# Harxon HX-CVX600A Antenna

## RELIABLE AND RUGGEDIZED WITH MILLIMETER ACCURACY


The Harxon HX-CVX600A GNSS antenna is designed with ruggedized enclosure that allows the antenna to be used in high shock and vibration environments. HX-CVX600A could provide the millimeter level accuracy with the advanced filtering capabilities and robust signal tracking. It is ideal for all surveying and I-construction machining applications.

### CONSISTENT PERFORMANCE ACROSS FULL FREQUENCY BANDS

The Harxon HX-CVX600A offers full support for reliable and consistent satellite signals tracking, including GPS, GLONASS, Galileo and BeiDou, QZSS, IRNSS, SBAS as well as L-Band correction services. Additionally, it exhibits 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.

### RUGGEDIZED ENCLOSURE FOR TOUGH ENVIRONMENTS

The HX-CVX600A antenna, with its compact design, is built into a ruggedized IP69K rating housing with independent aerodynamic enclosure to withstand exposure against dust, rain, splash or sunlight. Standard TNC female connector with anti-collision cap design ensures optimal reliability in challenging environment.

### STRONG ANTI-INTERFERENCE PERFORMANCE

The HX-CVX600A antenna equips a robust pre-filtered LNA to minimize de-sensing from high level out-of-band signals, and restraints possible electromagnetic interferences, offering strong anti-interference performance for consistent and reliable GNSS signals.

### KEY FEATURES

- **Comprehensive GNSS support: GPS, GLONASS, Galileo, BeiDou and QZSS, IRNSS, SBAS as well as L-Band correction services**
- **Millimeter PCV repeatability(≤2mm)**
- **Improved signal filtering and excellent multipath rejection**
- **Ruggedized enclosure for tough environments**

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Harxon
a BDStar company

## PERFORMANCE

| | |
|---|---|
| **Signal Received** | |
| Upper Band | 1.525 to 1.615 GHz |
| Lower Band | 1.165 to 1.278 GHz |
| GPS | L1/L2/L5 |
| GLONASS | L1/L2/L3 |
| GALILEO | E1/E5a/E5b/E6 |
| BDS | B1/B2/B3 |
| QZSS | L1/L2/L3/L6 |
| IRNSS | L5 |
| SBAS | L1/L5 |
| L-Band | |
| **Nominal Impedance** | 50Ω |
| **Polarization** | RHCP |
| **Axial Ratio** | ⩽3dB |
| **Azimuth Coverage** | 360°(omni-directional) |
| **Output VSWR** | ⩽2.0 |
| **Peak Gain** | 5.5dBi |

## LOW NOISE AMPLIFIER

| | |
|---|---|
| **LNA Gain** | 40±2dB |
| **Noise Figure** | ⩽2dB |
| **Output VSWR** | ⩽2.0 |
| **Passband Ripple** | ±2dB |
| **Operation Voltage** | +3.3～+18VDC |
| **Operation Current** | ⩽45mA |
| **Differential Propagation Delay** | ⩽5ns |

## MECHANICAL

| | |
|---|---|
| **Dimensions** | ¢150×53mm |
| **Connector** | TNC Female |
| **Weight** | ⩽600g |
| **Vibration** | 9.8gRMS, 24-2000Hz |
| **Shock** | 75Gs, 6ms duration, 3 shocks in mutually perpendicular axes |
| **Salt Fog** | 96h (continuous spray, 5% concentration, 35°C) |

| | |
|---|---|
| **Mounting** | |
| Pole Mount | Coarse threaded 5/8"-11, thread hole depth 10-11mm |
| Screws Mount | 4x M8 screws depth |

## ENVIRONMENTAL

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|---|---|
| **Temperature** | |
| Operating | -45℃～+85℃ |
| Storage | -55℃～+85℃ |
| **Humidity** | 95% no-condensing |
| **Water/Dust Resistance** | IP67, IP69K |

For the most recent details of this product:
https://en.harxon.com/products-detail.php?ProId=179

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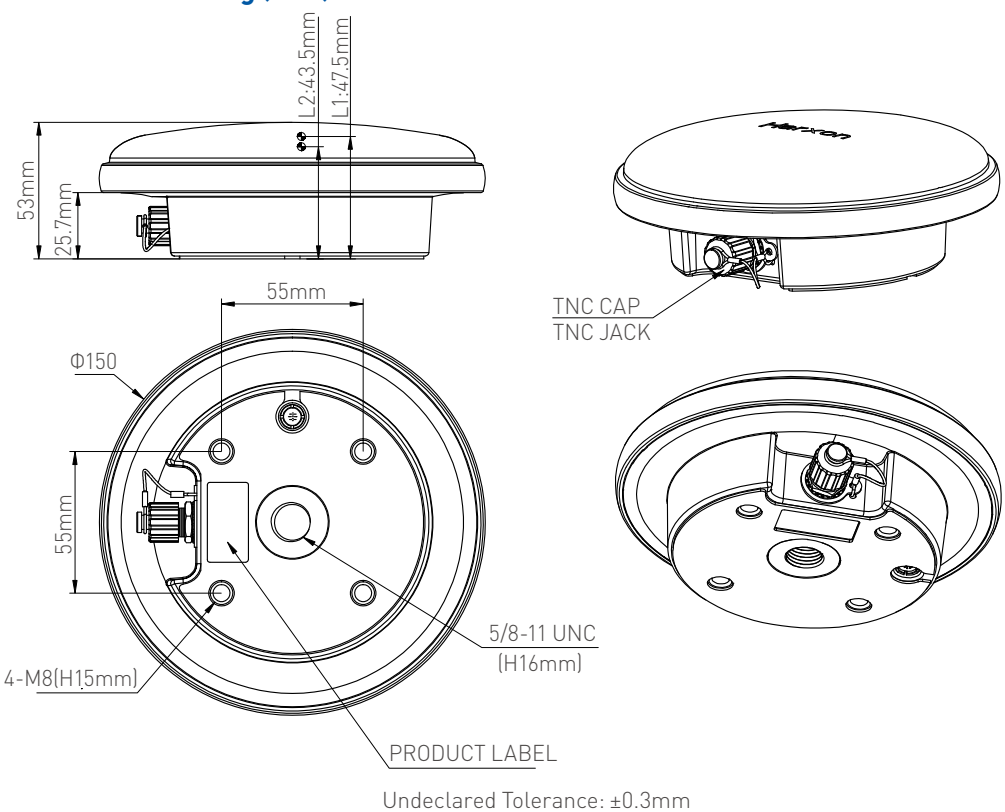
## Structure & Phase Center Drawing (mm)




Undeclared Tolerance: ±0.3mm