

2D Choke Ring Antenna HX-CG7601A



REVOLUTIONARY GNSS ANTENNA WITH STRONG MULTIPATH SUPPRESSION



HIGH PHASE CENTER STABILITY

The unique 2D choke ring design of HX-CG7601A ensures an excellent multipath reduction performance across multiple GNSS frequency bands of GPS, BeiDou, GLONASS, GALILEO, QZSS, and SBAS. And the antenna features the Harxon patented multi-point feeding technology to achieve greater phase center stability and hence effectively improve measurement accuracy. It is ideal for applications of CORS stations, bridge and building deformation monitoring or geological monitoring due to its sub-millimeter phase center stability.

TRACKING IN CHALLENGING ENVIRONMENTS

The strong ability to receive low elevation signals with high gain and wide beam width makes HX-CG7601A an excellent choice for tracking visible satellites and provide stable and precision GNSS data under complex environments, such as obstructed environment of tree lines or construction.

STRONG ANTI-INTERFERENCE PERFORMANCE

The antenna LNA features an excellent out-of-band rejection performance, which can suppress the EMI, 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.

MORE RUGGEDIZED FOR LONG LASTING DURABILITY

The HX-CG7601A cover is made of Glass Fiber Reinforced Polymer(GFRP) material and is structurally strong and reliable. The enclosure of this newly designed choke ring antenna employs multiple protections design to be comfort to IP67 standard, which withstands exposure against dust, rain, splash or sunlight. This reliable and ruggedized design ensures long-term proper operation of the choke ring antenna even under harsh environments as high low temperature, high humidity and salt fog.

KEY FEATURES

- Support GPS, Glonass, Galileo, Beidou, QZSS, and SBAS signal reception
- Stable phase center guarantees the accuracy of positioning within sub-millimeter level
- Strong anti-interference ability to endure the challenging operating environments
- IP67 reliable and ruggedized cover protection

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PERFORMANCE

Signal Received

| | |
|---------|----------|
| GPS | L1/L2 |
| GLONASS | L1/L2/L3 |
| GALILEO | E1 |
| BDS | B1/B2/B3 |
| QZSS | L1/L2 |
| SBAS | L1 |

Nominal Impedance 50Ω

Polarization RHCP

Axial Ratio ≤2dB

Gain at Zenith (90°)

| | |
|--------------|---------------|
| 1200-1278MHz | 6dBi(maximum) |
| 1559-1615MHz | 6dBi(maximum) |

LNA Gain 50dB(typical)

Noise Figure ≤2dB

Output/Input VSWR ≤2.0

Operation Voltage +3.3VDC to +12VDC

Operation Current 60mA(maximum)

Group Delay Ripple <5ns

MECHANICAL

Dimensions φ322*261mm

Connector TNC female

Weight ≤5.6kg

Mounting BSW5/8"-11 screw, depth≥22mm

ENVIRONMENTAL

Temperature

Operating -40°C to +85°C

Storage -55°C to +85°C

Humidity 95% non-condensing

Water/Dust Resistance IP67

Regulatory Compliance NGS,CE, FCC, RoHS

For the most recent details of this product:

<https://en.harxon.com/products-detail.php?Proid=100>

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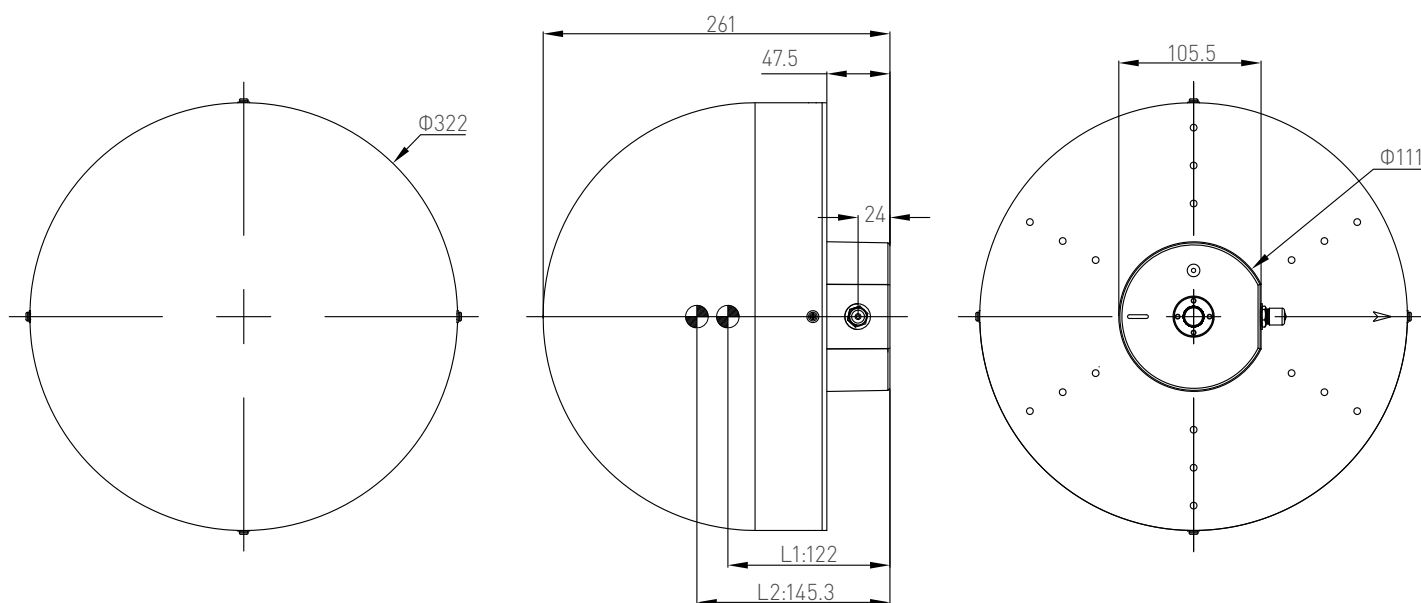
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Structure& Phase Center Drawing (mm)



TOP VIEW

SIDE VIEW

BOTTOM VIEW

Undeclared Tolerance: ±0.3mm