

M1621HCT-LP-UFL

IRIDIUM SFX EMBEDDED LOW-PROFILE ANTENNA

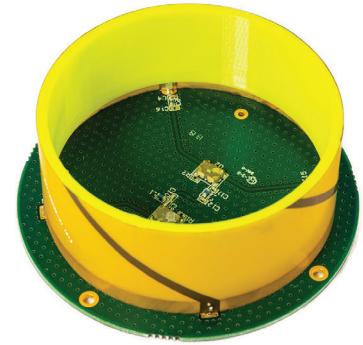
Part #: 100-00101-03

Description

The M1621HCT-LP-UFL is a high performance antenna designed for the Iridium SFX/ RUDICS /SBD network, and built on proprietary Maxtena Helicore (Registered Trademark symbol) Technology. The Helicore technology provides exceptional pattern control, polarization purity and high efficiency in very light and compact form factor. The omnidirectional antenna pattern allows this antenna to be easily embedded in any application. This antenna is designed to work with both Iridium voice and data modems including Iridium 9601, 9602N, 9603N, 9523N, 9522B and 9770 SFX. The embedded antenna features a custom cable and u.fl connector for easy installation.

Electrical Specifications

Parameter	Specification
Frequency	1616 - 1626 MHz
Polarization	RHCP
Antenna Element Peak Gain	2.5 dBic (typical)
Peak Efficiency	73%
Beamwidth	147°
VSWR	2.0:1
Impedance	50 Ω



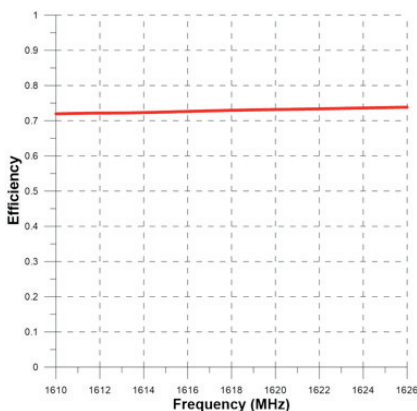
Features

- Iridium SFX 9770 compliant
- Very light weight 23g
- Ground plane independent
- High gain & low axial ratio

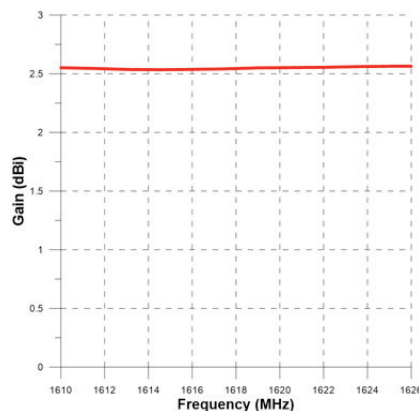
Applications

- Vehicle and fleet tracking
- Military & security
- Asset tracking
- IoT
- High quality voice applications
- Maritime industries
- UAV/Drones
- Navigation devices
- Mining equipment
- LBS & M2M applications
- Data streaming

Efficiency



Antenna Element Gain [dB]



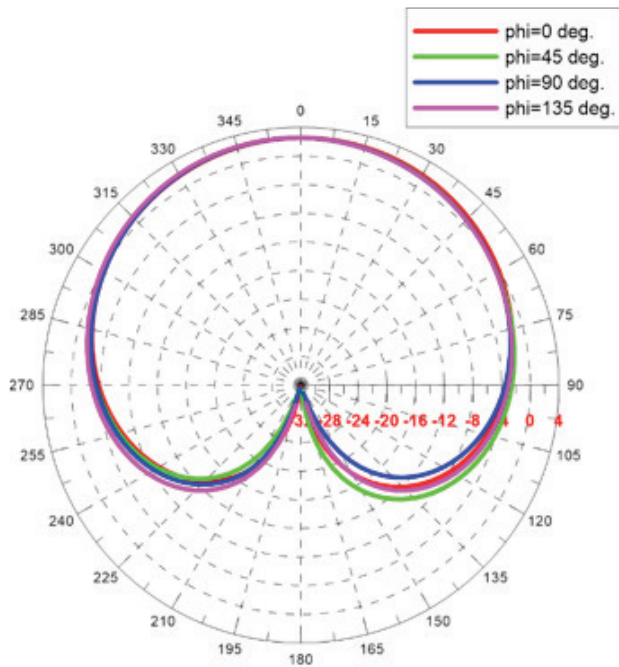
Radiation Specifications

Iridium Radiation Patterns

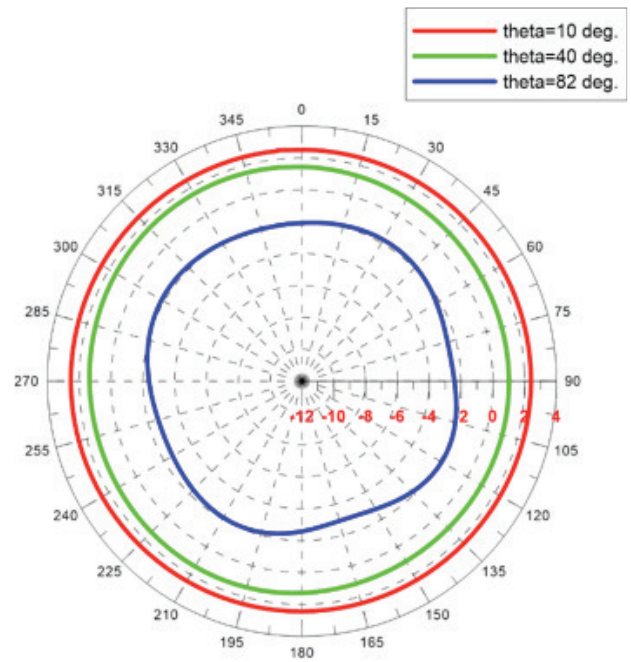
Maxtena's M1621HCT-LP-UFL has unique features that make it the best option for high-accuracy Iridium applications.

1. Highly symmetric radiation pattern guarantees there will be no direction of weak reception or blind spots.
2. A 147 degree beamwidth ensures excellent hemispherical coverage.

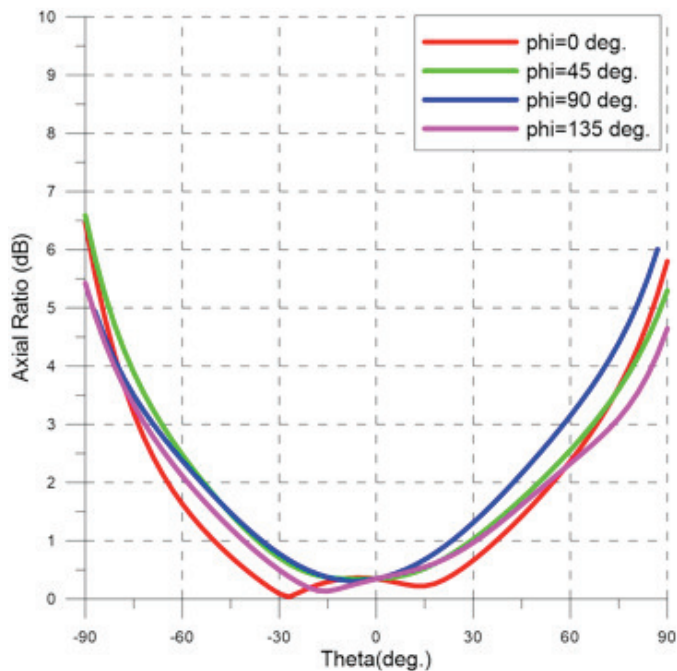
RHCP Realized Gain [dBiC] - Elevation Cuts



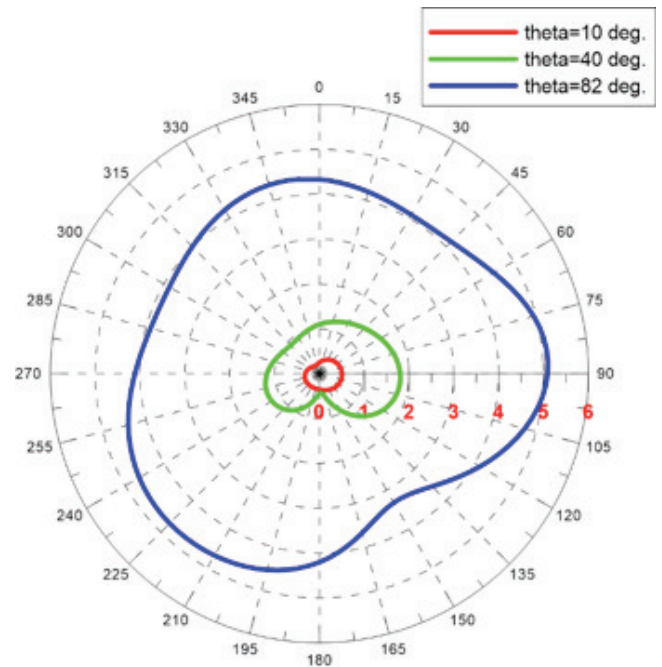
RHCP RealizedGain [dBiC] - Azimuth Cuts



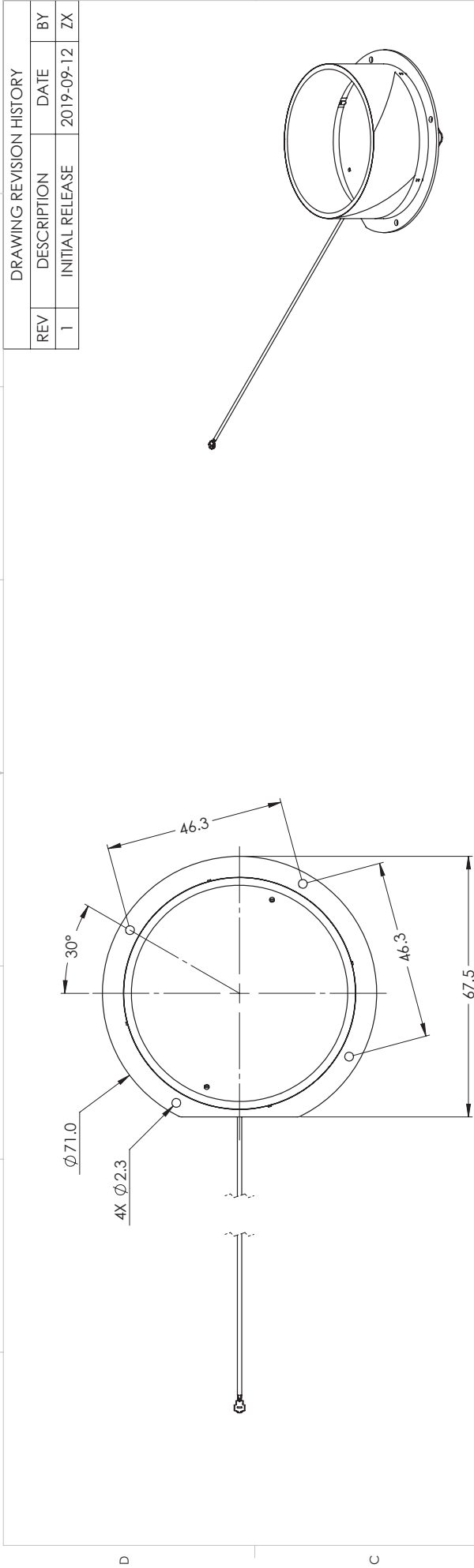
Axial Ratio [dB] - Elevation Cuts



Axial Ratio [dB] - Azimuth Cuts



Mechanical Specification	
Overall Dimensions	38.3 mm (height) x 60.15 mm (diameter)
Weight	23 g
Operating Temperature	from -40°C to 85°C
RF Connector	UFL
Environmental	RoHS Compliant



DRAWING REVISION HISTORY			
REV	DESCRIPTION	DATE	BY
1	INITIAL RELEASE	2019-09-12	ZX

NOTES:

- DESCRIPTION: IRIIDIUM SFX EMBEDDED LOW PROFILE ANTENNA.
- ATTACHMENT METHOD: FOUR #2-56 SCREW MOUNTING HOLES
- CONNECTOR: UFL

CONFIGURATION: 100-00101-03

dimensions in mm

ITEM 100-00101-03 REVISION HISTORY			
REV	DESCRIPTION	DATE	BY
1	INITIAL RELEASE	2019-05-15	ZX

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MAXTENA, INC		TITLE: 100-00101-03 M1621HCT-LP-UFL		
SIZE DWG. NO. B 117-00301-01		CAGE CODE: 5KQH7 SCALE: NONE		
CAD MAINTAINED. CHANGES SHALL BE INCORPORATED BY THE DESIGN ACTIVITY.		REV 1		