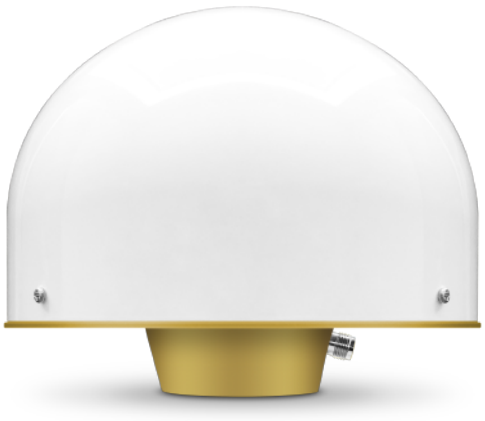
Mini Choke Ring Antenna HX-CGX611A

Harxon
a BDStar company

REVOLUTIONARY GNSS ANTENNA WITH STRONG MULTIPATH SUPPRESSION

Harxon HX-CGX611A is a high performance GNSS antenna for base station that covers full frequency satellite signal tracking of GPS, GLONASS, Galileo, BeiDou, QZSS, IRNSS, SBAS as well as L-Band correction service. It is a mini choke ring antenna with strong multipath suppression performance that specifically designed for applications as land and marine surveying, channel surveying, earthquake and landslide monitoring, deformation monitoring, and wharf container operations that require absolute positioning accuracy and multi-constellation support.



HIGH PHASE CENTER STABILITY

The HX-CGX611A antenna adopts unique choke ring structure design which delivers extraordinary multipath suppression performance for stable satellite signal tracking. It also features Harxon patented multi-point feeding technology to achieve the repeatability of phase center and geometrical center, maximumly decreasing the measuring deviation. The stability of this antenna reaches submillimeter, ideal for mission-critical applications.

EXCELLENT SIGNAL TRACKING IN CHALLENGING ENVIRONMENTS

The HX-CGX611A excels its signal tracking performance thanks to its high gain and wide beam width for directional diagram, which ensures ideal satellite signal reception even the antenna situates at low elevation and quickly tracks available satellites in environments with blockages and output reliable and stable GNSS signals.

POWERFUL ANTI-INTERFERENCE PERFROMANCE

The LNA (low noise amplifier) of this antenna features an excellent out-of-band rejection performance, which can suppress unwanted electromagnetic interference(EMI) and avoid interference from power grid, communication base station, or radio modem applications and effectively decrease the risk of satellite signal tracking loss, providing the stability and reliability of GNSS signals.

MINI DESIGN WITH RUGGEDIZATION AND DURABILITY

The HX-CGX611A is a ruggedized and durable mini choke ring antenna that built into an IP67 rating housing with multiple protection designs to withstand exposure against dust, rain, splash or sunlight. Its MTBF (mean time between failures) exceeds 30,000 hours and functions normally for a long period of time even under extreme environments as high and low temperature, high humidity, salt fog and etc. Its mini dimensions offers easy integration for positioning solutions.

KEY FEATURES

- Comprehensive GNSS Support: GPS, GLONASS, Galileo, BeiDou, QZSS, IRNSS, SBAS as well as L-Band correction service
- High gain with extraordinary low elevation signal tracking
- High phase center stability ensures sub-millimeter level positioning accuracy
- Strong anti-interference for harsh environment operations
- Ruggedized structure, mini design, lightweight, IP67 water/dust resistance

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EST.2000 ГЕОПРИБОР

PERFORMANCE

Signal Received	
GPS	L1/L2/L5
GLONASS	L1/L2/L3
GALILEO	E1/E5a/E5b/E6
BDS	B1/B2/B3
QZSS	L1/L2/L5/L6
IRNSS	L5
SBAS	L1/L5
L-Band	
Nominal Impedance	50Ω
Polarization	RHCP
Axial Ratio	⩽3dB
Azimuth Coverage	360°(Omni-directional)
Output VSWR	⩽2.0
Peak Gain	6.5dBi
Phase Center Repeatability	±1mm

LOW NOISE AMPLIFIER

LNA Gain	50±2dB
Noise Figure	⩽2dB
Output VSWR	⩽2.0
Passband Ripple	±2dB
Operation Voltage	+3.3V to +12V DC
Operation Current	⩽60mA
Differential Propagation Delay	⩽5ns

MECHANICAL

Dimensions	Φ185*148mm
Connector	TNC Female
Weight	⩽2.5Kg
Mounting	5/8''×11 Screws

ENVIRONMENTAL

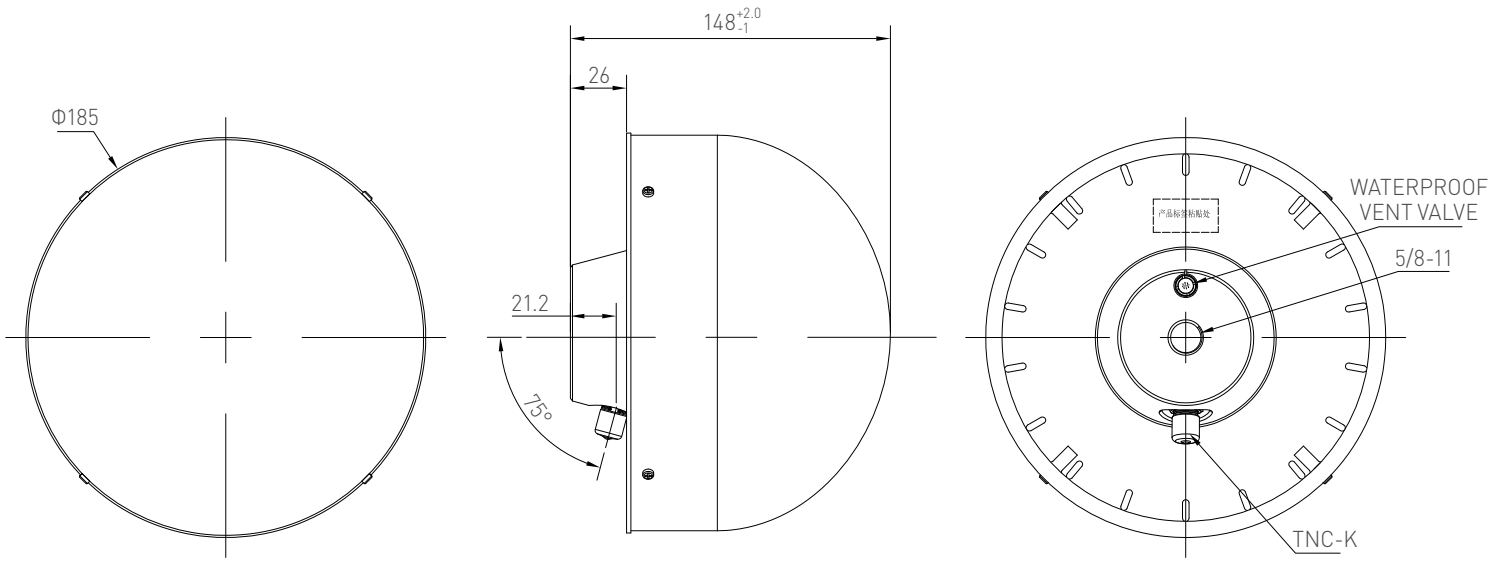
Operating	-40°C to +85°C
Storage	-55°C to +85°C
Humidity	95% No-condensing°C

For the most recent details of this product:
https://en.harxon.com/products-detail.php?ProId=156

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Structure& Phase Center Drawing (mm)



TOP VIEW SIDE VIEW BOTTOM VIEW

Undeclared Tolerance:±0.3mm

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