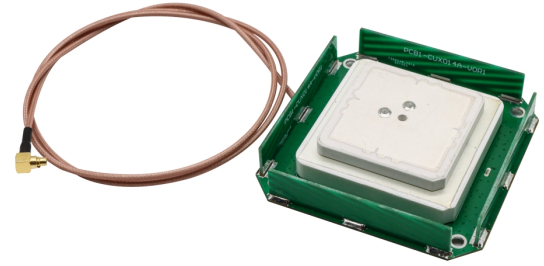


OEM GNSS Antenna HX-CUX014A

Harxon
a *BDStar* company

The embedded full frequency GNSS antenna HX-CUX014A is a high gain, low profile and compact active GNSS antenna that provides reliable and consistent positioning services for high dynamic applications such as UAV, small robots and autonomous vehicles. It features new structure, small size, high sensitivity and low power consumption.



CONSISTENT PERFORMANCE ACROSS FULL FREQUENCY BANDS

HX-CUX014A offers full support for superior satellite signals tracking, including GPS, GLONASS, Galileo and BeiDou. It offers a very stable phase center variation with advanced multipoint feeding technology, exceptional low elevation satellite tracking with symmetric radiation patterns, 4dBi high gain with ultralow signal loss, as well as outstanding wide-angle circular polarization (WACP) ensures excellent positioning accuracy.

STRONG ANTI-INTERFERENCE PERFORMANCE

HX-CUX014A is equipped with a robust pre-filtered LNA to minimize de-sensing from high level out-of-band signals, and restraints possible electromagnetic interferences for consistent and reliable GNSS signals. It excels in applications in congested environments such as agriculture, forest, UAV patrolling and GIS that face unwanted signal interference and blockage.

SMALL SIZE, LIGHT WEIGHT, LOW POWER CONSUMPTION

HX-CUX014A has a compact dimension of 64mm *64mm*13.4mm, weighing only 90g for low power consumption. The new structure design simplifies the integration and minimizes the overall machine dimension, bringing optimized positioning performance for system integrators.

KEY FEATURES

- Low Power Consumption
- Comprehensive GNSS support: GPS, GLONASS, Galileo, BeiDou
- Strong Anti-interference Performance

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PERFORMANCE

Signal Received

GPS	L1/L2/L5
GLONASS	L1/L2/L3/L-band
GALILEO	E1/E5a/E5b/E6
BDS	B1/B2/B3
QZSS	L1/L2/L5/L6
SBAS	L1/L5
IRNSS	L5
L-band	

Nominal Impedance 50Ω

Polarization RHCP

Axial Ratio ≤3dB

Azimuth Coverage 360°

Peak Gain

1166-1278MHz 4dBi (@Zenith)

1520-1610MHz 4dBi (@Zenith)

L-band 3dBi (@Zenith)

LNA

LNA Gain 33±2dB

Output VSWR ≤2.0

Operation Voltage +3V~+5VDC

Noise Figure ≤2.0dB

Operation Current ≤50mA

Group Delay Ripple ≤5ns

MECHANICAL

Dimensions 64mm *64mm*13.4mm

Connector MMCX-JW

Weight ≤90g

ENVIRONMENTAL

Operating Temperature -40°C to +85°C

Storage Temperature -55°C to +85°C

Humidity 95% non-condensing

en.harxon.com

sales@harxon.com

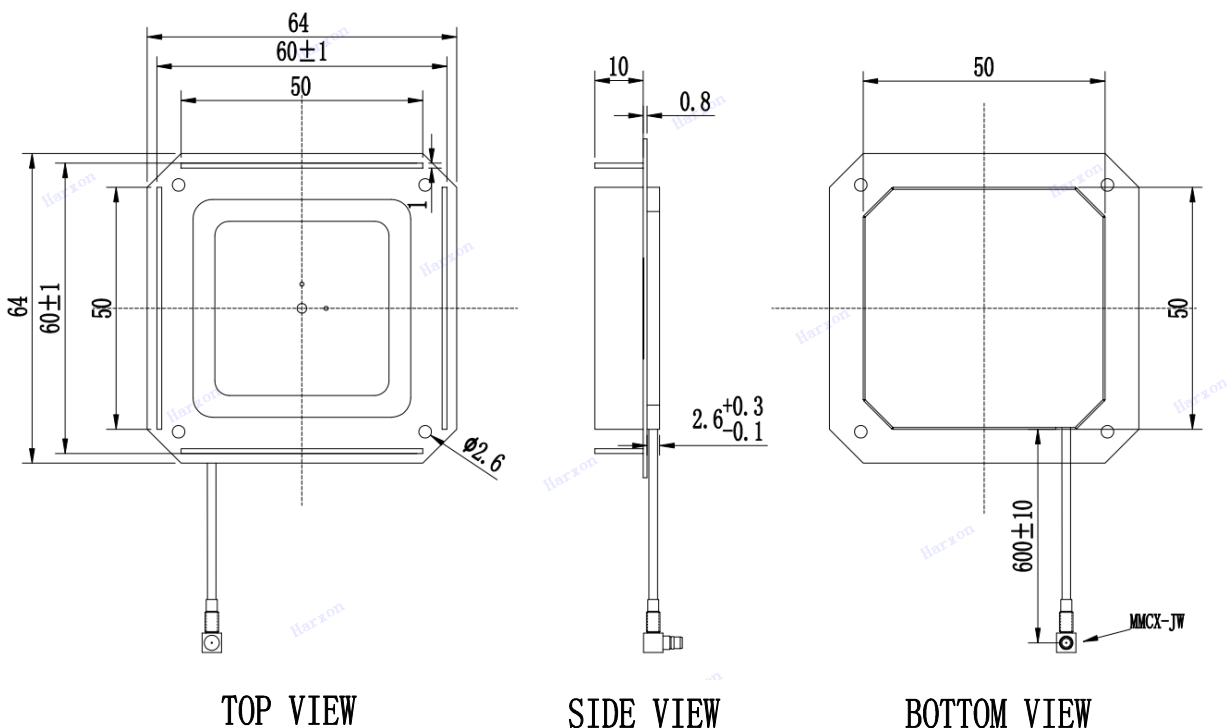
9/F, Block B, Building D3, TCL International
E City, NO.1001 Zhongshanyuan Road,
Nanshan District, Shenzhen, China

Tel: +86-755-26989948

Fax: +86-755-26989994

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Structure & Phase Center Drawing (mm)



Undeclared tolerance: ±0.3mm