

# Aviation Antenna HX-CAX601A

## HIGH PRECISION COMPACT GNSS ANTENNA FOR AVIATION



### HIGH PHASE CENTER STABILITY

HX-CAX601A features a multi-point feeding design to achieve greater phase center stability. It effectively improves measurement accuracy and provides better positioning solution.

### TRACKING IN CHALLENGING ENVIRONMENTS

The ability to receive low elevation signals with high gain and wide beam width makes HX-CAX-601A a suitable choice for tracking visible satellites and provide stable and precision GNSS data under different flight attitudes.

### STRONG ANTI-INTERFERENCE PERFORMANCE

The antenna LNA features an excellent out-of-band rejection performance, which can suppress the electro magnetic interference, providing the stability and reliability of GNSS signals. Also it effectively avoids disconnection dangerous when receivers are being interfered by wireless communication systems, for example power grid, communication base station or radio modem applications.

### SMALL SIZE WITH RUGGEDIZED STRUCTURE

The dimension of HX-CAX601A is only 90\*27.5mm (without connector) with a light weight of 13 gram, which makes it ideal to be placed over the professional drones, unmanned vessels or where high precision operations are needed. The IP67 ruggedized cover can protect the antenna from dust and water, furthermore ensure long-time outdoor operation due to its patented water-proof and breathable design.

### KEY FEATURES

- Support GPS, GLONASS, Beidou and Galileo signals reception
- Stable phase center guarantees the accuracy of positioning within millimeter-level
- Strong anti-interference ability to endure the challenging operating environments
- Small form factor with IP67 ruggedized structure

# Aviation Antenna HX-CAX601A

## PERFORMANCE

### Signal Received

|         |               |
|---------|---------------|
| GPS     | L1/L2/L5      |
| GLONASS | L1/L2/L3      |
| BDS     | B1/B2/B3      |
| GALILEO | E1/E5a/E5b/E6 |
| L-Band  |               |

**Nominal Impedance** 50Ω

**Polarization** RHCP

**Axial Ratio** ≤3dB

### Gain at Zenith (90°)

|              |               |
|--------------|---------------|
| 1164-1278MHz | 3dBi(maximum) |
| 1520-1615MHz | 3dBi(maximum) |

**LNA Gain** 36dB(typical)

**Noise Figure** ≤1.5dB

**Output/Input VSWR** ≤2.0

**Operation Voltage** +3.3VDC to +12VDC

**Operation Current** 45mA(maximum)

**Group Delay Ripple** <5ns

## MECHANICAL

**Dimensions** φ90\*27.5mm

**Connector** TNC female (selectable SMA female)

**Weight** ≤150g

**Mounting** 4 M4 screws installation

## ENVIRONMENTAL

### Temperature

Operating -40°C to +85°C

Storage -55°C to +85°C

**Humidity** 95% non-condensing

**Water/Dust Resistance** IP67

For the most recent details of this product:

<http://en.harxon.com/products-detail.php?Prolid=151>

**en.harxon.com**

sales@harxon.com

6/F, Block B, Building D3, TCL International

E City, NO.1001 Zhongshanyuan Road,

Nanshan District, Shenzhen, China

Tel: +86-755-26989948

Fax: +86-755-26989994

**Version 2** Specifications subject to change without notice.

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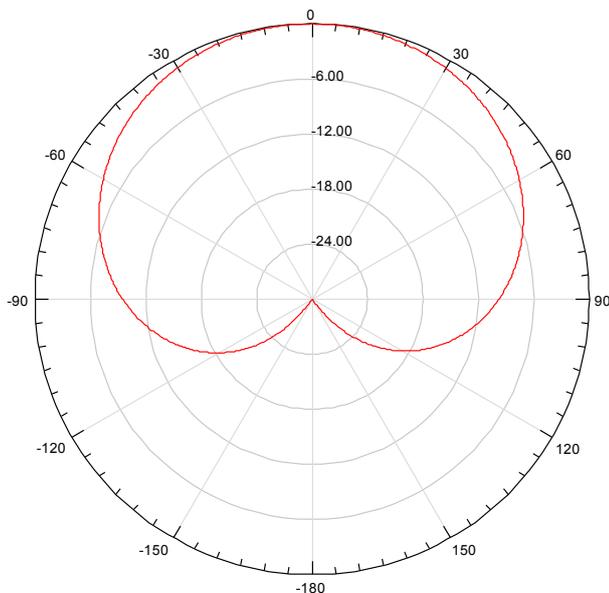
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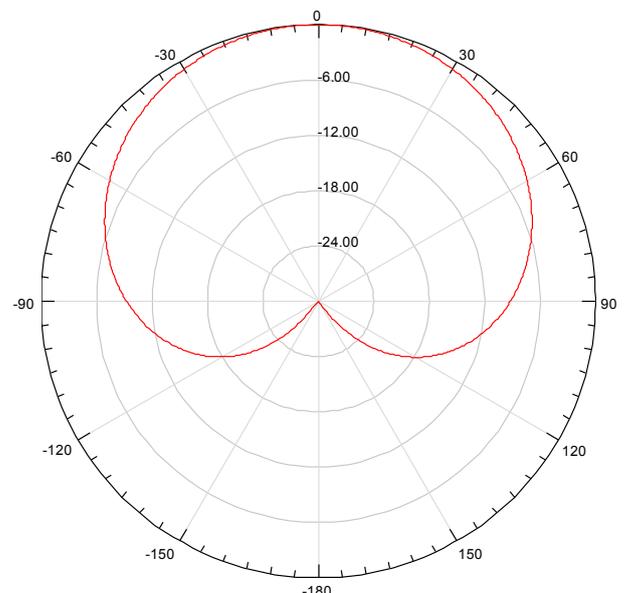
## Harxon Aviation Antennas:

| Model      | GPS |    |    | GLONASS |    |    | GALILEO |     |     |    | BDS |    |    | L-Band | Structures  |
|------------|-----|----|----|---------|----|----|---------|-----|-----|----|-----|----|----|--------|---|
|            | L1  | L2 | L5 | L1      | L2 | L3 | E1      | E5a | E5b | E6 | B1  | B2 | B3 |        |   |
| HX-CAX601A | ✓   | ✓  | ✓  | ✓       | ✓  | ✓  | ✓       | ✓   | ✓   | ✓  | ✓   | ✓  | ✓  | ✓      |  φ90*27.5mm  |
| HX-CA7606A | ✓   | ✓  | —  | ✓       | ✓  | —  | —       | —   | —   | —  | ✓   | ✓  | ✓  | —      |  115x72x27mm |
| HX-CA7607A | ✓   | ✓  | —  | ✓       | ✓  | —  | —       | —   | —   | —  | ✓   | ✓  | ✓  | —      |   |
| HX-CA3603A | ✓   | —  | —  | ✓       | —  | —  | —       | —   | —   | —  | ✓   | —  | —  | —      |   |

## NORMALIZED RADIATION PATTERN



1520MHz~1615MHz



1164MHz~1300MHz