



M1600HCT-22P-MR

High Performance Passive Iridium/GPS Antenna
Part #: 100-00042-08



Description

The M1600HCT-22P-MR is a rugged high performance passive antenna designed for the Iridium/ GPS 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 M1600HCT-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	1616-1626 MHz (Iridium) 1575 MHz (GPS)
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

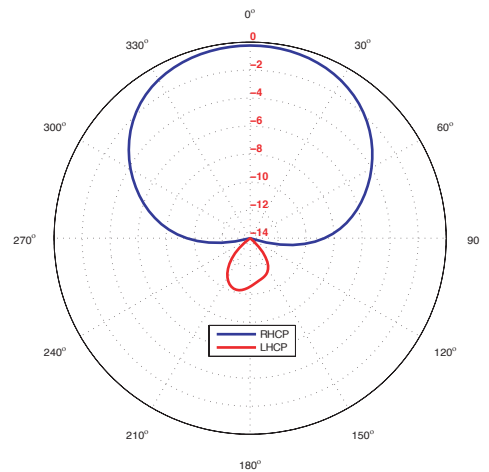
- Iridium/GPS bands
- Very low axial ratio
- IP-67 mounted and unmounted
- Ultra light weight
- Ground plane independent

Applications

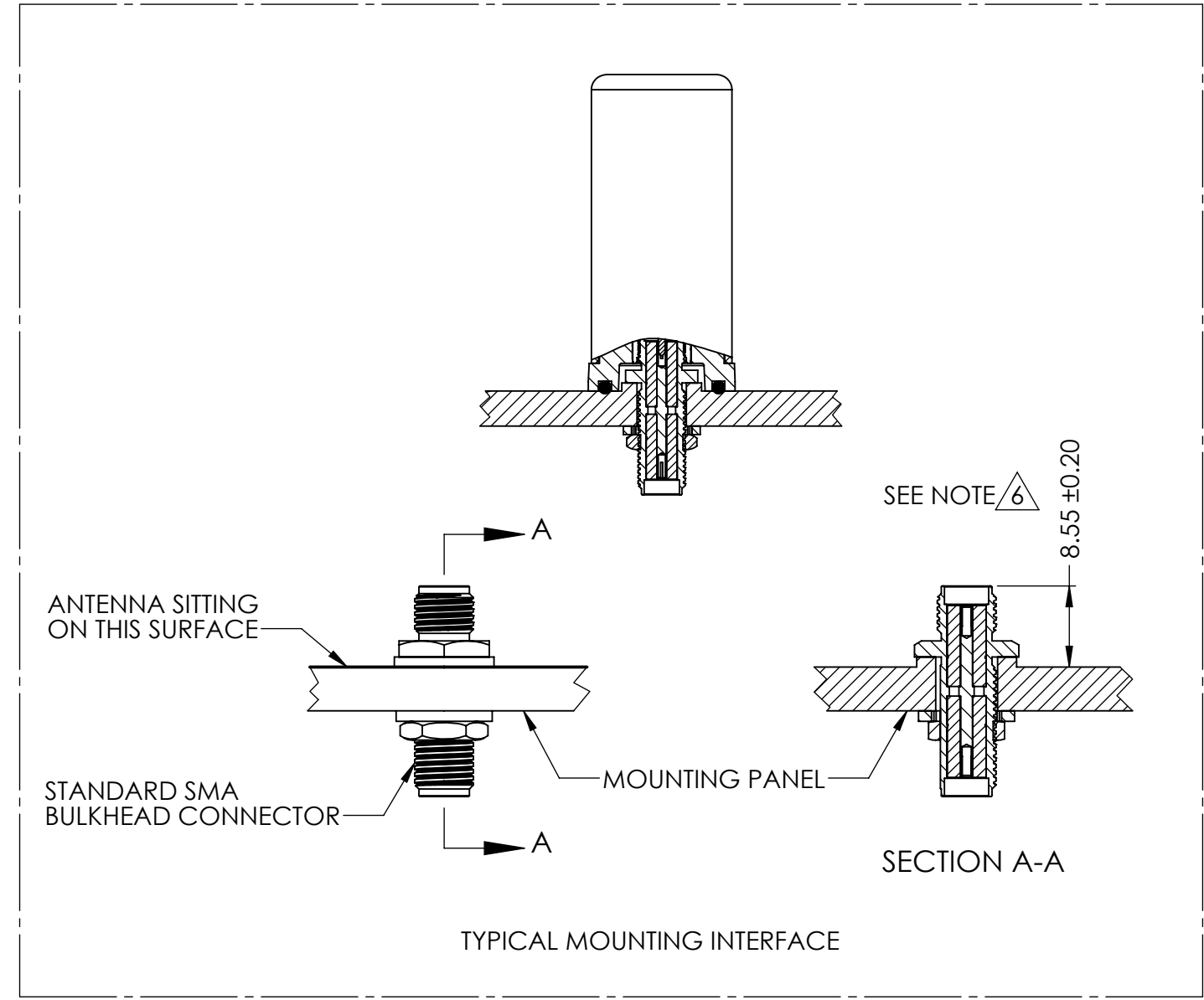
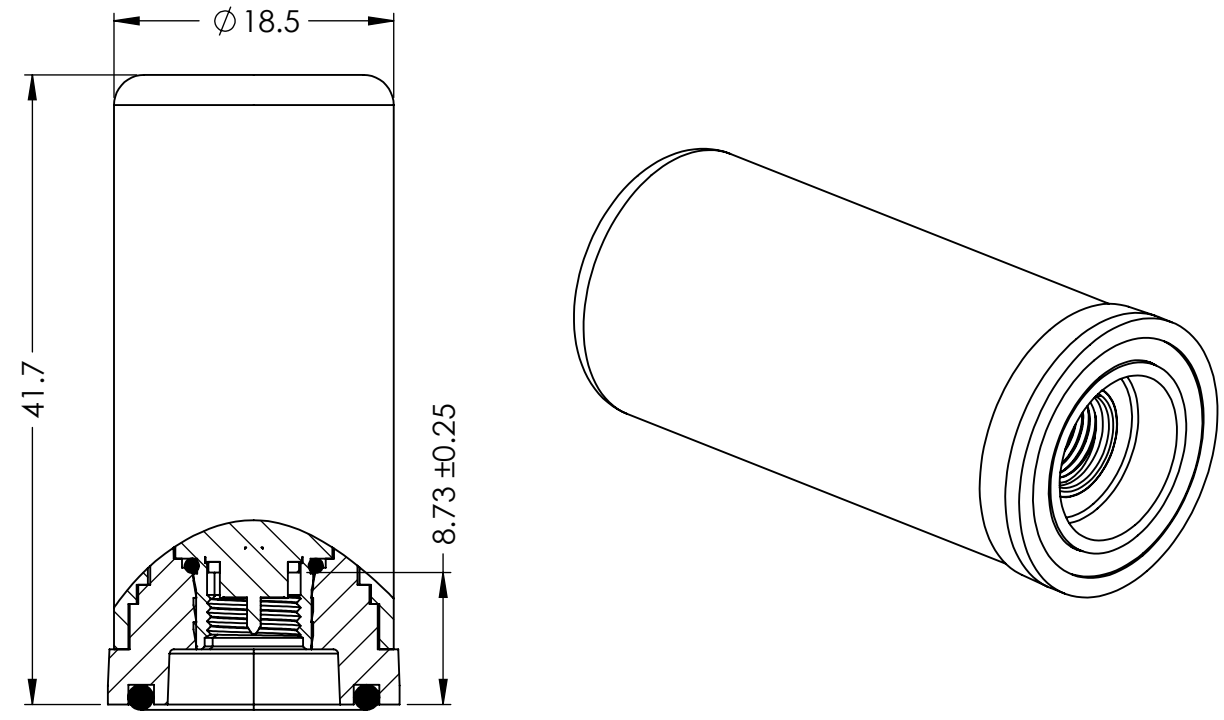
- Vehicle and fleet tracking
- Military & security
- Asset tracking
- Seismic recording instruments
- Oil & gas industries
- Navigation devices
- Mining equipment
- LBS & M2M applications
- Handheld devices

Realized gain plot

Measured at 1575 MHz



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



NOTES:

1. FREQUENCY (Iridium/GPS): 1616-1626 MHz, 1575 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 100-00042-08 REVISION HISTORY			
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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:		
100-00042-08		
M1600HCT-22P-MR		
SIZE	DWG. NO.	REV
B	117-00413-08	A
CAGE CODE: 5KQH7	SCALE: NONE	SHEET 1 OF 1