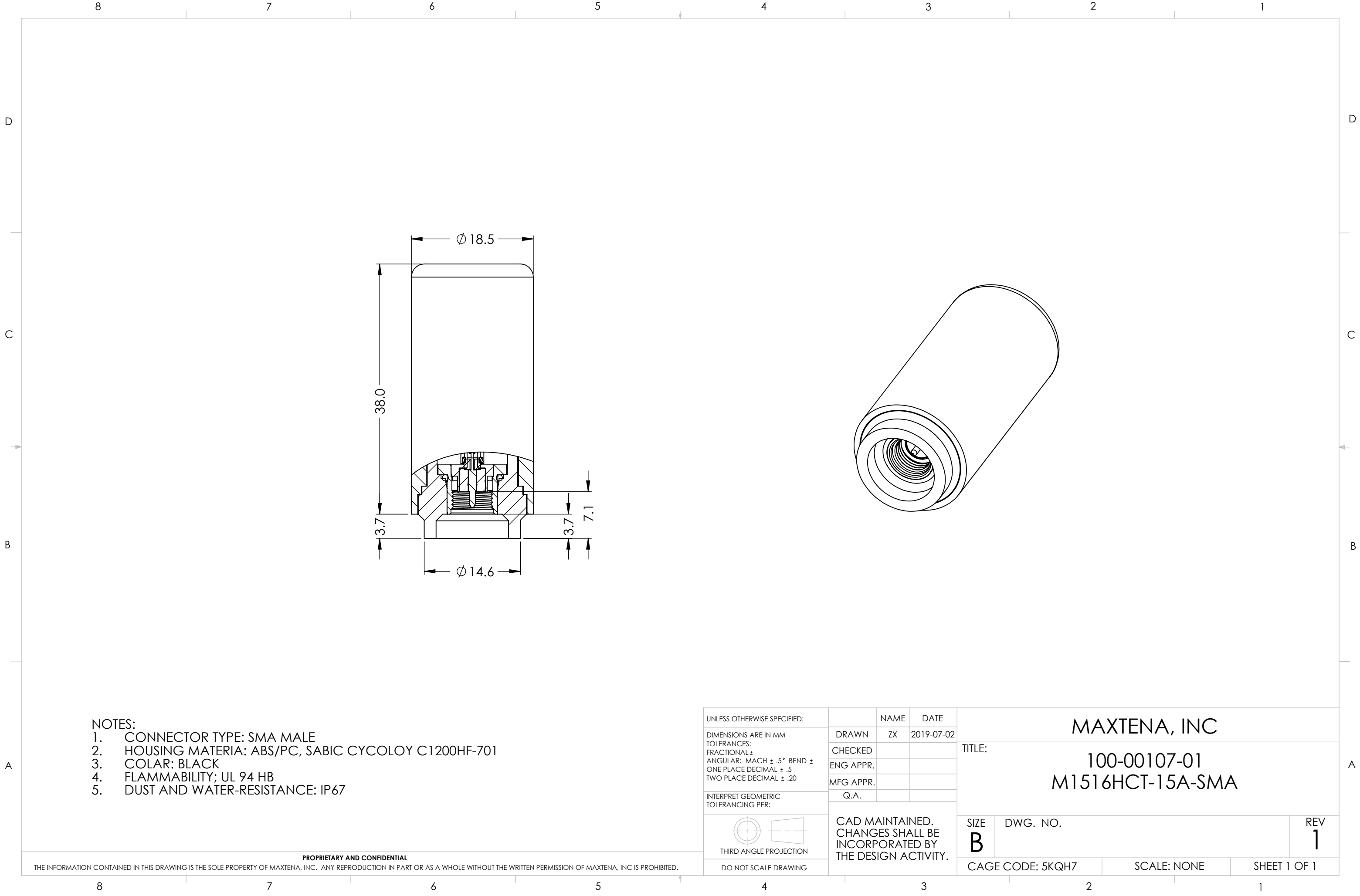
- Military & security
- Asset tracking
- Oil & gas industries
- Navigation devices
- LBS & M2M applications
- Handheld devices
- Law enforcement

Filter Response



Typical Radiation Pattern (@ 3.3 V)





- NOTES:
- 1. CONNECTOR TYPE: SMA MALE
 - 2. HOUSING MATERIA: ABS/PC, SABIC CYCOLOY C1200HF-701
 - 3. COLAR: BLACK
 - 4. FLAMMABILITY; UL 94 HB
 - 5. DUST AND WATER-RESISTANCE: IP67

UNLESS OTHERWISE SPECIFIED:		NAME		DATE		MAXTENA, INC							
DIMENSIONS ARE IN MM TOLERANCES: FRACTIONAL ± ANGULAR: MACH ± .5° BEND ± ONE PLACE DECIMAL ± .5 TWO PLACE DECIMAL ± .20	DRAWN	ZX	2019-07-02		TITLE: 100-00107-01 M1516HCT-15A-SMA								
	CHECKED												
	ENG APPR.												
	MFG APPR.												
INTERPRET GEOMETRIC TOLERANCING PER:		Q.A.				SIZE B		DWG. NO.		REV 1			
		CAD MAINTAINED. CHANGES SHALL BE INCORPORATED BY THE DESIGN ACTIVITY.											
DO NOT SCALE DRAWING						CAGE CODE: 5KQH7				SCALE: NONE		SHEET 1 OF 1	