

# HC600

## HC600 Iridium Antenna

Frequency Coverage: Iridium

### Overview

The HC600 is a lightweight passive helical antenna covering the Iridium frequency band (1616 MHz to 1626.5 MHz) and is designed to enhance the signal-to-noise ratio of communications over the Iridium voice and data modems.

Weighing 18 g, the lightweight HC600 features a precision-tuned helix element that provides excellent axial ratios and operates without the requirement of a ground plane, making it ideal for a wide variety of applications including Unmanned Aerial Vehicles (UAVs).

The HC600 is protected by a robust, military-grade plastic enclosure with an integrated SMA connector for screw-on mounting that securely seals the unit with an O-ring, complying with IP67 standards. The enclosure also provides two threaded holes in the base for secure attachment of the unit.



### Applications

- Iridium™ Voice and Data Applications
- Sea & Land Container Tracking
- Military & Security
- Fleet Management & Asset Tracking
- Marine & Avionics Systems
- Law Enforcement & Public Safety

### Features

- 3.7 dBic gain over full bandwidth
- Axial ratio:  $\leq 0.5$  dB max.
- 15 kV ESD circuit protection
- IP67 weather proof housing
- Robust Industrial grade enclosure
- Operates from  $-40^{\circ}\text{C}$  to  $+85^{\circ}\text{C}$

### Benefits

- Extremely lightweight (18 g)
- Excellent circular polarized signal reception
- Industrial temperature range
- Rugged design
- Ideal for harsh environments
- REACH, and RoHS compliant
- Remote SBD antenna

**About Tallysman:** With global headquarters and manufacturing in Ottawa, Canada, Tallysman is a leading manufacturer of high-precision antennas and components for Global Navigation Satellite System (GNSS) applications. Tallysman's mission is to support the needs of a new generation of positioning systems by delivering unprecedented antenna precision at competitive prices. Learn more at [www.tallysman.com](http://www.tallysman.com)

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## Antenna

Architecture ..... Iridium, RHCP Quadrifilar Helix

		Gain	Axial Ratio
		dBic typ. at Zenith	dB at Zenith
<b>GNSS</b>			
GPS	L1	-	-
	L2	-	-
	L5	-	-
GLONASS	G1	-	-
	G2	-	-
	G3	-	-
Galileo	E1	-	-
	E5a	-	-
	E5b	-	-
	E6	-	-
BeiDou	B1	-	-
	B2	-	-
	B3	-	-
IRNSS/NavIC	L5	-	-
QZSS	L6	-	-
<b>Satellite Communications</b>			
Iridium		3.7	≤ .5 max.
Globalstar		-	-

## Environmental

Operating Temp. Range ... -40°C to +85°C

Vibration ..... 3-axis, sweep = 15 min, 10 to 200 Hz  
sweep: 3 G

Shock ..... Vertical axis: 50 G, other axes: 30 G

Compliance ..... RoHS and REACH compliant

## Other

Warranty ..... One year – parts and labour

## Ordering Information

HC600 - Passive Iridium Helical Antenna

Part Number: 33-HC600

## Electrical

Frequency Bandwidth ... 1616-1626.5 MHz

VSWR ..... <1.5:1 typ. 1.8:1 max.

ESD Circuit Protection ... 15 kV air discharge

## Mechanical

Mechanical Size ..... 54.2 mm (H) x 33.2 mm (Dia)

Available Connectors ..... SMA Male

Weight ..... 18 g

Enclosure ..... Radome and Base: EXL9330

## HC600 Dimensions (mm)

