

Survey GNSS Antenna HX-CSX600A



HIGH PERFORMANCE GNSS ANTENNA CRAFTED FOR HIGH-ACCURACY POSITIONING



CONSISTENT PERFORMANCE ACROSS FULL FREQUENCY BANDS

HX-CSX600A offers full support for reliable and consistent satellite signal tracking, including GPS, GLONASS, Galileo, BeiDou, QZSS, IRNSS, SBAS as well as L-Band correction services. It exhibits a very stable phase center variation with advanced multipoint feeding technology. It features at least 5.5dBi high gain at Zenith across all frequency bands (7dBi maximum), -1.5dB high gain at 20-degree low elevation, and 2.0dB low noise figure.

STRONG ANTI-INTERFERENCE PERFORMANCE

HX-CSX600A equips a robust pre-filtered LNA to realize excellent out-of-band rejection performance, offering strong anti-interference performance for consistent and reliable GNSS signals. Also, it effectively avoids disconnection danger when receivers are operated in complex electromagnetic environments such as communication base station and busy urban area.

TRACKING IN CHALLENGING ENVIRONMENTS

The ability to receive low elevation signals with high gain and wide beam width makes HX-CSX600A an excellent choice for tracking visible satellites in tough environments, providing the positioning solutions with precision and reliable data. It can be widely used in challenging conditions where high precision is needed, such as obstructed environments of forest or construction.

RUGGEDIZED HOUSING, EASY TO INSTALL

It is built into a compact and ruggedized housing with IP67 rating to protect from dust, rain and sunlight, it can withstand a certain amount of shock and vibration, providing reliable performance even in harsh environments. The standard TNC-K connector and pole mount enable easy installation and integration.

KEY FEATURES

- Support GPS, GLONASS, GALILEO, BDS, QZSS, IRNSS, SBAS and L-Band
- At least 5.5dBi high gain across all frequency bands (7dBi maximum)
- Stable phase center guarantees the accuracy of positioning within millimeter-level
- Strong anti-interference ability to endure the challenging operating environments
- Ruggedized housing with IP67 rating protection

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PERFORMANCE

Signal Received	
GPS L1/L2/L5	
BDS B1I/B2I/B3I/B1C/B2a/B2b	
GLONASS L1/L2/L3	
GALILEO E1/E5a/E5b/E6	
QZSS L1/L2/L5/L6	
IRNSS L5	
SBAS L1/L5	
L-Band	
Nominal Impedance	50Ω
Polarization	RHCP
Axial Ratio	≤3dB
Azimuth Coverage	360°
Output VSWR	≤2.0
Peak Gain	7dBi
Phase Center Variation	±2mm

LNA

LNA Gain	L2: 40±2dB
	L1: 38±2dB
Noise Figure	≤2dB
Output VSWR	≤2.0
Passband Ripple	±2dB
Operation Voltage	+3.3~+12VDC
Operation Current	≤45mA
Differential Propagation Delay	≤5ns

MECHANICAL

Dimensions	Φ160*67.5mm
Connector	TNC-K
Weight	≤500g
Mounting	
Pole Mount; Coarse threaded 5/8"-11, thread hole depth 12mm	

ENVIRONMENTAL

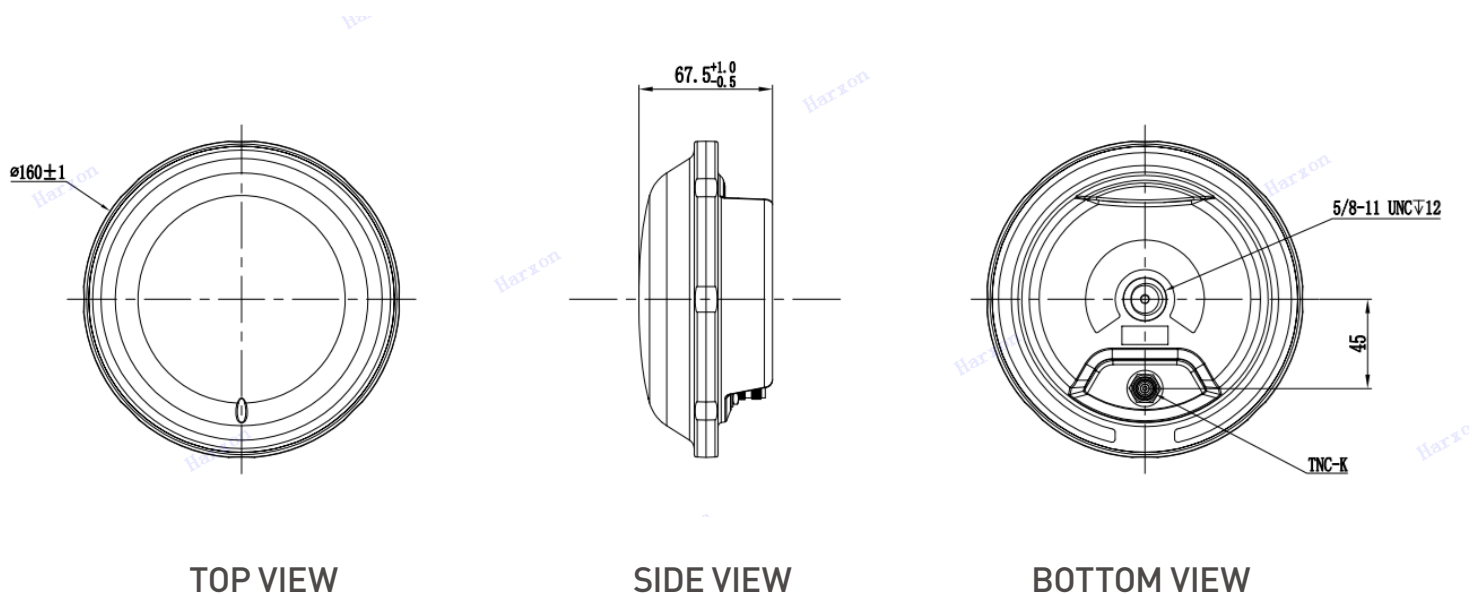
Operating Temperature	-40℃~+85℃
Storage Temperature	-55℃~+85℃
Humidity	95% Non-condensing
Shocking	
MIL-STD-810-H <516.8 4.6.4> Fragility Unpackaged Handling 1.5m (5ft) concrete	
Vibration	
MIL-STD-810-H <514.8 2.2.5> Truck/trailer General Exposure	
Protection Rating	IP67
EMC (RF Input Static)	
Connected: 8KV, Air: 15KV, 10 times	
Compliance	CE FCC ROHS

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Structure& Phase Center Drawing (mm)



Undeclared tolerance:±0.3mm