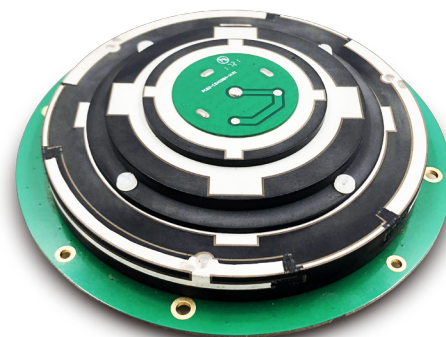


# X-Survey™ Antenna HX-CSX100A

**Harxon**  
a *BDStar* company

## INNOVATIVE 4in1 MULTIFUNCTION ANTENNA TO RTK APPLICATIONS



### 4IN1 NAVIGATION PLUS COMMUNICATION ANTENNA

X-Survey™ is the unique 4in1 OEM antenna for both navigation and communication in the surveying applications. It provides standard Wi-Fi, Bluetooth, 4G<sup>®</sup>, and multiple constellation signals reception for GNSS positioning.

### HIGH PHASE CENTER STABILITY

The high gain and wide beam width GNSS antenna features a multi-point feeding technology, ensuring a high phase center stability and positioning accuracy. Moreover, the array-arranged 4G antennas provides more stable signals and longer communication distance at different directions.

### POWERFUL SYSTEM COMPATIBILITY BUT PREVENT INTERFERENCE

X-Survey™ antenna provides high isolation among each antenna to prevent self-interference, hence improves the RTK system compatibility. RF coaxial connectors are designed for plug-and-use, keeping a high efficiency and lowering the impact of EMI. The antenna LNA features an excellent out-of-band rejection performance, which can also suppress the EMI, providing reliable GNSS signals.

### EASY INTEGRATION DESIGN FOR PRECISION APPLICATIONS

The unique structure design simplifies the RTK integration, and minimizes the overall machine dimension, aiming to bring system integrators high efficiency performance of navigation and communication in surveying and precision agriculture applications.

### KEY FEATURES

- Supports GPS, GLONASS, BeiDou, Galileo signals reception
- Supports Dual 4G, Wi-Fi, Bluetooth
- Stable phase center guarantees the accuracy of positioning within centimeter-level
- Powerful system compatibility, easy for machine integration

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## PERFORMANCE

### Signal Received

GPS	L1/L2/L5
GLONASS	L1/L2/L3
BDS	B1/B2/B3
GALILEO	E1/E5a/E5b/E6
QZSS	L1/L2/L5
IRNSS	L5
SBAS	L1/L5
L-Band	
Dual 4G / BT / WiFi	

**Nominal Impedance** 50Ω

**Polarization** RHCP

**Axial Ratio** ≤3dB

**Azimuth Coverage** 360°

**Output VSWR** ≤2.0

### Peak Gain

GNSS	1164MHz-1300MHz 5dBi
	1525MHz-1612MHz 5dBi
BT/WiFi	2.4-2.5GHz 1dBi
4G	790-960MHz 0.5dBi
	1710-2690MHz 0.5dBi

Phase Center Deviation ±2mm

## LNA

**LNA Gain** L2: 40±2dB

L1: 38±2dB

**Noise Figure** ≤2dB

**VSWR** ≤2.0

**Passband Ripple** ±2dB

**Operation Voltage** 3.3V to 12V DC

**Operation Current** ≤45mA

**Group Delay Ripple** ≤5ns

## MECHANICAL

**Dimensions** Φ125 x 27.5mm<sup>②</sup>

**Weight** ≤220g

### Connector

GNSS	MMCX-C-JW1.5
BT/WiFi	MMCX-C-JW1.5
Dual 4G	MMCX-C-JW1.5

**Mounting** 4 x M2.5 screws installation

## ENVIRONMENTAL

### Temperature

Operating -40°C to +85°C

Storage -55°C to +85°C

**Humidity** 95% non-condensing

For the most recent details of this product:

<http://en.harxon.com/products-detail.php?Prolid=172>

[en.harxon.com](http://en.harxon.com)

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**Version 2** Specifications subject to change without notice.

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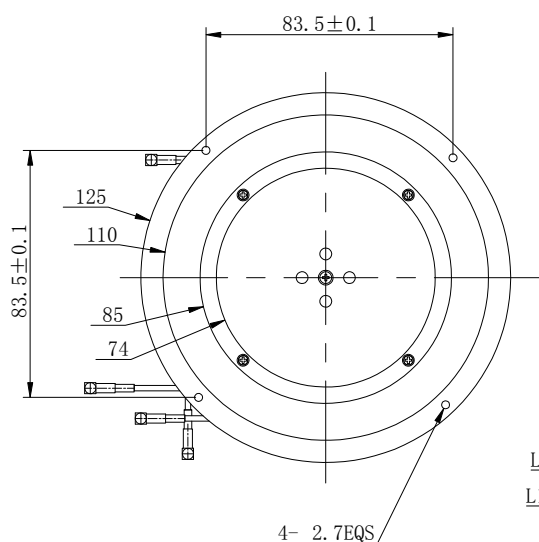
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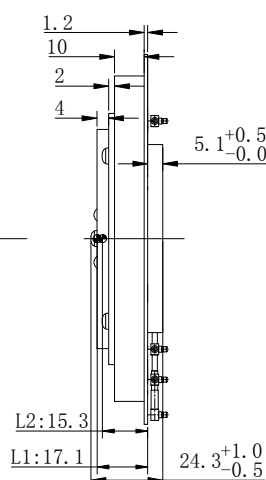
①.4G bands: can be customized according to different countries and regions

②.Dimension: typical value, without connector, can be customized

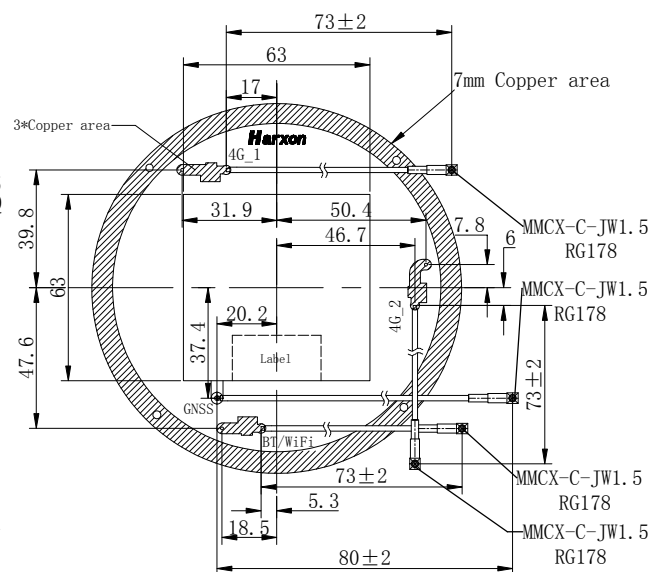
## Structure & Phase Center Drawing (mm)



TOP VIEW



SIDE VIEW



BOTTOM VIEW

Undeclared Tolerance: ±0.3mm