

# Harxon HX-CVX600A Antenna

**Harxon**  
a *BDStar* company

## 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( $\leq 2\text{mm}$ )
- Improved signal filtering and excellent multipath rejection
- Ruggedized enclosure for tough environments

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## PERFORMANCE

### Signal Received

Upper Band	1.525 to 1.615 GHz
Lower Band	1.164 to 1.3GHz GHz
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	

### 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

φ150×53mm

### 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

### Temperature

#### Operating

-45°C~+85°C

#### Storage

-55°C~+85°C

### 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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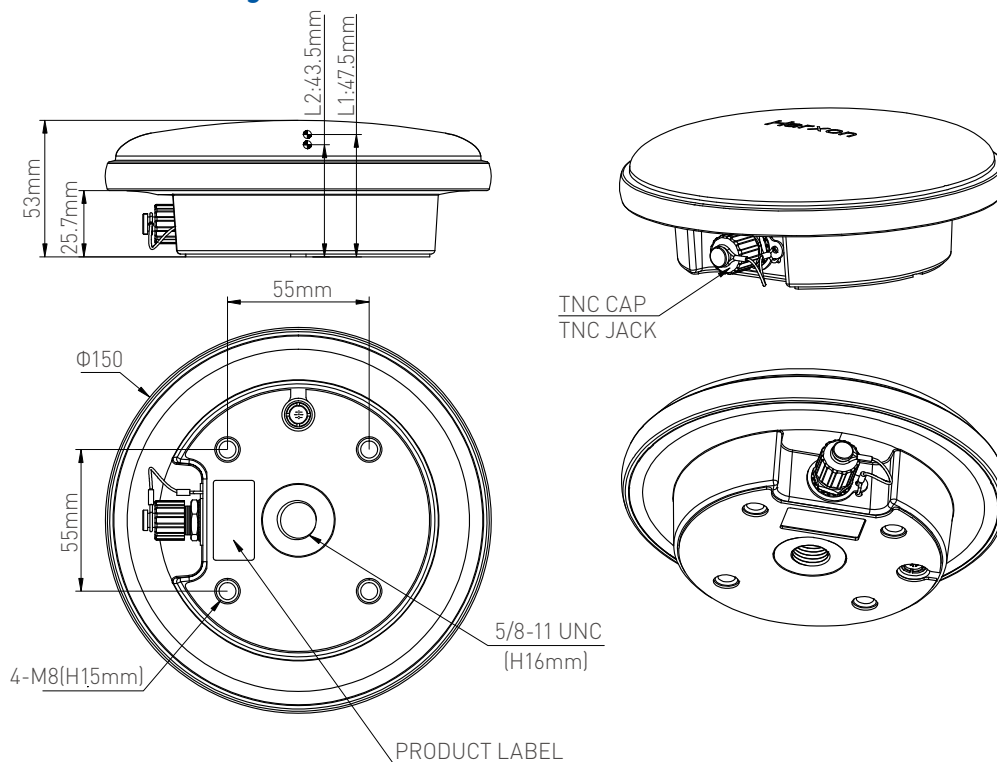
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## Structure & Phase Center Drawing (mm)



Undeclared Tolerance: ±0.3mm