



# 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

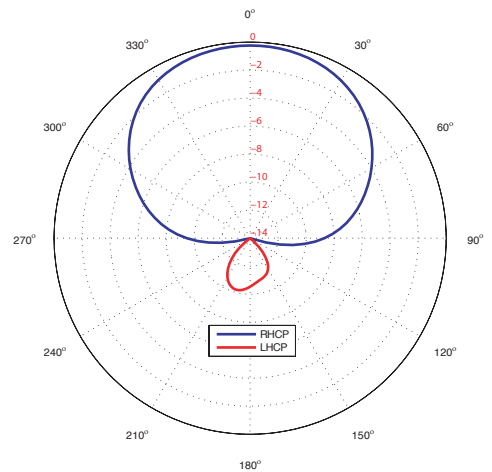
- GPS band
- Very low axial ratio
- IP-67 mounted and unmounted
- Ultra light weight
- Ground plane independent

### Applications

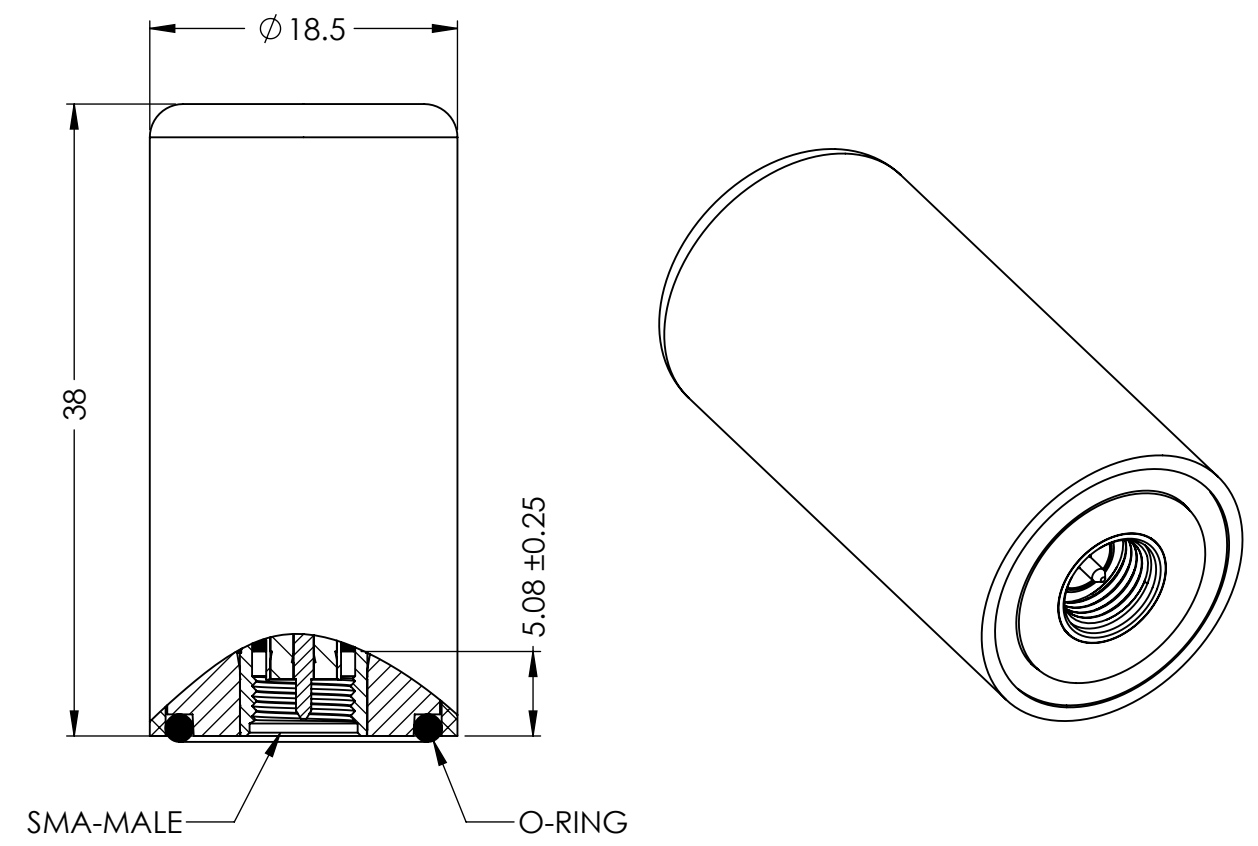
- Vehicle and fleet tracking
- Military & security
- Asset tracking
- Seismic recording instruments
- Oil & gas industries
- Navigation devices
- Mining equipment
- LBS & M2M applications
- Handheld devices

### Realized gain plot

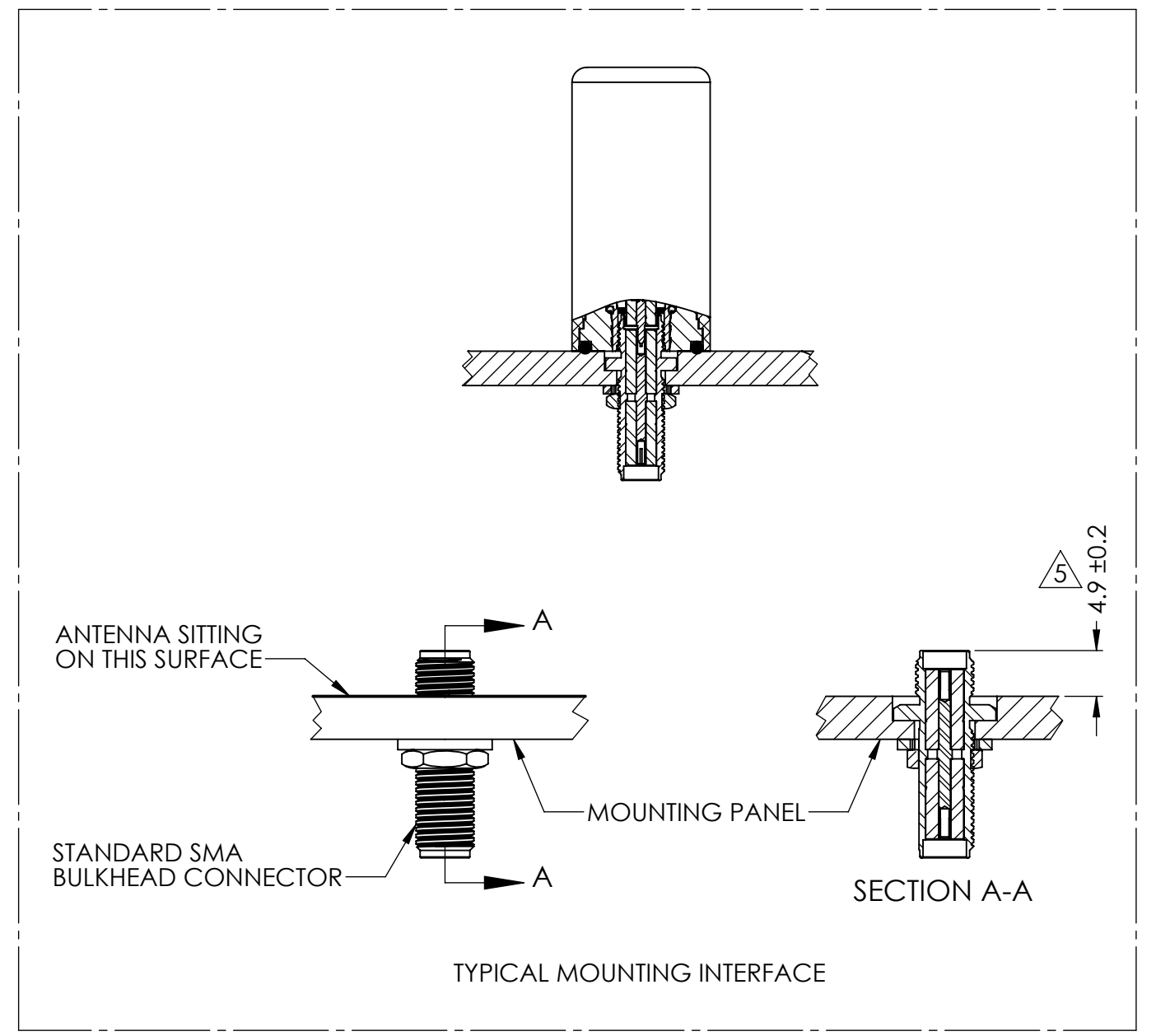
Measured at 1575 MHz



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



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



ITEM 100-00043-01 REVISION HISTORY			
REV	DESCRIPTION	DATE	BY
A	INITIAL RELEASE	2021-03-11	QZ

UNLESS OTHERWISE SPECIFIED:	NAME	DATE
DIMENSIONS ARE IN MM	DRAWN	QZ 2021-03-11
TOLERANCES:	CHECKED	ZX 2021-03-16
FRACTIONAL ±	ENG APPR.	NPC 2021-03-18
ANGULAR: MACH ± .5° BEND ±	MFG APPR.	
INTEGER ± 2	Q.A.	
ONE PLACE DECIMAL ± 1.0		
TWO PLACE DECIMAL ± .50		
INTERPRET GEOMETRIC TOLERANCING PER:		
	CAD MAINTAINED. CHANGES SHALL BE INCORPORATED BY THE DESIGN ACTIVITY.	
THIRD ANGLE PROJECTION		
DO NOT SCALE DRAWING		

MAXTENA, INC		
TITLE: 100-00043-01 M1575HCT-22P-SMA		
SIZE	DWG. NO.	REV
<b>B</b>	<b>117-00414-01</b>	<b>A</b>
CAGE CODE: 5KQH7	SCALE: NONE	SHEET 1 OF 1

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