



M1610HCT-22P-MR

High Performance Passive Iridium/GPS/GLONASS Antenna

Part #: 100-00042-09



Description

The M1610HCT-22P-MR is a rugged high performance passive antenna designed for the Iridium/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 M1610HCT-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 the Iridium network.

Electrical Specification

Parameter	Design Specifications
Frequency	1575 MHz 1602 MHz 1616-1626 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

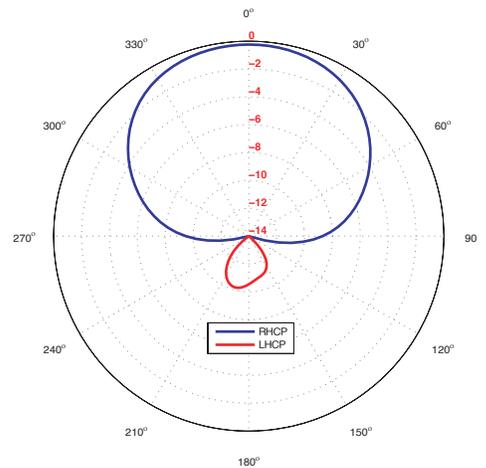
- Iridium/GPS/GLONASS bands
- Very low axial ratio
- IP-67 mounted and unmounted
- Ultra light weight
- Ground plane independent

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

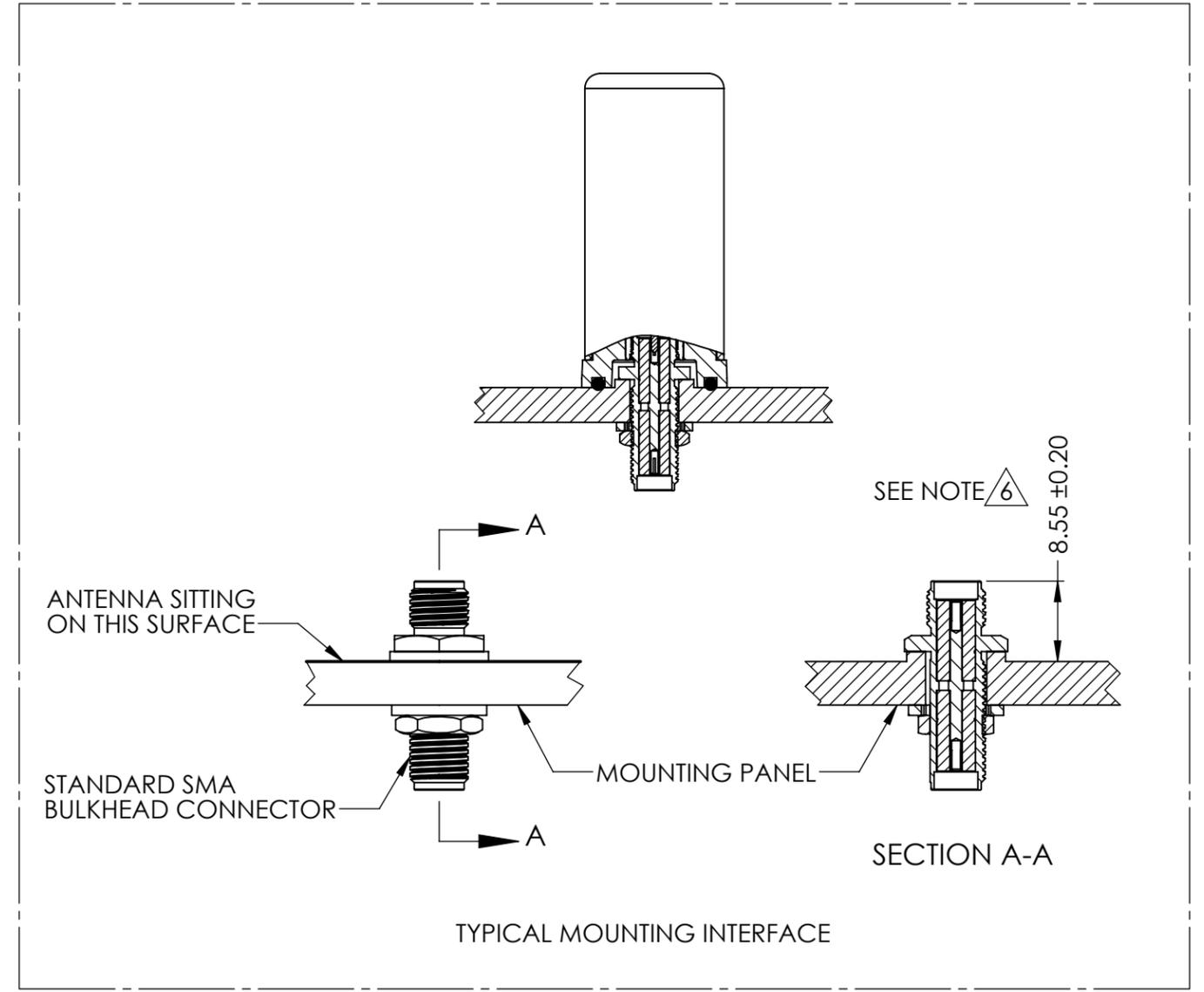
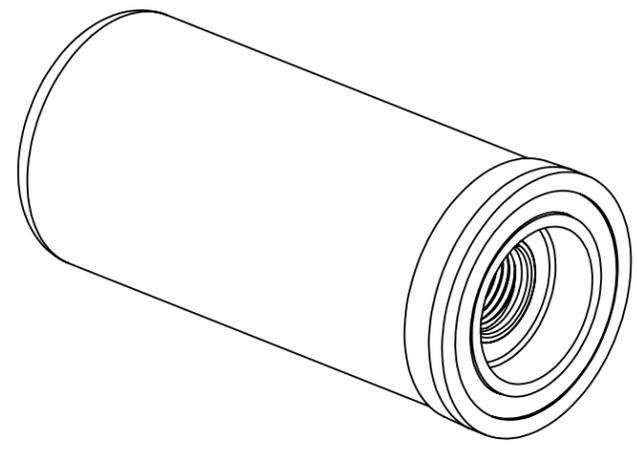
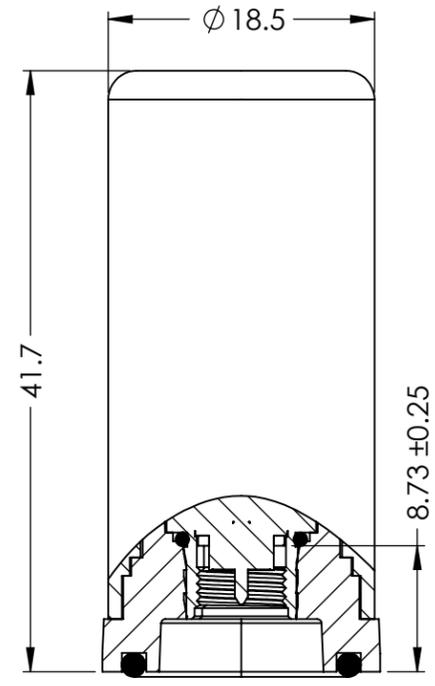
Measured at 1575 MHz



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



NOTES:

1. FREQUENCY (Iridium/GPS/GLONASS): 1616-1626 MHz, 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 100-00042-09 REVISION HISTORY			
REV	DESCRIPTION	DATE	BY
A	INITIAL RELEASE	2022-05-27	SZ

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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: 100-00042-09 M1610HCT-22P-MR		
SIZE B	DWG. NO. 117-00413-09	REV A
CAGE CODE: 5KQH7	SCALE: NONE	SHEET 1 OF 1