

# M1621HCT-GN

## HIGH PERFORMANCE IRIDIUM ANTENNA

Part #: 100-00147-01

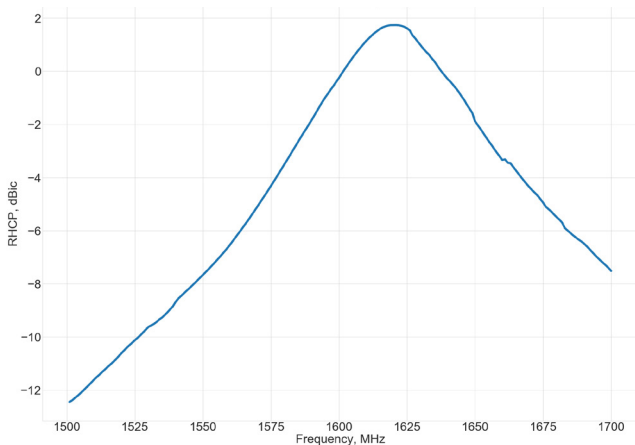
### Description

The M1621HCT-GN is a high performance antenna designed for the Iridium network. The antenna is 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-GN is rated IP-67 when mounted for added protection. This product is designed for applications requiring high quality Iridium reception.

### Electrical Specifications

Parameter	Specification
Frequency	1621 MHz (Iridium)
Polarization	RHCP
Antenna Element Peak Gain	2.0 dBic (Iridium)
Axial Ratio	0.25 dB (typical)
VSWR	1.5 (max)
Impedance	50 $\Omega$
Operating temp.	from -30°C to 60°C
RF Connector	SMA male
Overall dimensions	135 mm (height) x 18.5 mm (diameter)
Weight	45 grams

### RHCP Gain vs. Frequency



### Mechanical Specifications

dimensions are in mm

### Features

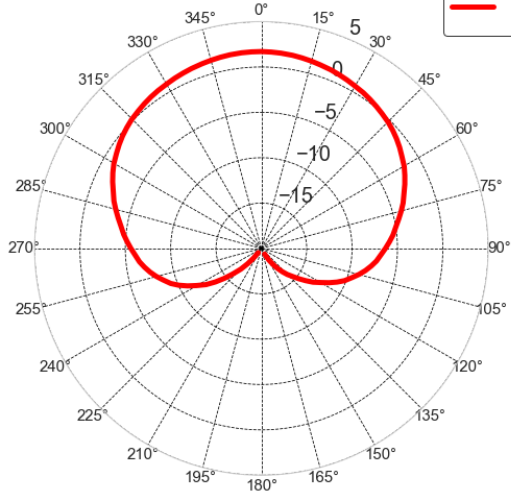
- Very low axial ratio
- IP-67 mounted
- Ultra lightweight - 45 grams
- Ground plane independent

### Applications

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

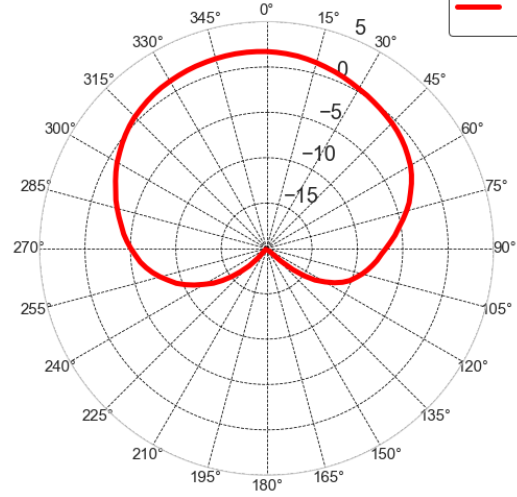
GNSS RHCP Gain-Elevation Cut

1621 MHz  
phi=0 deg.



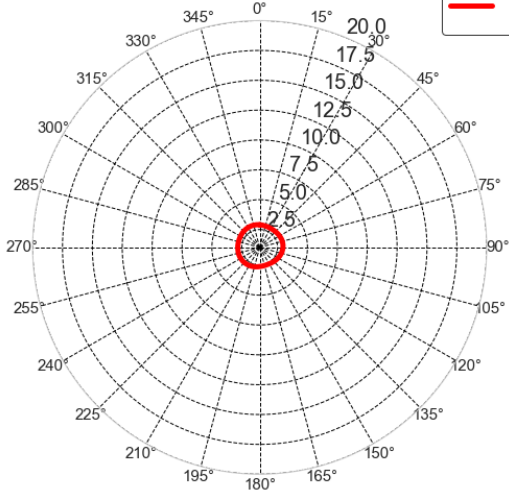
GNSS RHCP Gain-Elevation Cut

1621 MHz  
phi=90 deg.



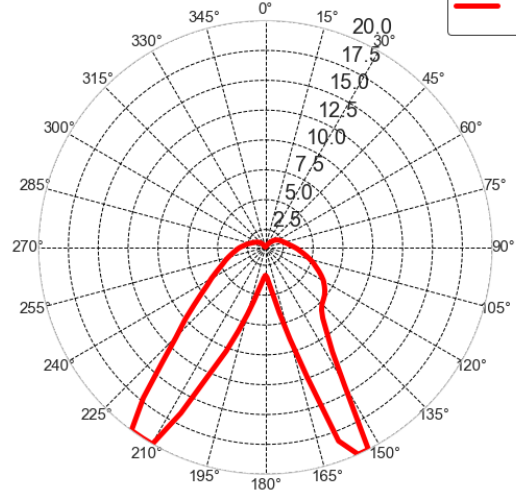
Iridium Axial Ratio-Azimuth Cut

1621 MHz  
theta=10 deg.



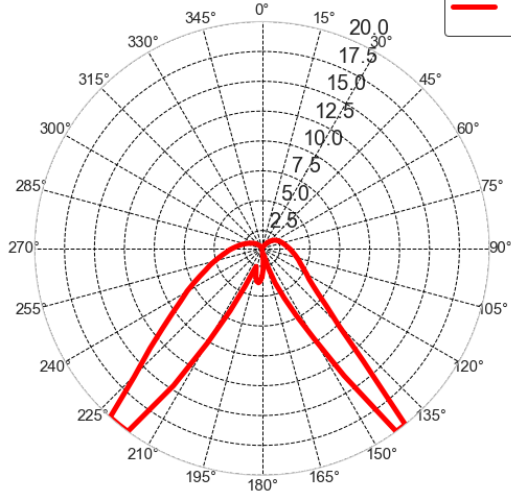
Iridium Axial Ratio-Elevation Cut

1621 MHz  
phi=0 deg.



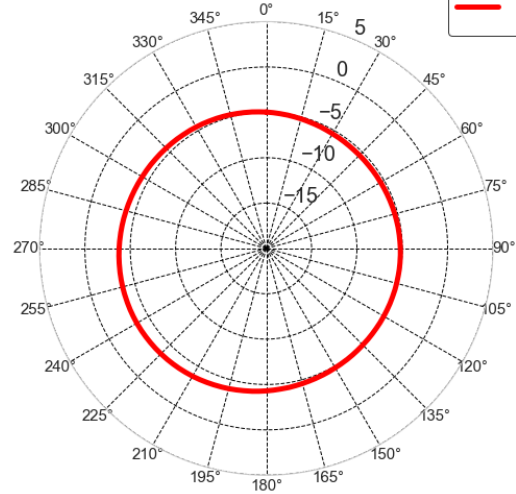
Iridium Axial Ratio-Elevation Cut

1621 MHz  
phi=90 deg.

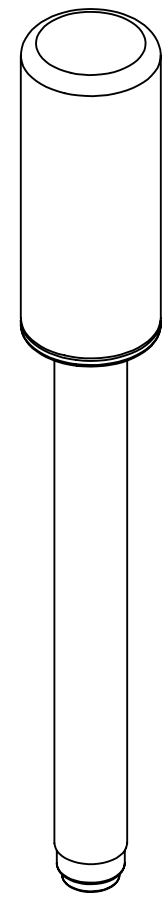
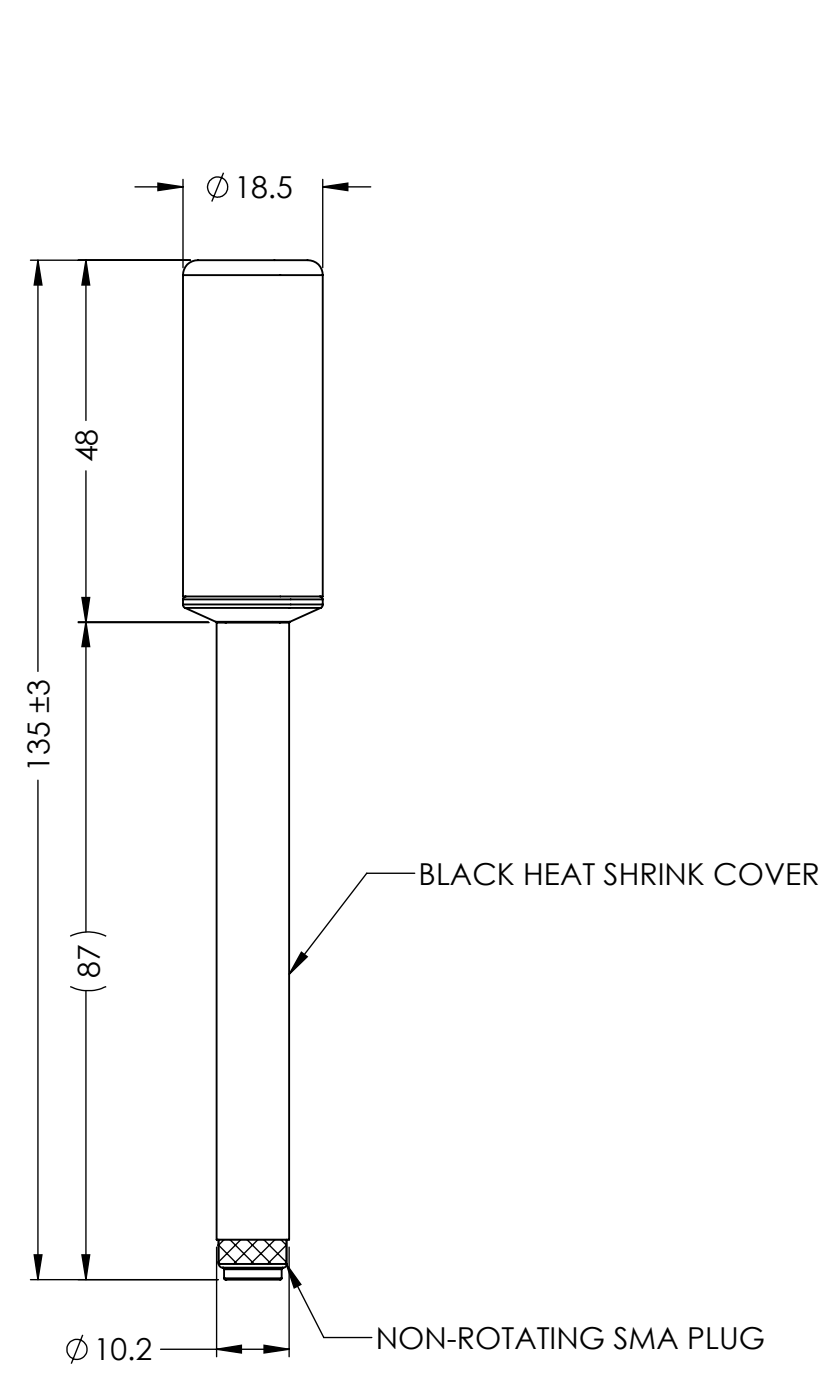


Iridium RHCP Gain-Azimuth Cut

1621 MHz  
theta=10 deg.



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



- NOTES:
1. RADOME MATERIAL: BLACK PC/ABS .
  2. GOOSENECK MATERIAL: STAINLESS STEEL WITH BLACK COATING.
  3. RF CONNECTOR TYPE: SMA PLUG NON-ROTATING.
  4. IP RATING: IP67

ITEM 100-00147-01 REVISION HISTORY			
REV	DESCRIPTION	DATE	BY
A	INITIAL RELEASE	2021-05-05	MP

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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.	
ONE PLACE DECIMAL ± 1.0	Q.A.	
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: 100-00147-01 M1621HCT-GN		
SIZE B	DWG. NO. 117-00442-01	REV A
CAGE CODE: 5KQH7	SCALE: NONE	SHEET 1 OF 1

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