



M1646HCT-P-SMA

IRIDIUM PASSIVE ANTENNA

Part #: 100-00224-01

Description

The M1646HCT-P-SMA is a high performance antenna designed for the Iridium network built on proprietary Maxtena Helicore® technology. This technology provides exceptional pattern control, polarization purity and high efficiency in a very compact form factor. The M1646HCT-P-SMA is a screw-on design, featuring an integrated SMA connector and is rated IP-67 when mounted for added protection. This product is designed for applications requiring Iridium satellite reception.

Electrical Specification

Parameter	Specification
Frequency	1616 - 1626 MHz (Iridium)
Polarization	RHCP
Antenna element peak gain	2.6 dBic
Axial Ratio	0.5 dB (Zenith)
Efficiency	61 %
VSWR	1.5 (max)
Impedance	50 Ω
RF Connector	SMA

Mechanical Specification

Parameter	Specification
Antenna Dimensions	Ø22.6 x 61 mm
Operating Temperature	-40 °C to 85 °C
Mounting Type	Connector Mount
Connector	SMA male
Radome/Color	Black
Housing material	ABS/PC
Certificates	IP67



Features

- Very low axial ratio
- IP-67 mounted
- Ultra light weight
- Ground plane independent

Applications

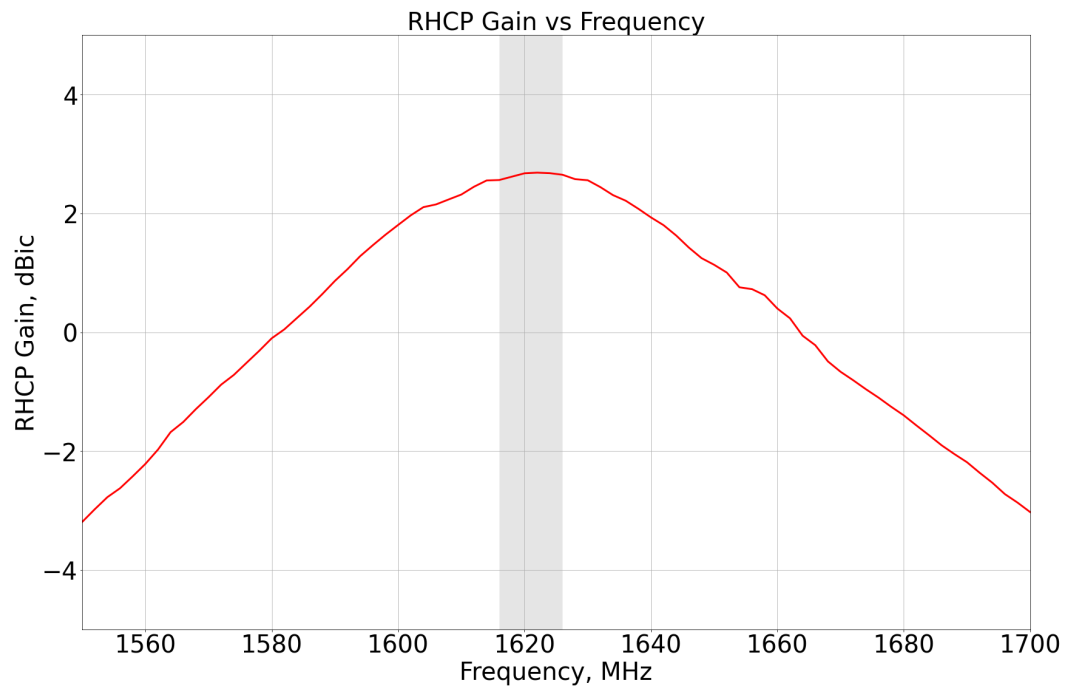
- Vehicle and fleet tracking
- Military & security
- Asset tracking
- Oil & gas industries
- Navigation devices
- Mining equipment
- LBS & M2M applications
- Handheld devices
- Law enforcement



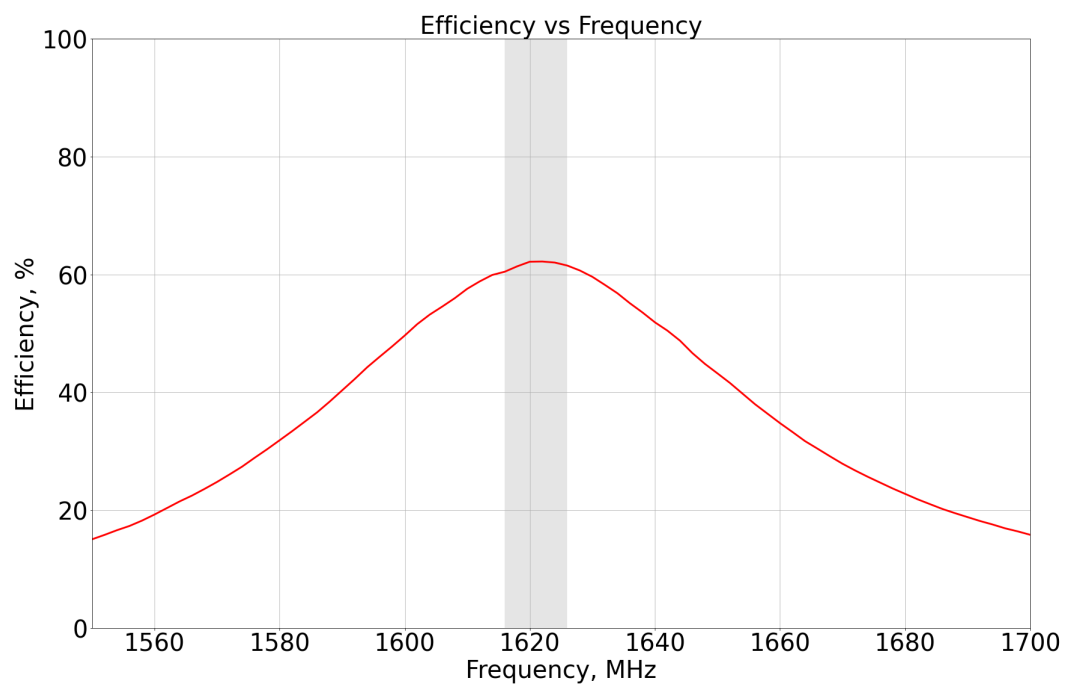
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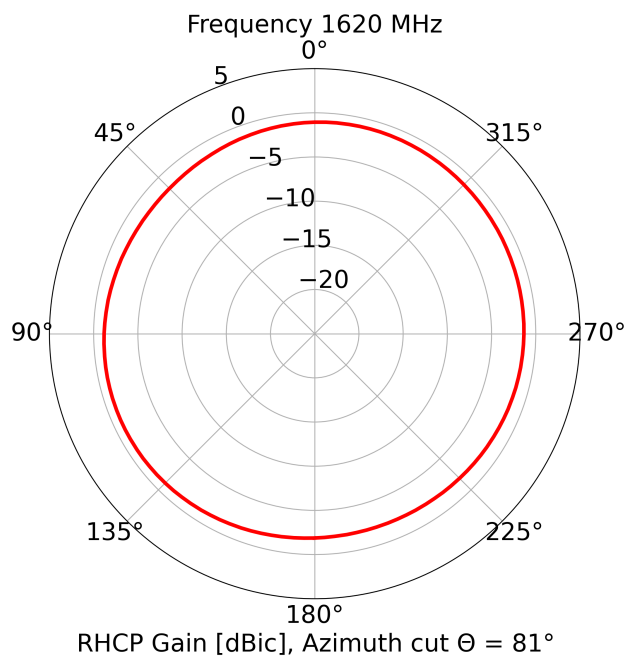
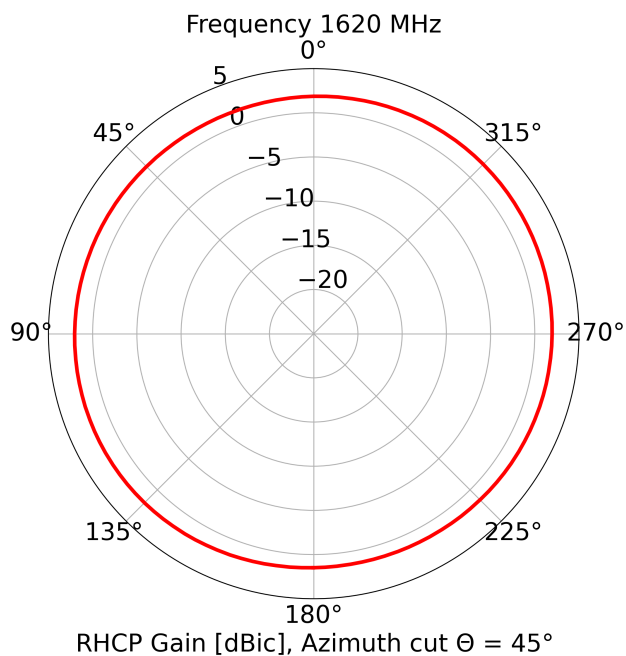
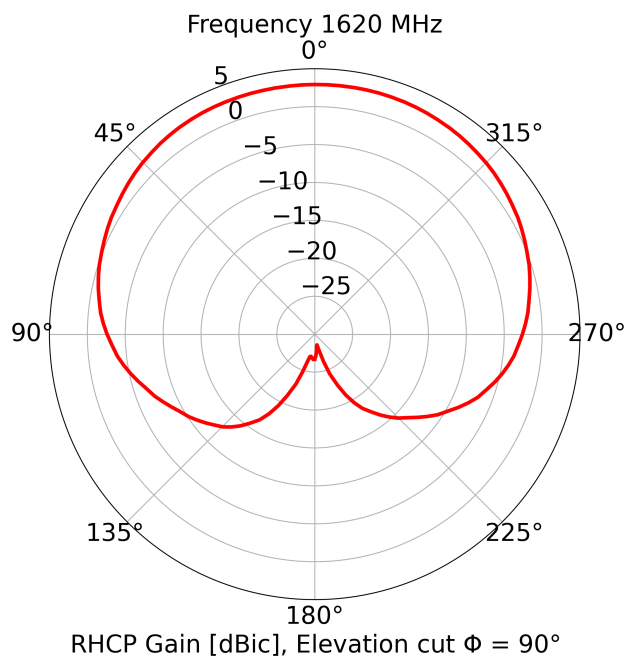
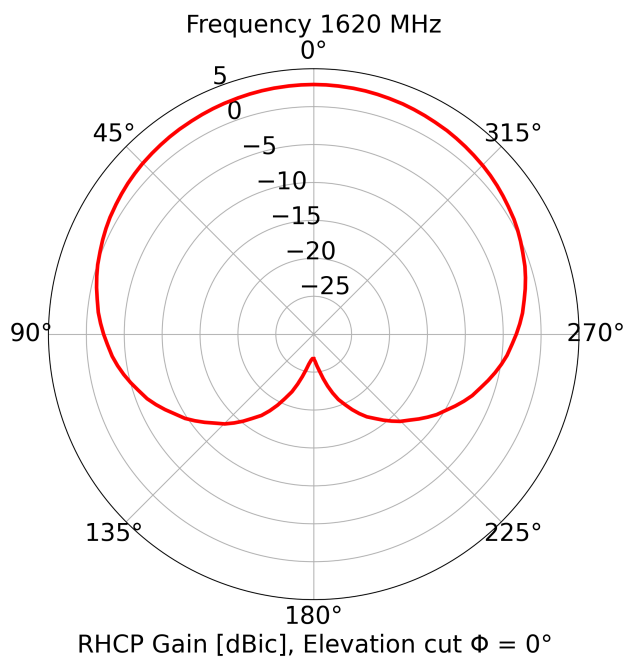
Gain



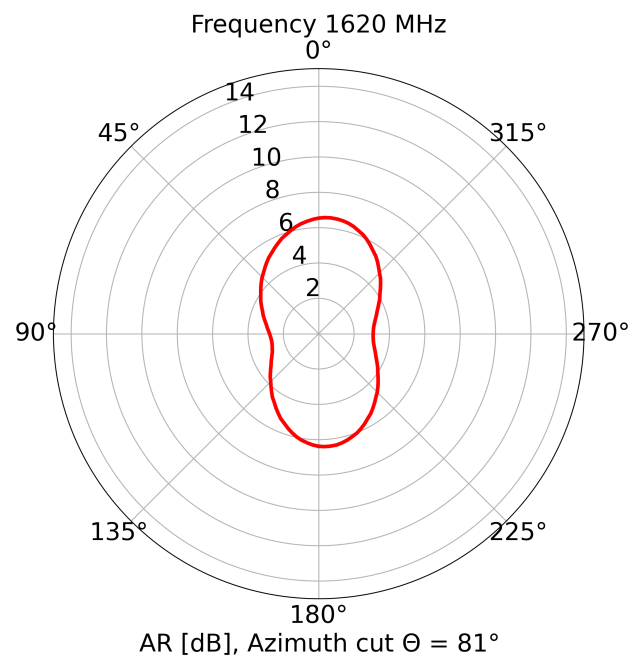
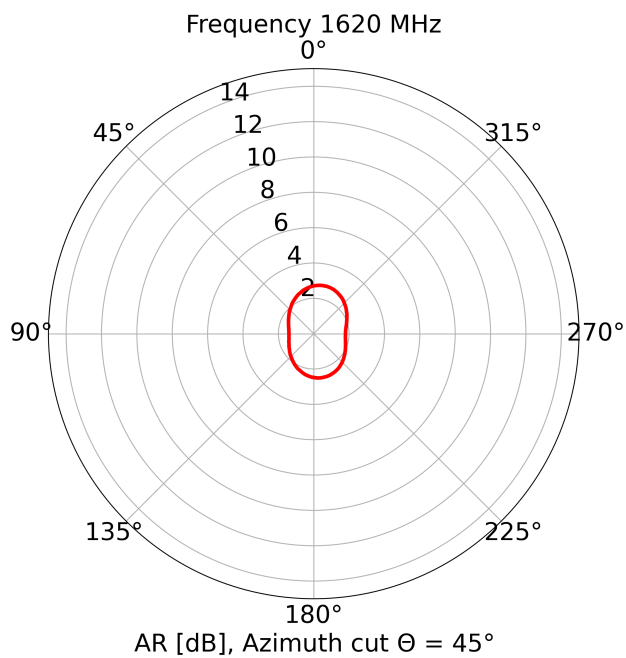
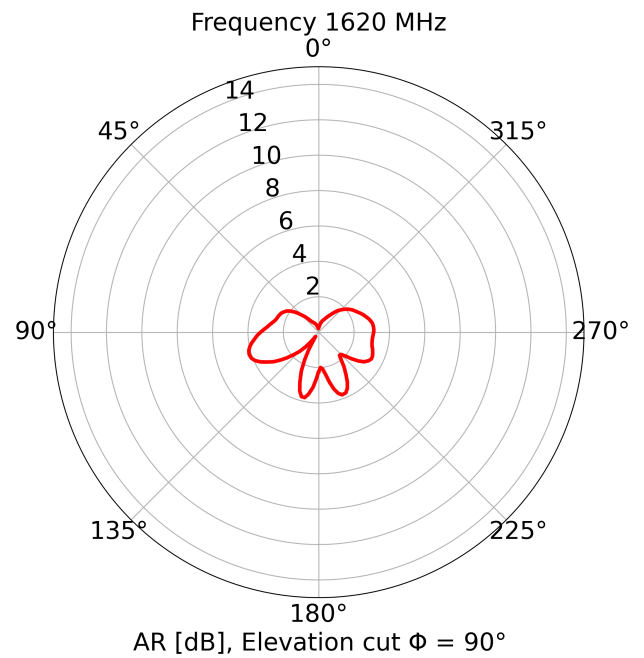
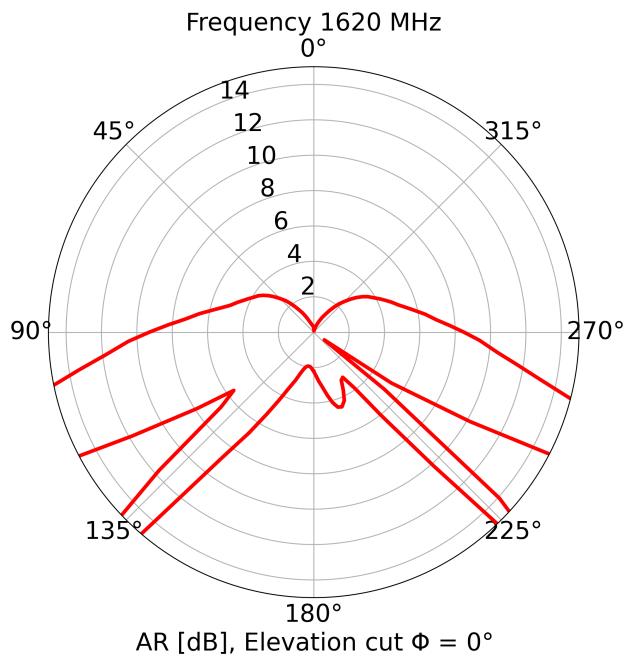
Efficiency

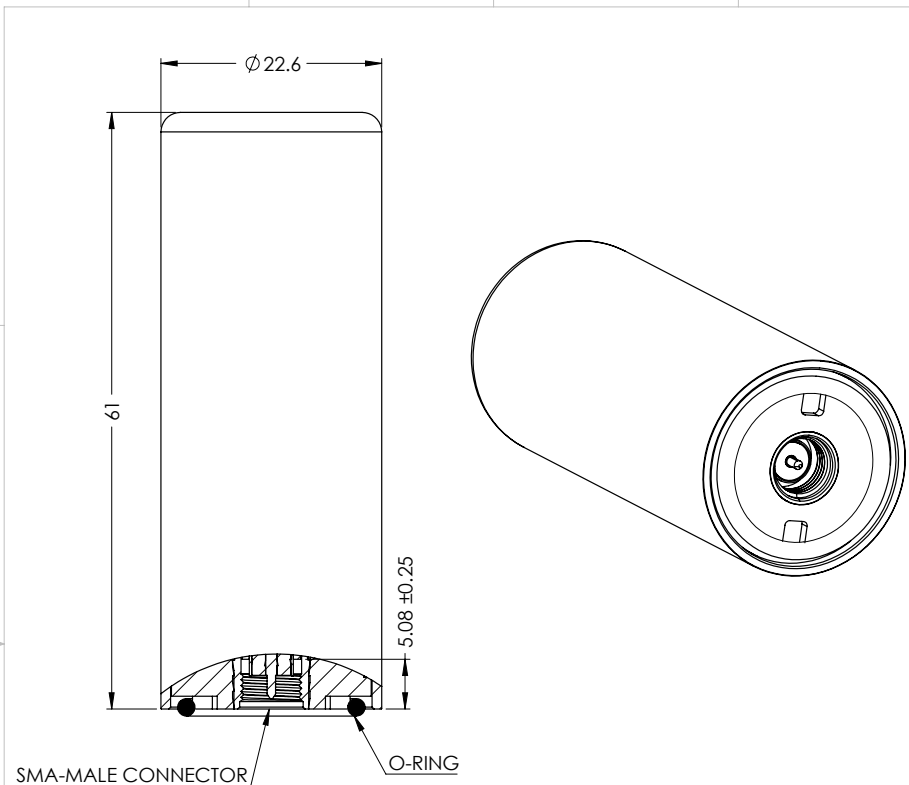


Radiation Patterns



Axial Ratio

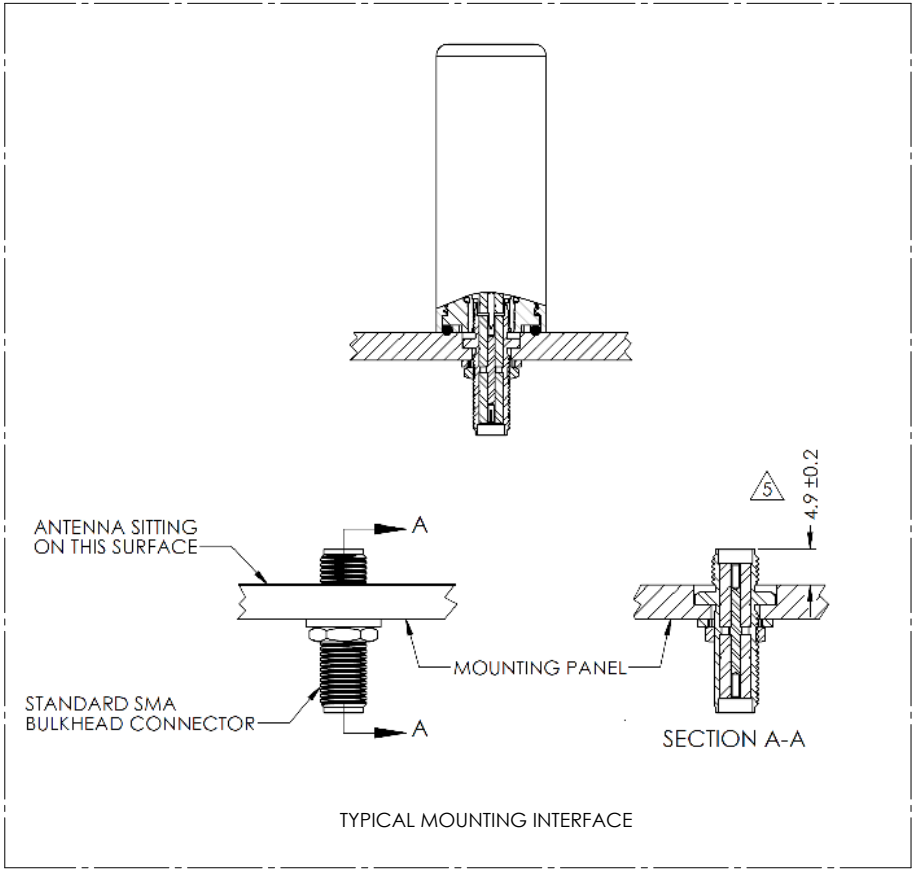




- NOTES:
- 1. CONNECTOR TYPE: SMA-MALE
 - 2. HOUSING MATERIAL: ABS/PC
 - 3. COLOR: BLACK
 - 4. DUST AND WATER RESISTANCE: IP67
 - 5. RECOMMEND A 4.9MM MOUNTING HEIGHT FOR MOUNTING INTERFACE SEALING AND ELECTRICAL CONNECTION. ASSEMBLY TORQUE SHALL BE NO MORE THAN 8 IN*LB

ITEM 100-00224-01 REVISION HISTORY			
REV	DESCRIPTION	DATE	BY
1	INITIAL RELEASE	2022-01-05	ZX
A	MODEL UPDATED	2022-07-15	SZ

DRAWING REVISION HISTORY			
REV	DESCRIPTION	DATE	BY
1	INITIAL RELEASE	2022-01-05	SZ
A	MODEL UPDATED	2022-07-15	SZ



UNLESS OTHERWISE SPECIFIED:		NAME	DATE
DIMENSIONS ARE IN MM		DRAWN	SZ 2022-01-05
TOLERANCES:		CHECKED	ZX 2022-01-05
FRACTIONAL ±		ENG APPR.	NPC 2022-01-05
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.	
THIRD ANGLE PROJECTION			
DO NOT SCALE DRAWING			

MAXTENA, INC
100-00224-01
BAYMAX

TITLE:

SIZE	DWG. NO.	REV
B	117-00556-01	A
CAGE CODE: 5KQH7	SCALE: NONE	SHEET 1 OF 1

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