



M1575HCT-22P-SMA

HIGH PERFORMANCE PASSIVE GPS ANTENNA

Ordering Part #: 100-00043-01



Description

The M1575HCT-22P-SMA is a rugged 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-SMA is a screw-on design, featuring an integrated SMA connector. The ultra light design is rated IP-67 when both mounted and unmounted for added protection. This product is designed for applications requiring high quality reception of GPS signals.

Electrical Specifications

Parameter	Design Specifications
Frequency	1575 MHz
Polarization	RHCP
Antenna element peak gain	-0.5 dBic (typical)
Efficiency	25% (typical)
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
RF connector	SMA
Overall dimensions	38 mm (height) x 18.5 mm (diameter)

Features

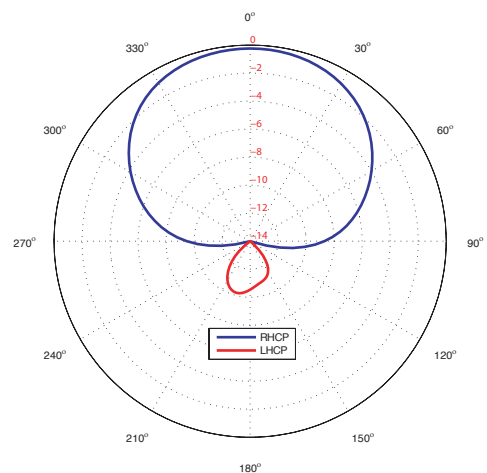
- GPS band
- Very low axial ratio
- IP-67 mounted and unmounted
- Ultra light weight
- Ground plane independent

Applications

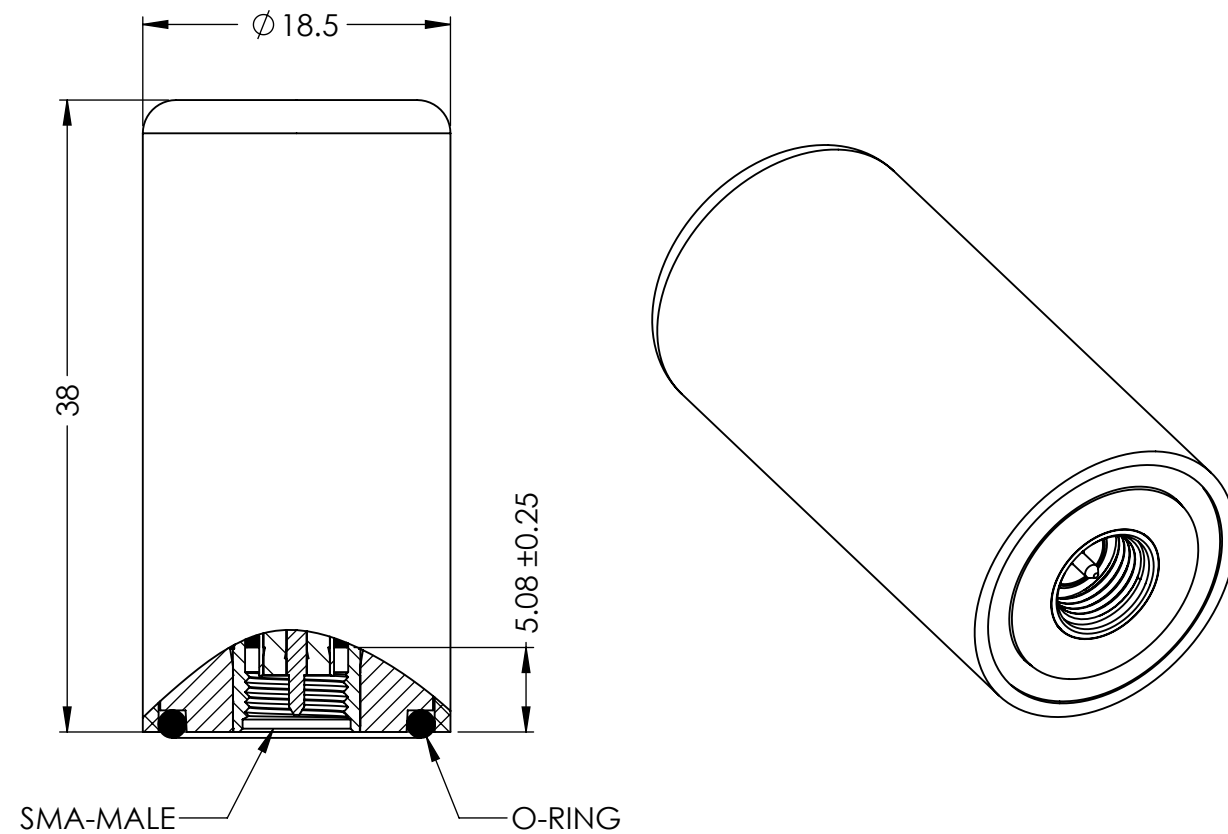
- Vehicle and fleet tracking
- Military & security
- Asset tracking
- Seismic recording instruments
- Oil & gas industries
- Navigation devices
- Mining equipment
- LBS & M2M applications
- Handheld devices

Realized gain plot

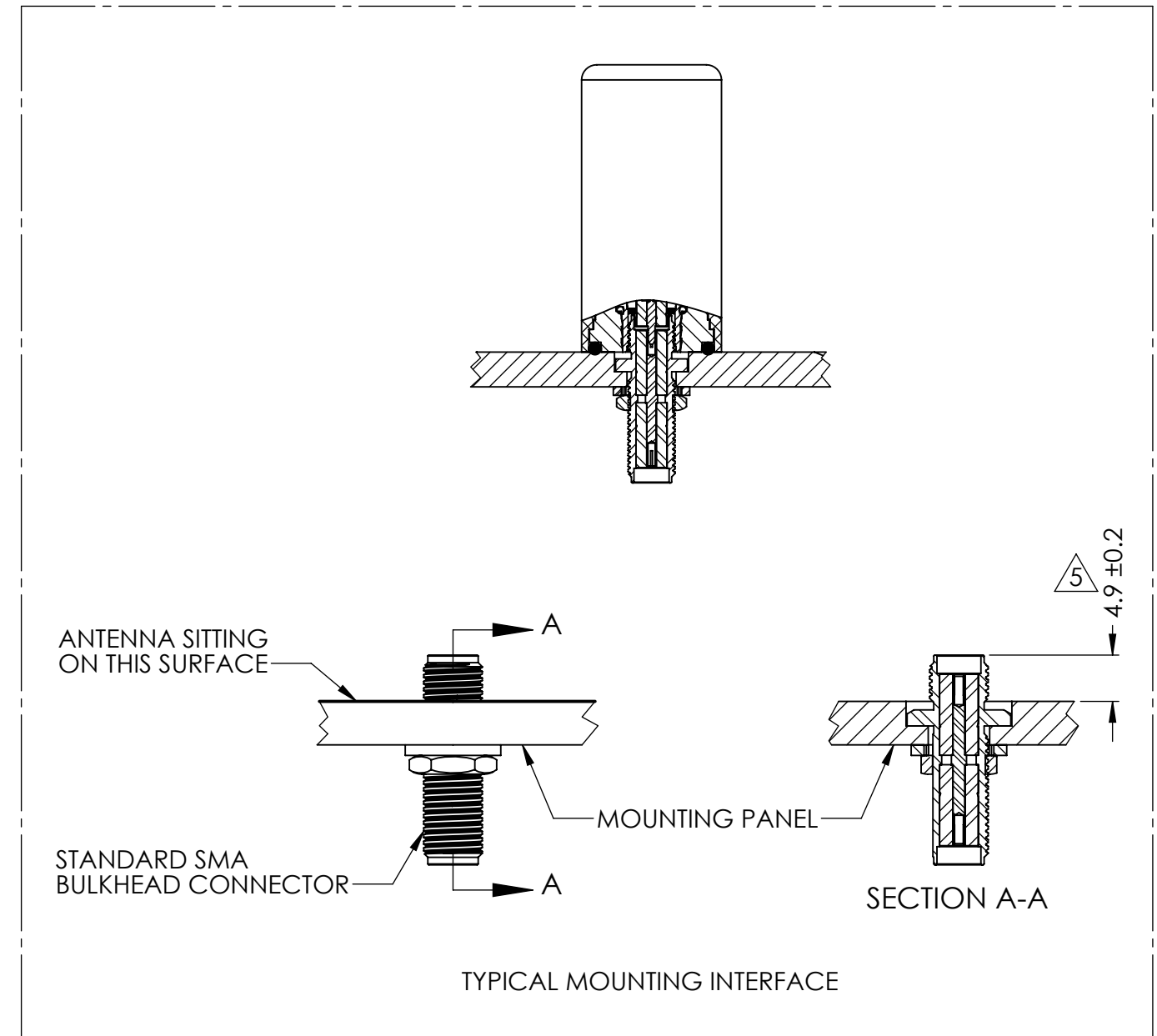
Measured at 1575 MHz



DRAWING REVISION HISTORY			
REV	DESCRIPTION	DATE	BY
A	INITIAL RELEASE	2021-03-11	QZ



- NOTES:
1. CONNECTOR TYPE: SMA-MALE.
 2. HOUSING MATERIA: ABS/PC.
 3. COLAR: BLACK.
 4. DUST AND WATER-RESISTANCE: IP67.
 5. RECOMMEND A 4.9MM MOUNTING HEIGHT FOR MOUNTING INTERFACE SEALING AND ELECTRICAL CONNECTION.
 6. ASSEMBLY TORQUE SHALL BE NO MORE THAN 8 IN*LB.



UNLESS OTHERWISE SPECIFIED:		NAME	DATE	MAXTENA, INC			
DIMENSIONS ARE IN MM TOLERANCES: FRACTIONAL ± ANGULAR: MACH ± .5° BEND ± INTEGER ± 2 ONE PLACE DECIMAL ± 1.0 TWO PLACE DECIMAL ± .50 INTERPRET GEOMETRIC TOLERANCING PER:	DRAWN	QZ	2021-03-11	TITLE: 100-00043-01 M1575HCT-22P-SMA			
	CHECKED	ZX	2021-03-16				
	ENG APPR.	NPC	2021-03-18				
	MFG APPR.						
	Q.A.						
	CAD MAINTAINED. CHANGES SHALL BE INCORPORATED BY THE DESIGN ACTIVITY.			SIZE		DWG. NO.	REV
THIRD ANGLE PROJECTION				B		117-00414-01	
DO NOT SCALE DRAWING				CAGE CODE: 5KQH7		SCALE: NONE	SHEET 1 OF 1