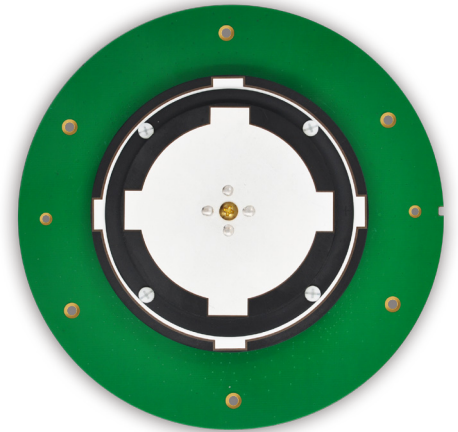


# HX-CSX048A Embedded GNSS Antenna

## HX-CSX048A Embedded Full Frequency GNSS Antenna with L-Band

The Harxon HX-CSX048A is a precision tuned, stacked patch GNSS antenna that provides reliable and consistent positioning services across the full bandwidth of the antenna. Its superior positioning accuracy and powerful system compatibility makes it ideal to be integrated into various surveying and RTK applications.



### CONSISTENT PERFORMANCE ACROSS FULL FREQUENCY BANDS

The Harxon HX-CSX048A offers full support for superior satellite signals tracking, including GPS, GLONASS, Galileo and BeiDou, QZSS, IRNSS, SBAS as well as L-Band correction services. It offers a very stable phase center variation with advanced multipoint feeding technology, exceptional low elevation satellite tracking with symmetric radiation patterns, high gain with ultralow signal loss, as well as outstanding wide-angle circular polarization (WACP) ensures excellent positioning accuracy.

### GREAT MULTIPATH REJECTION AND POWERFUL ANTI-INTERFERENCE CAPABILITY

The HX-CSX048A antenna equips an anti-multipath interceptor and provides superior multi-path signal rejection. Besides, the pre-filtered LNA of the antenna restrains unwanted electromagnetic interferences and significantly avoids signal loss while around challenging environments as power grid, communication base station and broadcasting stations.

### EASY INTEGRATION DESIGN FOR VARIOUS APPLICATIONS

The unique structure design of HX-CSX048A simplifies the RTK integration, and minimizes the overall device dimension, optimizing system integrators positioning efficiency and performance in various surveying and RTK applications.

### KEY FEATURES

- Comprehensive GNSS support: GPS, GLONASS, Galileo, BeiDou and QZSS, IRNSS, SBAS as well as L-Band correction services
- Centimeter phase center repeatability
- Improved signal filtering and excellent multipath rejection
- Superior electromagnetic compatibility for easy integration

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## PERFORMANCE

<b>Signal Received</b>	
GPS	L1/L2/L5
GLONASS	L1/L2/L3
GALILEO	E1/E5a/E5b/E6
BDS	B1/B2/B3
QZSS	L1/L2/L5/L6
IRNSS	L5
SBAS	L1/L5
L-Band	
<b>Nominal Impedance</b> 50Ω	
<b>Polarization</b> RHCP	
<b>Axial Ratio</b> ≤3dB	
<b>Azimuth Coverage</b> 360°(omni-directional)	
<b>Output VSWR</b> ≤2.0	
<b>Peak Gain</b> 5.5dBi	

## LOW NOISE AMPLIFIER

<b>LNA Gain</b>	40±2dB
<b>Noise Figure</b>	≤2dB
<b>Output VSWR</b>	≤2.0
<b>Passband Ripple</b>	±2dB
<b>Operation Voltage</b>	+3.3 to +12VDC
<b>Operation Current</b>	≤45mA
<b>Differential Propagation Delay</b>	≤5ns

## MECHANICAL

<b>Dimensions</b>	φ152x25mm
<b>Connector</b>	MCX-C-JW1.5
<b>Weight</b>	≤220g

## ENVIRONMENTAL

<b>Temperature</b>	
Operating	-40°C to +85°C
Storage	-55°C to +85°C
Humidity	95% No-condensing

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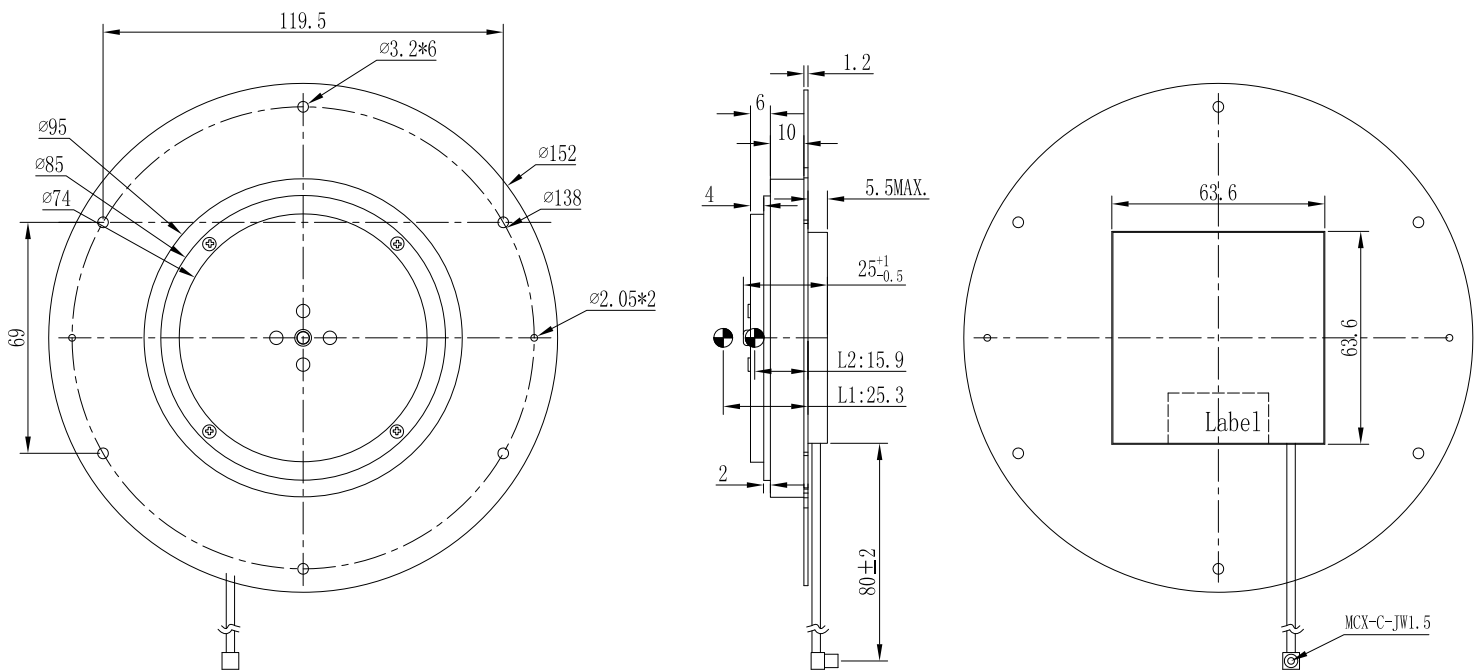
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## Structure & Phase Center Drawing (mm)



TOP VIEW

SIDE VIEW

BOTTOM VIEW

Undeclared Tolerance: ±0.3mm