



# M1621HCT-P-SMA

## IRIDIUM CERTIFIED PASSIVE ANTENNA

Ordering Part #: 100-00003-02



### Description

The M1621HCT-P-SMA is a high performance antenna designed for the Iridium network, and built on proprietary Maxtena HeliCore® technology. This technology provides exceptional pattern control, polarization purity and high efficiency in a very compact form factor. The M1621HCT-P-SMA is a screw-on design, featuring an integrated SMA connector and is rated IP-67 when both mounted and unmounted for added protection. This product is designed for applications requiring high quality reception and is ideal when:

- the orientation of the unit containing the antenna is random;
- the unit is used in harsh environments;
- the antenna is mounted externally and in close proximity to other antennas.

### Electrical Specifications

Parameter	Design Specifications
Frequency	1616-1626 MHz
Polarization	RHCP
Antenna element peak gain	2.8 dBic (typical)
Efficiency	60%
Bandwidth (-1dB)	20 MHz
Axial Ratio	0.2 dB (typical) / 0.5 dB (max)
VSWR	1.5 (max)
Impedance	50 Ohm
Operating temp.	from -40°C to 85°C
RF connector	SMA

### Features

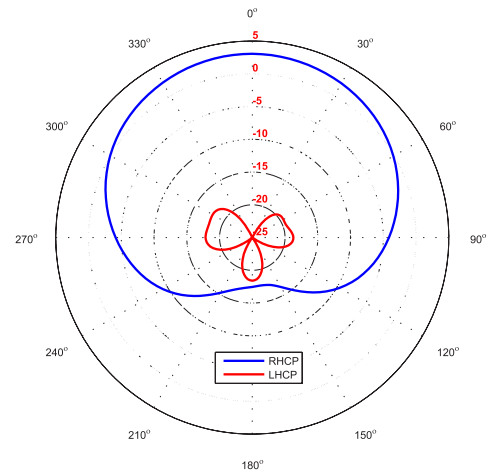
- Optimized for Iridium network
- Very low axial ratio
- IP-67 mounted and unmounted
- Ultra light weight
- Ground plane independent

### Applications

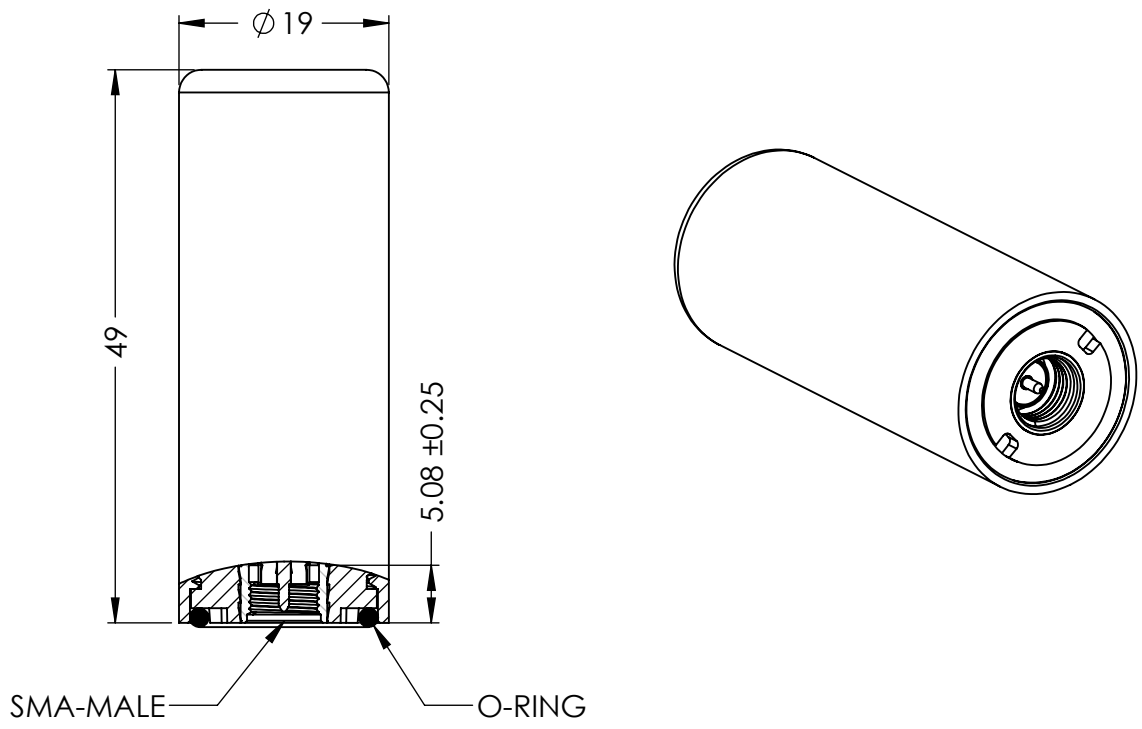
- Vehicle and fleet tracking
- Military & security
- Asset tracking
- Iridium (SBD) Short Burst Data
- Oil & gas industries
- Navigation devices
- Mining equipment
- LBS & M2M applications
- Handheld devices
- Law enforcement

### Realized gain plot

Measured at 1621 MHz

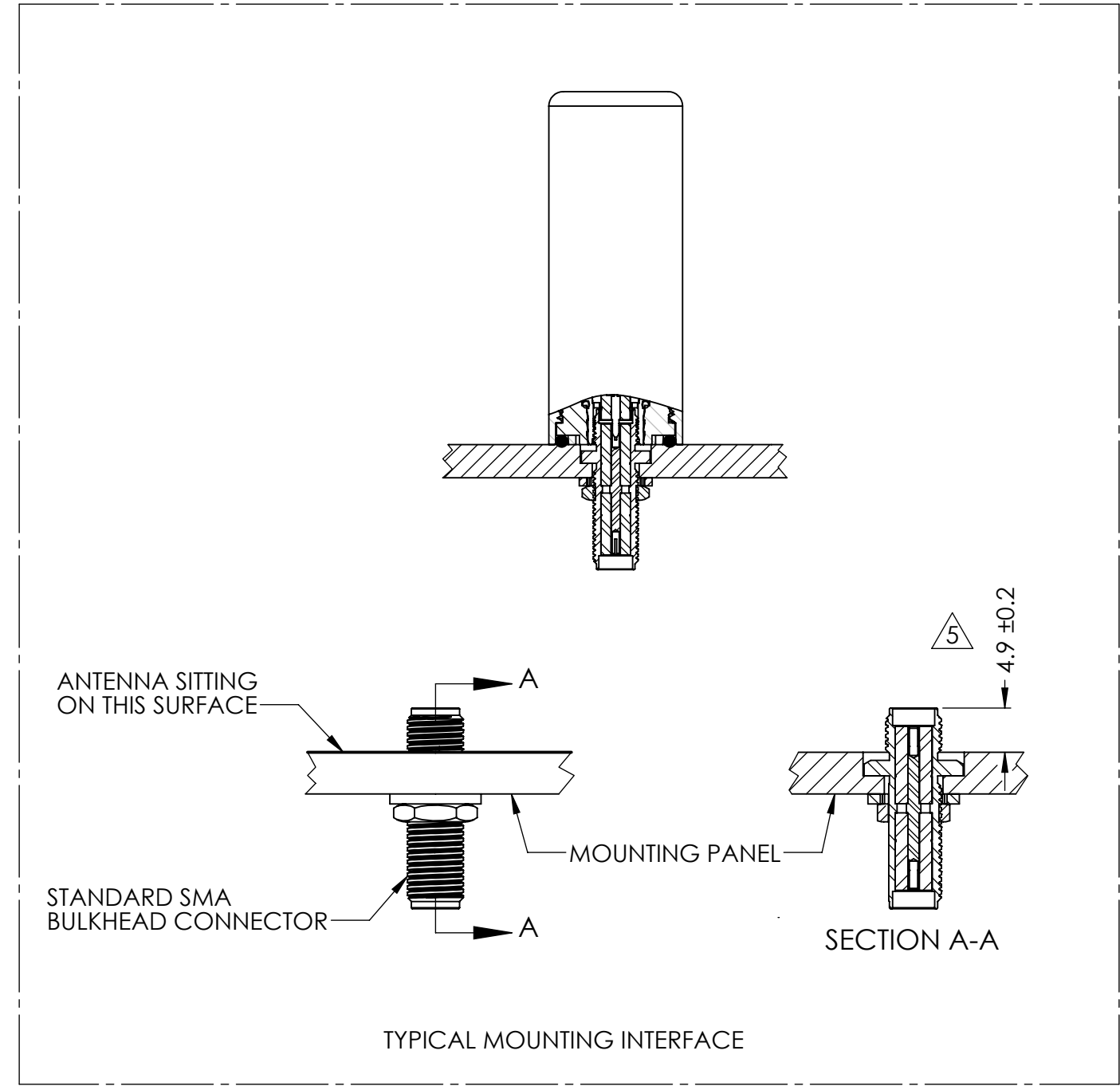


DRAWING REVISION HISTORY			
REV	DESCRIPTION	DATE	BY
A	INITIAL RELEASE	2021-05-05	MP



NOTES:

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



ITEM 100-00003-02 REVISION HISTORY			
REV	DESCRIPTION	DATE	BY
A	INITIAL RELEASE	2106-04-20	SMS
B	CHANGE ADHESIVE & REPLACE REGULAR BASE AND HOUSING TO THREADED BASE AND HOUSING	2020-11-28	MP

PROPRIETARY AND CONFIDENTIAL

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF MAXTENA, INC. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF MAXTENA, INC IS PROHIBITED.

UNLESS OTHERWISE SPECIFIED:	NAME	DATE
DIMENSIONS ARE IN MM	DRAWN	MP 2021-05-05
TOLERANCES:	CHECKED	ZX 2021-05-07
FRACTIONAL ±	ENG APPR.	NPC 2021-05-13
ANGULAR: MACH ± .5° BEND ±	MFG APPR.	
INTEGER ± 2	Q.A.	
ONE PLACE DECIMAL ± 1.0		
TWO PLACE DECIMAL ± 0.50		
INTERPRET GEOMETRIC TOLERANCING PER:		
	CAD MAINTAINED. CHANGES SHALL BE INCORPORATED BY THE DESIGN ACTIVITY.	
DO NOT SCALE DRAWING		

MAXTENA, INC		
TITLE: 100-00003-02 M1621HCT-P-SMA		
SIZE	DWG. NO.	REV
B	117-00446-01	A
CAGE CODE: 5KQH7	SCALE: NONE	SHEET 1 OF 1