

Survey GNSS Antenna HX-CSX633A

Harxon
a *BDStar* company

HIGH PRECISION GNSS ANTENNA FOR
AGRICULTURAL VEHICLES, SMALL
ROBOTS AND SURVEYING APPLICATIONS



RUGGEDIZED HOUSING, EASY TO INSTALL

HX-CSX633A is designed with brand new structure, enabling easy and flexible installations (magnetic mount, screws mount and pole mount) for many high-precision applications, including agricultural vehicles, small robots and surveying applications. 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.

HIGH PHASE CENTER STABILITY

HX-CSX633A 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-CSX633A 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.

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 danger when receivers are operated under complex electro magnetic environments such as communication base station applications or urban area.

KEY FEATURES

- Support GPS, GLONASS, GALILEO, BDS, QZSS, IRNSS and SBAS signal reception
- Stable phase center guarantees the accuracy of positioning within millimeter-level
- Strong anti-interference ability to endure the challenging operating environments
- Ruggedized housing, flexible installation options, IP67 Rating waterproof



Survey GNSS Antenna HX-CSX633A

Harxon
a *BDStar* company

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
Gain at Zenith	5.5dBi
Phase Center Error	±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
Group Delay Ripple	≤5ns

MECHANICAL

Dimensions	Φ152*57.7mm
Connector	TNC-K
Weight	≤500g
Mounting	Magnetic mount 3 x M5 screws mount BSW5/8"-11 screw, 12-14mm

ENVIRONMENTAL

Operating Temperature	-40C to +85 C
Storage Temperature	-55C to +85C
Humidity	95% non-condensing
Shock	MIL-STD-810-H <516.8 4.6.4> Fragility Unpack- aged Handling 1.5m (5 ft) concrete
Vibration	MIL-STD-810-H <514.8 2.2.5> Truck/trailer General Exposure
Water/Dust Resistance	IP67
EMC (RF Input Static)	Connected: 8KV, Air: 15KV, 10 times
Regulatory Compliance	CE FCC ROHS

en.harxon.com

sales@harxon.com

9/F, Block B, Building D3, TCL International
E City, NO.1001 Zhongshanyuan Road,
Nanshan District, Shenzhen, China

Tel: +86-755-26989948

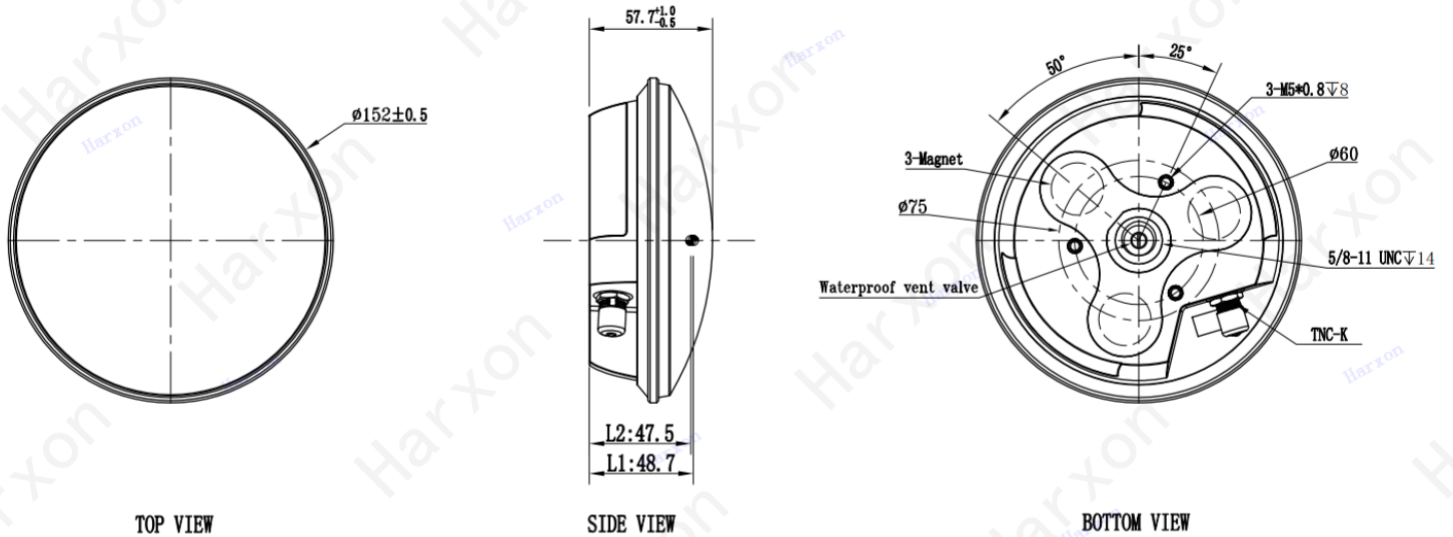
Fax: +86-755-26989994

Version 1 Specifications subject to change without notice.
©2022 Harxon Corporation, All rights reserved.
Printed in China
May 2022

Survey GNSS Antenna HX-CSX633A

Harxon
a *BDStar* company

Structure & Phase Center Drawing (mm)



Undeclared tolerance: ± 0.3 mm

Product Label

The content of the label is shown as below. The S/N code needs to be written according to the program file and the actual situation. The following figures are only for illustration.

Label 1: Special-shaped label, size $\phi 109.8 * T0.4$ mm



Label 2: size 23*9mm

Model: HX-CSX633A
S/N: C21049000162

