

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($\leq 2\text{mm}$)
- 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	1.164 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 to +18VDC

Operation Current ≤45mA

Differential Propagation Delay ≤5ns

MECHANICAL

Dimensions Φ150×53mm

Connector TNC Female

Weight ≤600g

Mounting

Pole Mount Coarse threaded 5/8"-11,
thread hole depth 10-11mm

Screws Mount 4x M8 screws depth

ENVIRONMENTAL

Temperature

Operating -45°C to +85°C

Storage -55°C to +85°C

Humidity 95% no-condensing

Ingress Protection Rating IP67, IP69K

Vibration 9.8gRMS, 24-2000Hz

Shock 75Gs, 6ms duration, 3 shocks in
mutually perpendicular axes

Salt Fog

96h (continuous spray, 5% concentration, 35°C)

For the most recent details of this product:

<https://en.harxon.com/products-detail.php?Proid=179>

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

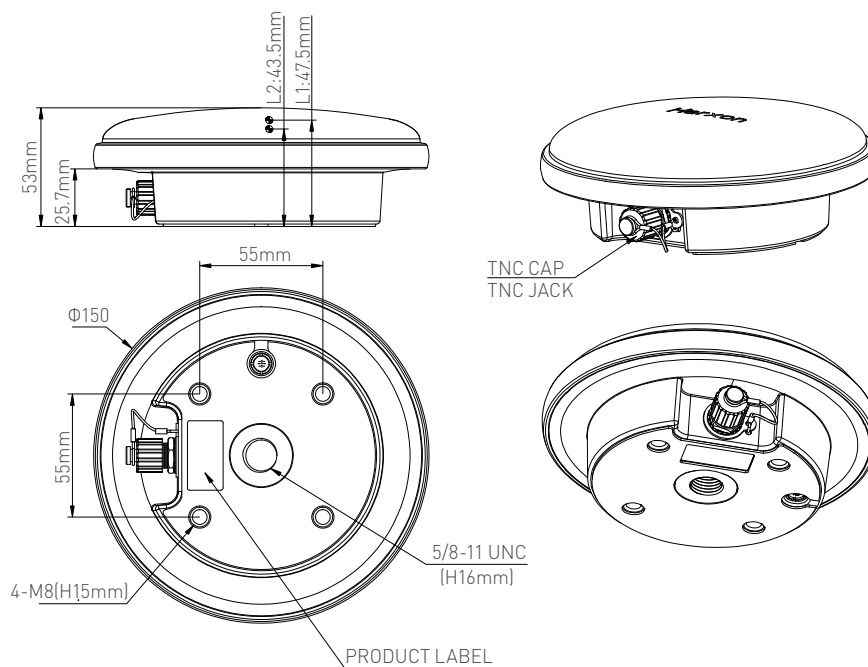
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Structure & Phase Center Drawing (mm)



Undeclared Tolerance: ±0.3mm