M1590HCT-HP-TH

THURAYA RUGGED HIGH PERFORMANCE ANTENNA

Part #: 100-000137-01

Description

The M1590HCT-HP-TH is a rugged high performance antenna designed for the Thuraya 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 M1590HCT-HP-TH is a mast mount design, featuring a TNC connector and is rated IP-66 when both mounted and unmounted for added protection. This antenna is ideal for Maritime and M2M Thuraya applications.

Features

- Optimized for Thuraya network
- Very low axial ratio
- IP66 and RoHS compliant
- Ground plane independent

Applications

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

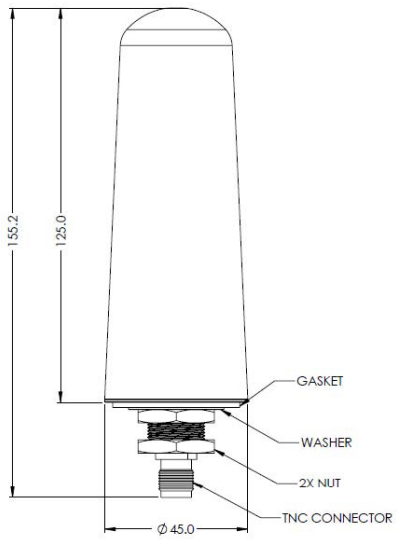
Electrical Specifications

Parameter	Specification
Frequency	1625 - 1660.5 MHz
Polarization	LHCP
Antenna Element Peak Gain	3.0 dBic (typical)
Peak Efficiency	50%
Interface Rating	200 V/m in band
Axial Ratio	2.2 dB (typical)
VSWR	<2
Impedance	50 Ω

Mechanical Specifications

Parameter	Specification
Overall Dimensions	125 mm (height) x 45 mm (diameter)
RF Connector	TNC Jack
Operating Temp Range	-40˚C to 85 ˚C
Weight	100 g
Attachment Method	19 mm Through Hole Mount
Environmental	IP66 and RoHS Compliant

Mechanical Drawing



Dimensions in mm

MAXTENA
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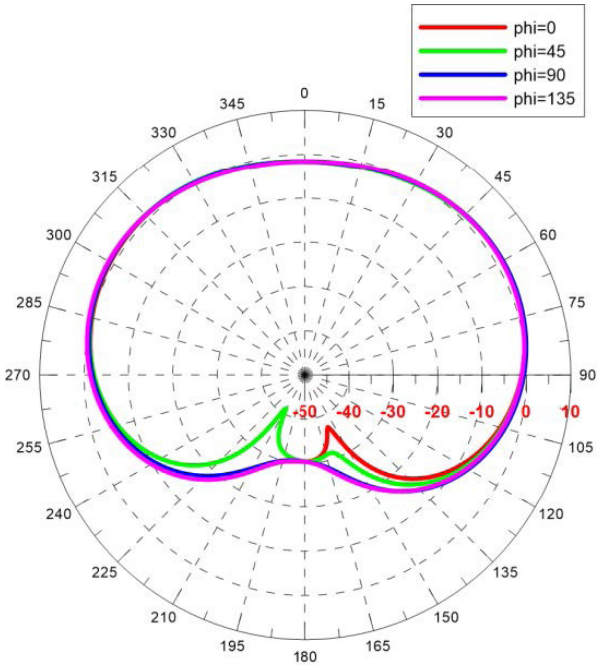
Radiation Specifications

Thuraya Radiation Patterns

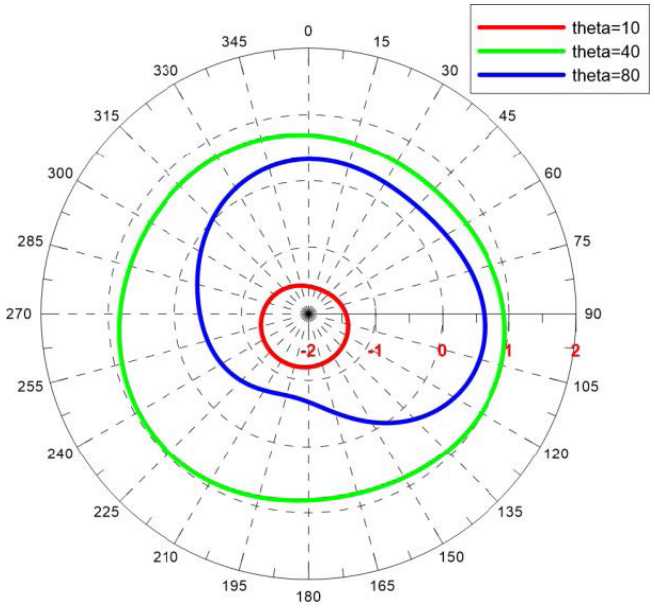
Maxtena's M1590HCT-HP-TH has unique features that make it the best option for Thuraya M2M applications.

1. Low axial ratio ensures multipath error is mitigated.
2. Highly symmetric radiation pattern guarantees there will be no direction of weak reception or blind spots.

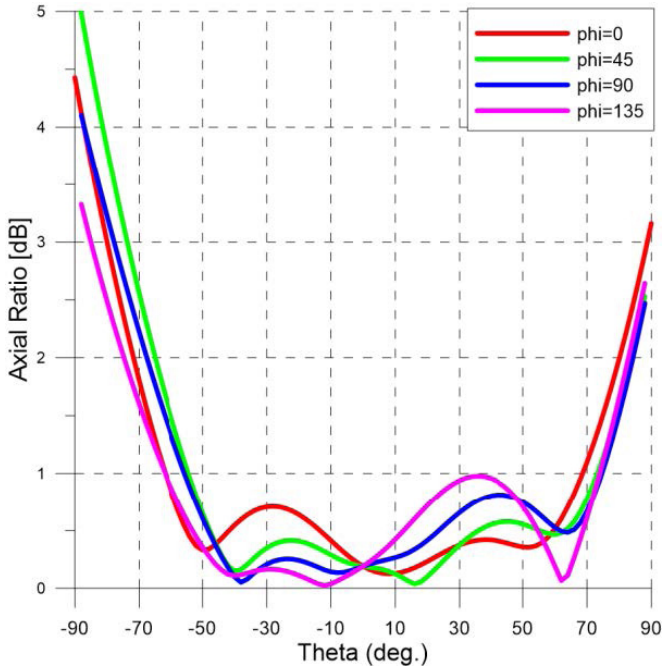
LHCP Realized Gain [dBic] - Elevation Cuts



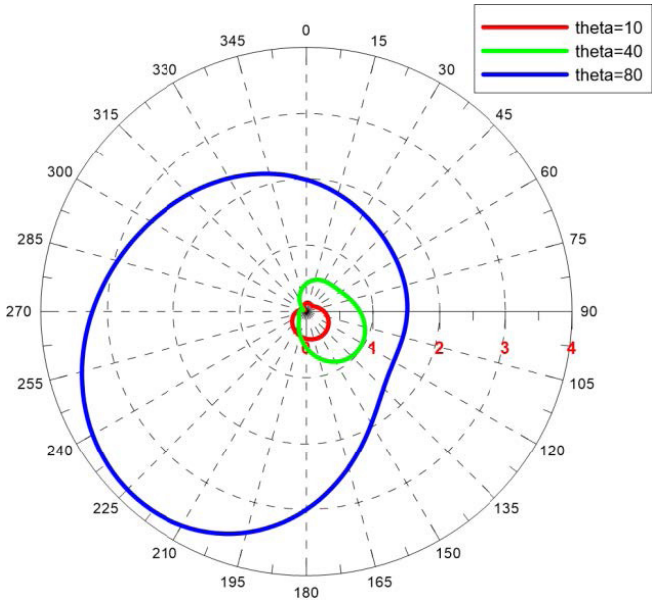
LHCP RealizedGain [dBic] - Azimuth Cuts



Axial Ratio [dB] - Elevation Cuts



Axial Ratio [dB] - Azimuth Cuts



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