

M1575HCT-15A-SMA

HIGH PERFORMANCE ACTIVE GPS ANTENNA

Ordering Part #: 100-00028-07

Description

The M1575HCT-15A-SMA is a high performance dual stage LNA active 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-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

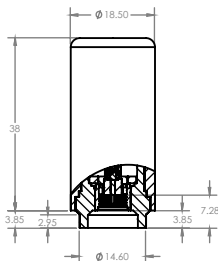
Parameter	Compliance
RoHS	Compliant
MIL-STD-810G	Compliant

Electrical Specifications

Parameter	Design Specifications
Frequency	1575.42 MHz (GPS)
Polarization	RHCP
Total active gain	28 dBic (typical) @ 3.3 V
Passive gain	-2.5 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

Mechanical Specifications / Mounting Interface

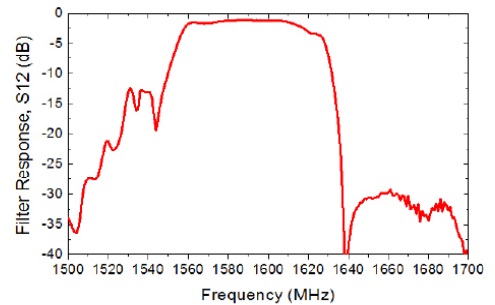
dimensions are in mm



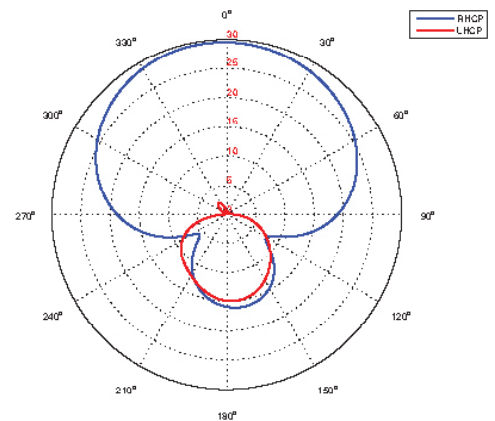
Applications

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

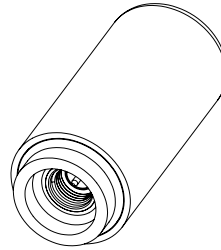
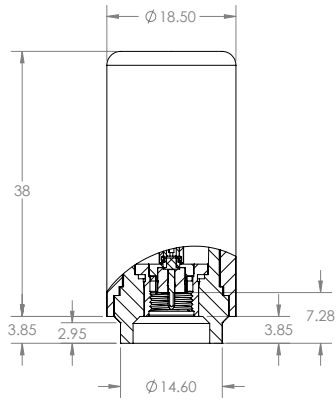
Filter Response



Typical Radiation Pattern (@ 3.3 V)



CAD MAINTAINED. CHANGES SHALL BE INCORPORATED BY THE DESIGN ACTIVITY



NOTES:

1. CONNECTOR TYPE: SMA MALE
2. HOUSING MATERIAL: ABS PC, SABIC CYCOLOY C1200HF-701
3. COLOR: BLACK
4. FLAMMABILITY: UL 94 HB
5. DUST AND WATER-RESISTANCE: IP67
6. UNLESS OTHERWISE NOTED DIMENSION < 20MM, ±0.1MM; <50MM, ±0.2MM.

PROPRIETARY AND CONFIDENTIAL

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UNLESS OTHERWISE SPECIFIED:		NAME	DATE	MAXTENA, INC	
DIMENSIONS ARE IN MM		DRAWN	XXL	TITLE: 100-00028-07	
TOLERANCES:		CHECKED	NPC		
FRACTIONAL ±		ENG APPR:	SP		
ANGULAR: MACH ± BEND ±		MFG APPR:			
TWO PLACE DECIMAL ±0.10		Q.A.		SIZE	DWG. NO.
THREE PLACE DECIMAL ±		COMMENTS:		B	
INTERPRET GEOMETRIC TOLERANCING PER:				CAGE: 5KQH7	SCALE: 2:1
MATERIAL:					SHEET 1 OF 2
FINISH:					REV 0
DO NOT SCALE DRAWING					