3D Choke Ring Antenna

HX-CGX601A

REVOLUTIONARY DESIGN,

HIGH PERFORMANCE

MULTI-CONSTELLATION ANTENNA



HIGH PHASE CENTER STABILITY

The unique 3D choke ring design of HX-CGX601A ensures an excellent multipath reduction performance across all GNSS frequency bands including L-Band. 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-CGX601A 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-CGX601A cover is made of Glass Fiber Reinforced Polymer(GFRP) material and is structurally strong and reliable. The newly designed choke rings are treated with a more robust double treatment for longer lasting durability in harsh environments. The IP67 ruggedized cover is also designed for added protection for inside antenna avoid from dust and water. The antenna MTBF is over 30000 hours, which ensures long-time outdoor operation in challenging environments of high low temperature, high humidity and high salt fog.

KEY FEATURES

- Support GPS, Glonass, Galileo, Beidou, QZSS, IRNSS 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/L5/L-Band
GLONASS	L1/L2/L3
GALILEO	E1/E5a/E5b/E6
BDS	B1/B2/B3
QZSS	L1/L2/L5/L6
IRNSS	L5
SBAS	L1/L5
Nominal Impedance	50Ω
Polarization	RHCP
Axial Ratio	≤2dB
Gain at Zenith (90°)	
1164-1300MHz	7.0dBi(maximum)
1525-1615MHz	6.5dBi(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	¢379*312mm
Connector	TNC female
Weight	≤10.5kg
Mounting	BSW5/8''-11 screw, depth≥22mm

ENVIRONMENTAL

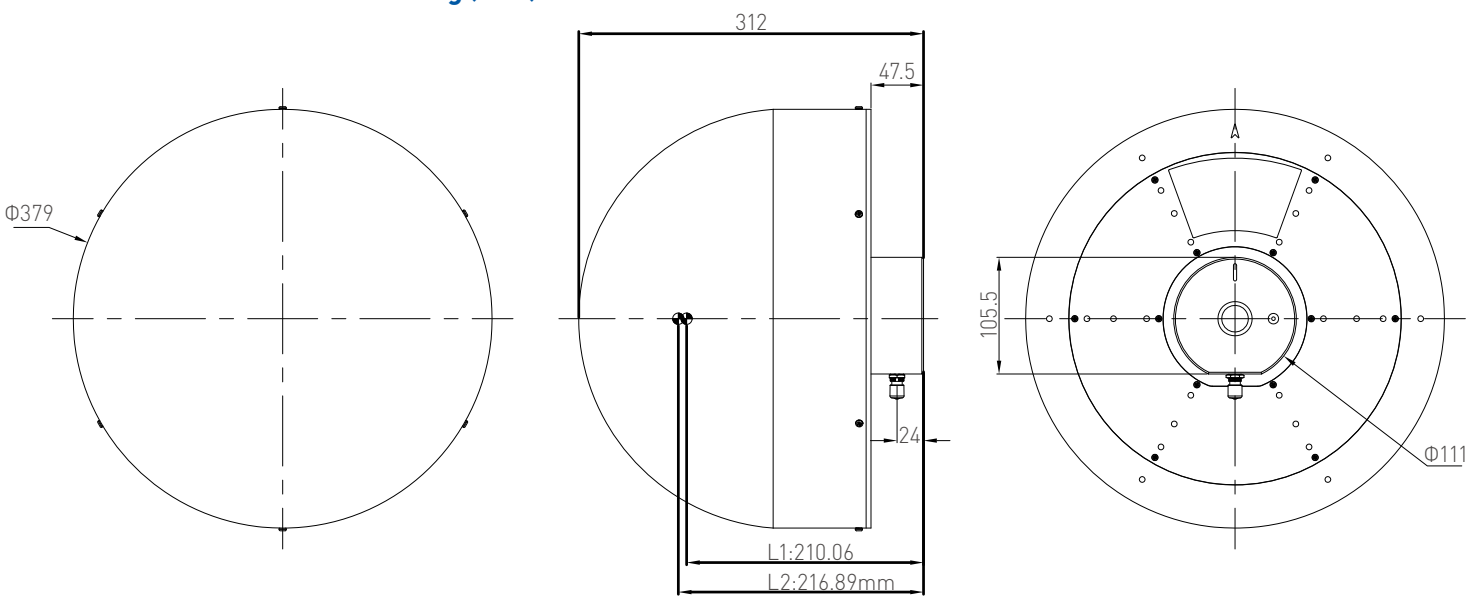
Temperature	
Operating	-40℃ to +85℃
Storage	-55℃ to +85℃
Humidity	95% non-condensing
Water/Dust Resistance	IP67
Regulatory Compliance	IGS, NGS, CE, FCC, RoHS

For the most recent details of this product:
http://en.harxon.com/products-detail.php?ProId=34

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Structure& Phase Center Drawing (mm)



TOP VIEW SIDE VIEW BOTTOM VIEW

Undeclared tolerance:±0.3mm

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