



# GNSS OEM Antenna

## HX-CSX078A

### Product Introduction

The HX-CSX078A is a compact, wideband GNSS antenna from Harxon that provides accurate reception for all upper GPS L1\L2\L5、GLONASS L1\L2 and BDS B1\B2\B3 and Galileo E1\E5a\E5b\E6 signals and L-band.

The HX-CSX078A has exceptional pattern control, polarization purity and high efficiency in a very compact form factor. Antenna element has high gain and wide beam width to ensure the signal receiving performance of satellite at low elevation angle.

The HX-CSX078A is the smallest, lightest, GNSS antenna for reception of all GNSS constellations. The built-in 111mm circular ground plane should ideally be augmented with a local system ground plane.

OEM antenna are easily detuned by the local environment, Harxon offers custom tuning services for optimized integration into OEM end-user modules.

### Technical Features

- GPS L1\L2\L5、GLONASS L1\L2、BDS B1\B2\B3、Galileo E1\E5a\E5b\E6 bands and L-band.
- Multi-path rejection board inside can eliminate the multi-path influence on measurement error.
- High stability and high repeatability at phase center.
- Very low noise figure.
- Ground plane independent.
- GIS&RTK applications.

## Technical Parameter

### Antenna Spec

Frequency Range	GPS L1/L2/L5 GLONASS L1/L2 BDS B1/B2/B3 Galileo E1/E5ab/E6 L-band
Impedance	50ohm
Polarization	RHCP
Axial Ratio	≤3dB
Azimuth Coverage	360°
Output VSWR	≤2.0
Peak Gain	5.5dBi
Phase Center Error	±2mm

### LNA Spec

LNA Gain	40±2dB
Noise Figure	≤2.0dB

Output VSWR	≤2.0
In-band flatness	±2dB
Operation Voltage	3.3~12VDC
Operation Current	≤45mA
Group Delay	≤5ns

### Mechanical Spec

Dimension	φ111*24.5mm
Connector	MCX-C-JW1.5
Weight	≤220g

### Environment Spec

Operating Temp	-40℃~+85℃
Storage Temp	-55℃~+70℃
Humidity	95% No-condensing

## Structural Drawing

