

# M1600HCT12-UFL

## THURAYA HELICAL ANTENNA

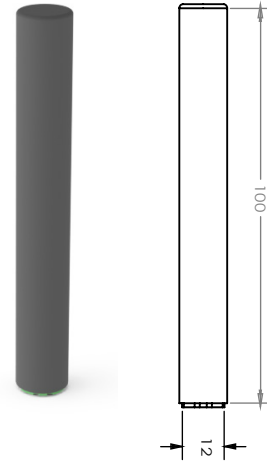
Part #: 100-00108-01

### Description

The M1600HCT12-UFL is a 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 M1600HCT12-UFL comes with an integrated coaxial cable with U.FL connector. Cable length can be customized upon request. This product is ideal for embedded applications requiring minimal integration effort or for retrofitting existing products. The antenna is custom tuned for any type of plastic housing.

### Electrical Specifications

Parameter	Design Specifications
Frequency	1525 MHz - 1660.5 MHz
Polarization	LHCP
Peak gain	3.5 dBic @ 1540 MHz (typical) 3.5 dBic @ 1640 MHz (typical)
Axial ratio	1.5 dB (max)
Impedance	50 Ohm
Interference rating	200 V/m in band
Operating temp.	from -40°C to 85°C
RF connector	UFL
Overall dimensions	100 mm (height) x 12 mm (diameter)
Weight	9 grams



### Mechanical Specifications

dimensions are in mm

### Features

- Very low axial ratio
- Pattern constant with frequency
- Ground plane independent
- Ultra lightweight

### Applications

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

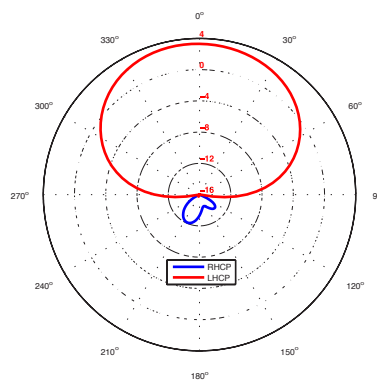
### 1540 MHz Typical Performance

Parameter	Design Specifications
Element Efficiency	50%
Peak gain	3.5 dBic
Axial ratio	1.5 dB (max)
VSWR	<2

### 1640 MHz Typical Performance

Parameter	Design Specifications
Element Efficiency	50%
Peak gain	1.5 dBic
Axial ratio	3.5 dB (max)
VSWR	<2

Realized gain plot  
measured at 1540 MHz



Realized gain plot  
measured at 1640 MHz

