

# Survey GNSS Antenna HX-CSX627A



## HIGH PERFORMANCE ANTENNA FOR GIS SURVEYING



### HIGH PHASE CENTER STABILITY

HX-CSX627A features a multi-point feeding design to achieve greater phase center stability. It effectively improves measurement accuracy and provides better positioning solutions.

### TRACKING IN CHALLENGING ENVIRONMENTS

The ability to receive low elevation signals with high gain and wide beam width makes HX-CSX627A an excellent choice for tracking visible satellites under challenging conditions, providing the positioning solutions with precision and reliable data. It can be widely used in GNSS surveying applications where high precision is needed, 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 electromagnetic interference, providing the stability and reliability of GNSS signals. Also it effectively avoids disconnection dangerous when receivers are operated under complex electro magnetic environments such as communication base station applications or urban area.

### DURABLE, EASY-INSTALLATION DESIGN

Its compact and lightweight design, making HX-CSX627A highly portable and suitable for outdoor operating in precision applications. The patented waterproof and breathable design, durable enclosure has been proven to sustain the harsh conditions by meeting IP67, easily protecting HX-CSX627A from dust and water for quite a long time.

### KEY FEATURES

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

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**Harxon**  
a *BDStar* company

## PERFORMANCE

<b>Signal Received</b>	
GPS	L1/L2/L5/L-band
GLONASS	L1/L2/L3
GALILEO	E1/E5a/E5b/E6
BDS	B1/B2/B3
QZSS	L1/L2/L5/L6
SBAS	L1/L5
IRNSS	L5
<b>Nominal Impedance</b>	50Ω
<b>Polarization</b>	RHCP
<b>Axial Ratio</b>	≤3dB
<b>Azimuth Coverage</b>	360°
<b>Output VSWR</b>	≤2.0
<b>Peak Gain</b>	5.5dBi
<b>Deviation of Phase Center</b>	±2mm

## LNA

<b>LNA Gain</b>	L1: 38±2dB L2: 40±2dB
<b>Noise Figure</b>	≤2dB
<b>Output/Input VSWR</b>	≤2.0
<b>Passband Ripple</b>	±2dB
<b>Operation Voltage</b>	+3.3 to +12VDC
<b>Operation Current</b>	≤45mA
<b>Group Delay Ripple</b>	≤5ns

## MECHANICAL

<b>Dimensions</b>	Φ152*62.2mm
<b>Connector</b>	TNC female
<b>Weight</b>	≤400g
<b>Mounting</b>	BSW5/8"-11 screw, 12-14mm

## ENVIRONMENTAL

<b>Temperature</b>	
Operating	-40°C to +85°C
Storage	-55°C to +85°C
<b>Humidity</b>	95% non-condensing

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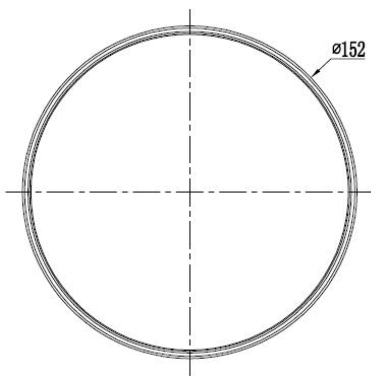
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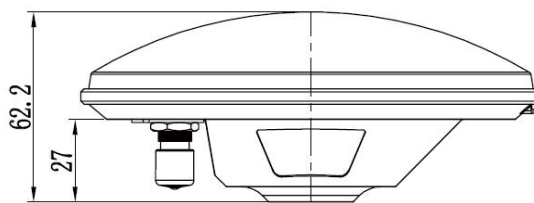
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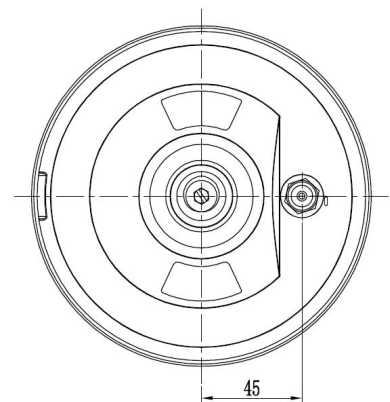
## Structure& Phase Center Drawing (mm)



TOP VIEW



SIDE VIEW



BOTTOM VIEW

Undeclared tolerance:±0.3mm