



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

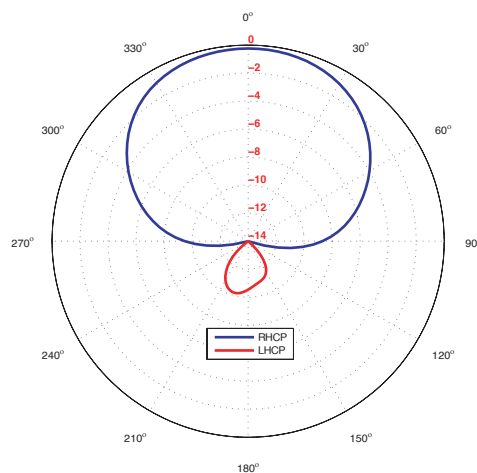
- Iridium/GPS/GLONASS bands
- Very low axial ratio
- IP-67 mounted and unmounted
- Ultra light weight
- Ground plane independent

Applications

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

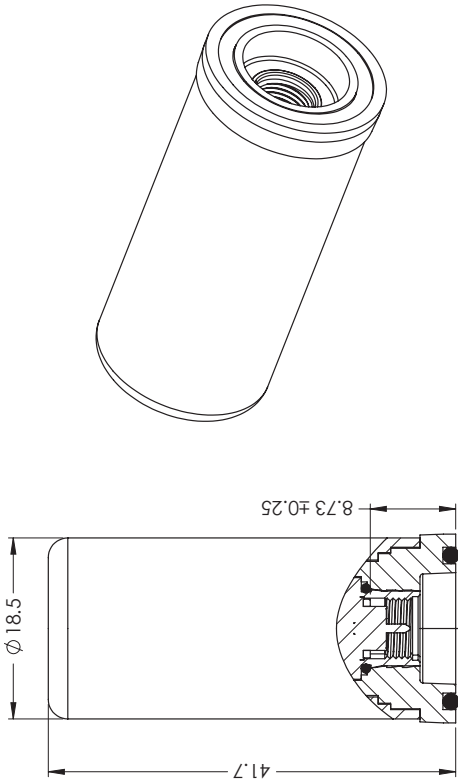
Realized gain plot

Measured at 1575 MHz

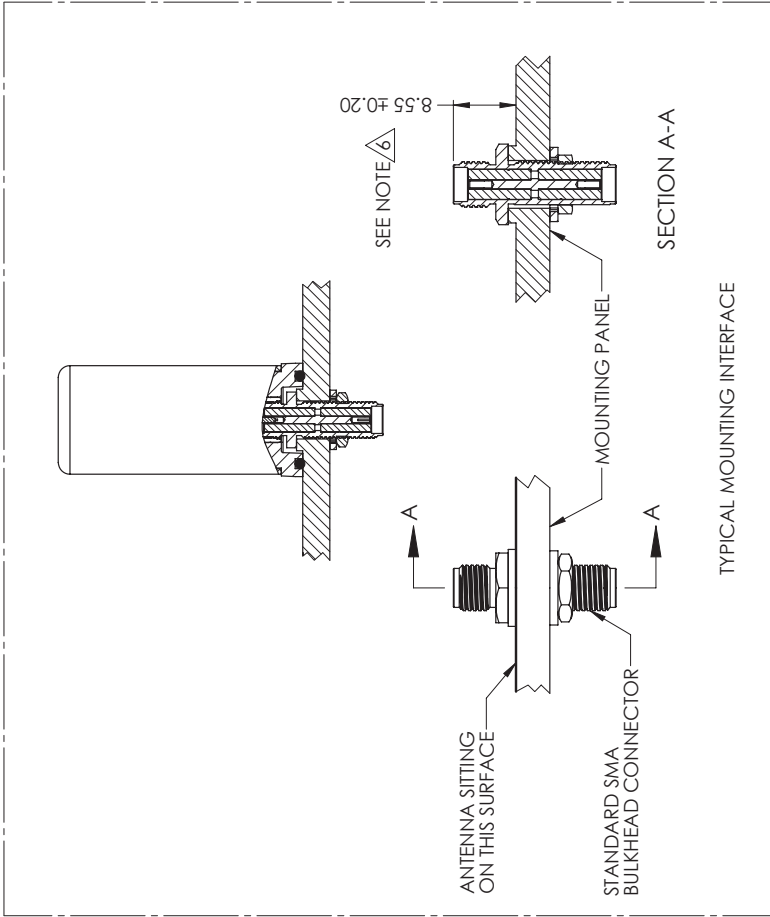


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DRAWING REVISION HISTORY			
REV	DESCRIPTION	DATE	BY
A	INITIAL RELEASE	2022-05-27	SZ



- NOTES:
- FREQUENCY (Iridium/GPS/GLONASS): 1616-1626 MHz, 1575 MHz, 1602 MHz
 - CONNECTOR TYPE: SMA-MALE.
 - HOUSING MATERIAL: ABS/PC.
 - COLOR: BLACK.
 - DUST AND WATER-RESISTANCE: IP 67.
 - RECOMMEND A 8.55 MM MOUNTING HEIGHT FOR MOUNTING INTERFACE SEALING AND ELECTRICAL CONNECTION.
 - ASSEMBLY TORQUE SHALL BE NO MORE THAN 8 IN*LB.



UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN MM		DRAWN	SZ	2022-05-27
TOLERANCES:		CHECKED	ZK	2022-05-27
FRACTIONAL: ± 0.0005		ENG APPR.	NPC	2022-05-27
DECIMAL: ± 0.0005		MFG APPR.		
ANGLE: ± 0.5° BEND ± 1.0		Q.A.		
ONE PLACE DECIMAL ± 1.0				
TWO PLACE DECIMAL ± 0.50				
INTERPRET GEOMETRIC TOLERANCING PER:				
THIRD ANGLE PROJECTION				
DO NOT SCALE DRAWING				
CAD MAINTAINED. CHANGES SHALL BE INCORPORATED BY THE DESIGN ACTIVITY.				
SIZE	DWG. NO.	CAGE CODE: 5KQH7		
B	117-00413-09	SCALE: NONE		
REV	A	SHEET 1 OF 1		

ITEM 100-00042-09 REVISION HISTORY			
REV	DESCRIPTION	DATE	BY
A	INITIAL RELEASE	2022-05-27	SZ

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