



M1602HCT-22P-MR

High Performance Passive GPS/GLONASS Antenna

Part #: 100-00042-03



Description

The M1602HCT-22P-MR is a rugged high performance passive antenna designed for the GPS/GLONASS 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 M1602HCT-22P-MR 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

Electrical Specification

Parameter	Design Specifications	
Frequency	1575 MHz (GPS)	1602 MHz (GLONASS)
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

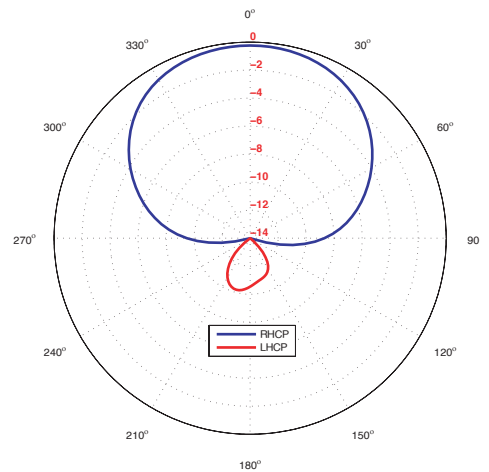
- GPS/GLONASS bands
- Very low axial ratio
- IP-67 mounted and unmounted
- Ultra light weight
- Ground plane independent

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

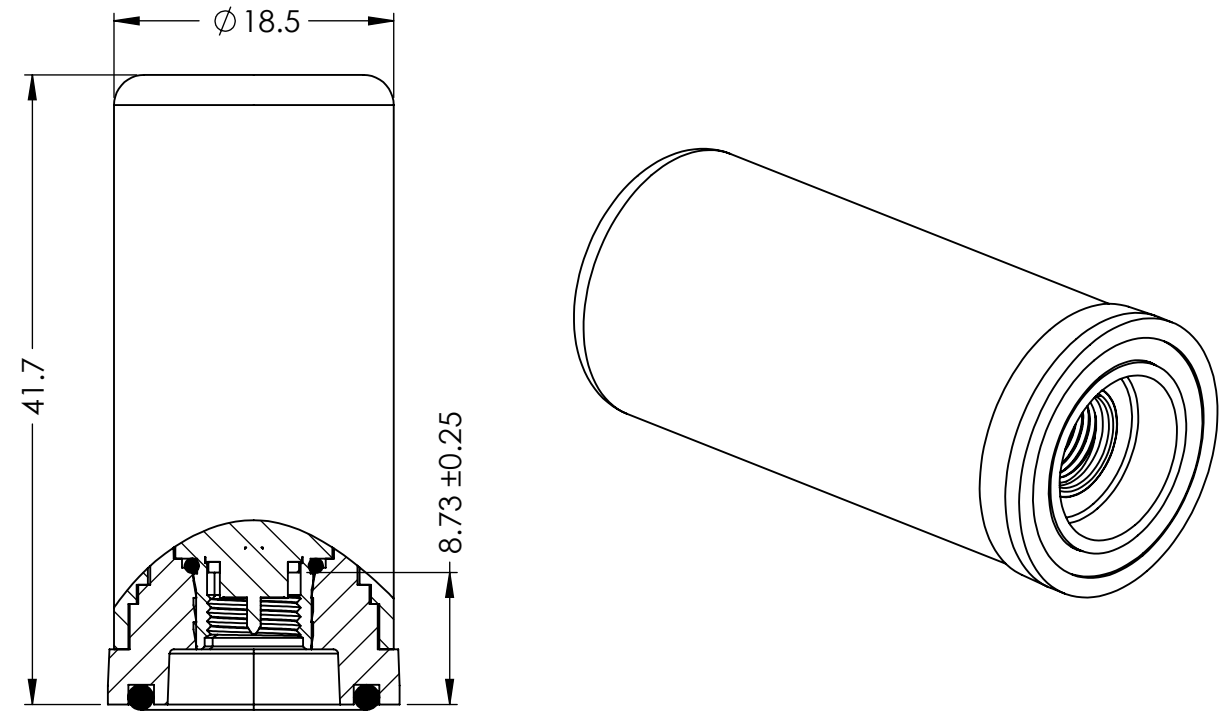
Measured at 1575 MHz



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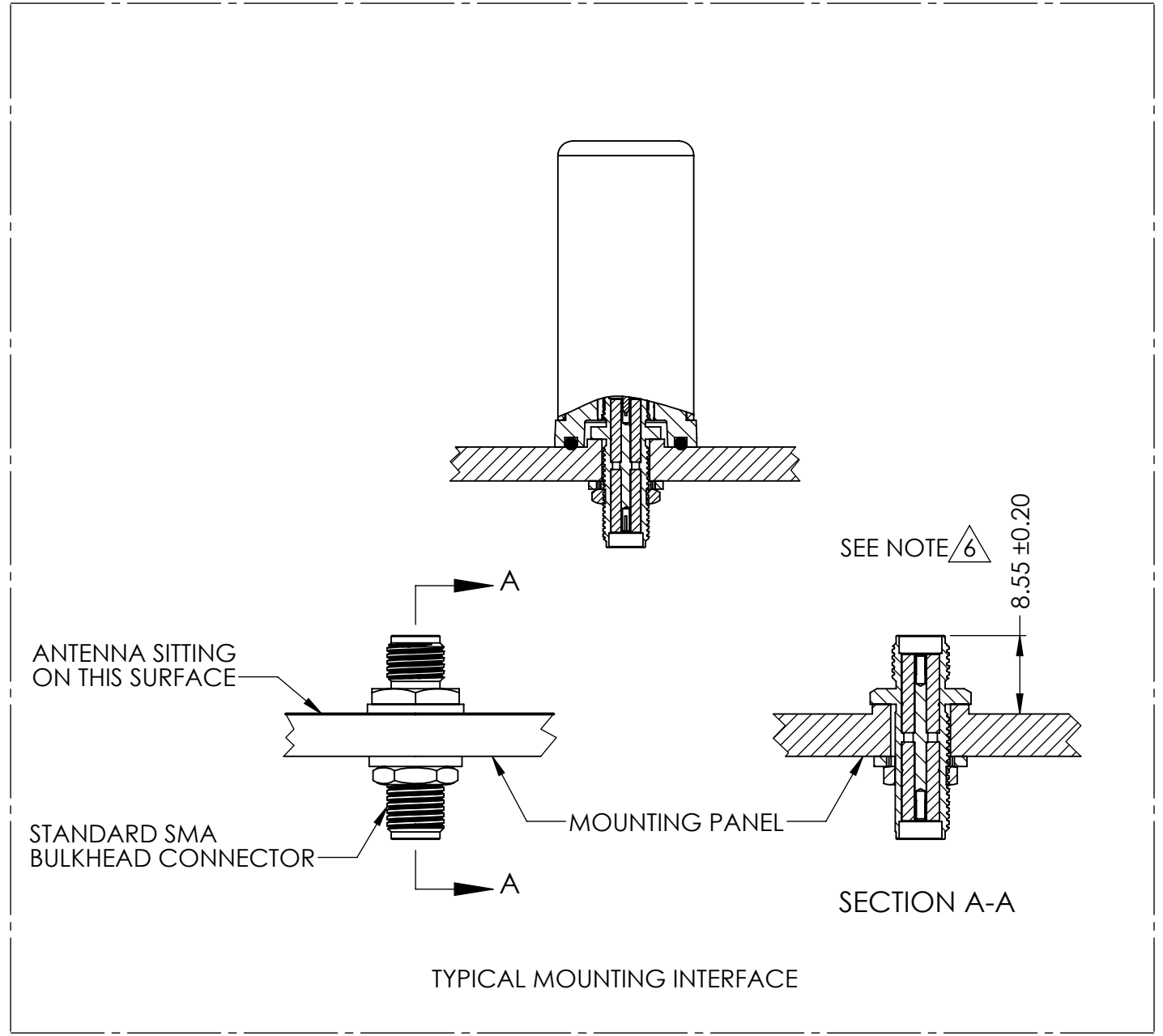
www.maxtena.com

DRAWING REVISION HISTORY			
REV	DESCRIPTION	DATE	BY
A	INITIAL RELEASE	2022-05-27	SZ



NOTES:

1. FREQUENCY (GPS/GLONASS): 1575 MHz, 1602 MHz
2. CONNECTOR TYPE: SMA-MALE.
3. HOUSING MATERIA: ABS/PC.
4. COLAR: BLACK.
5. DUST AND WATER-RESISTANCE: IP67.
6. RECOMMEND A 8.55 MM MOUNTING HEIGHT FOR MOUNTING INTERFACE SEALING AND ELECTRICAL CONNECTION.
7. ASSEMBLY TORQUE SHALL BE NO MORE THAN 8 IN*LB.



ITEM 100-00042-03 REVISION HISTORY			
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UNLESS OTHERWISE SPECIFIED:	NAME	DATE
DIMENSIONS ARE IN MM	DRAWN SZ	2022-05-27
TOLERANCES:	CHECKED ZX	2022-05-27
FRACTIONAL ±	ENG APPR. NPC	2022-05-27
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.	
DO NOT SCALE DRAWING		

MAXTENA, INC		
TITLE: 100-00042-03 M1602HCT-22P-MR		
SIZE B	DWG. NO. 117-00413-03	REV A
CAGE CODE: 5KQH7	SCALE: NONE	SHEET 1 OF 1