

Ruggedized GNSS Antenna HX-CVX600A



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℃ to +85℃
Storage	-55℃ to +85℃

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℃)

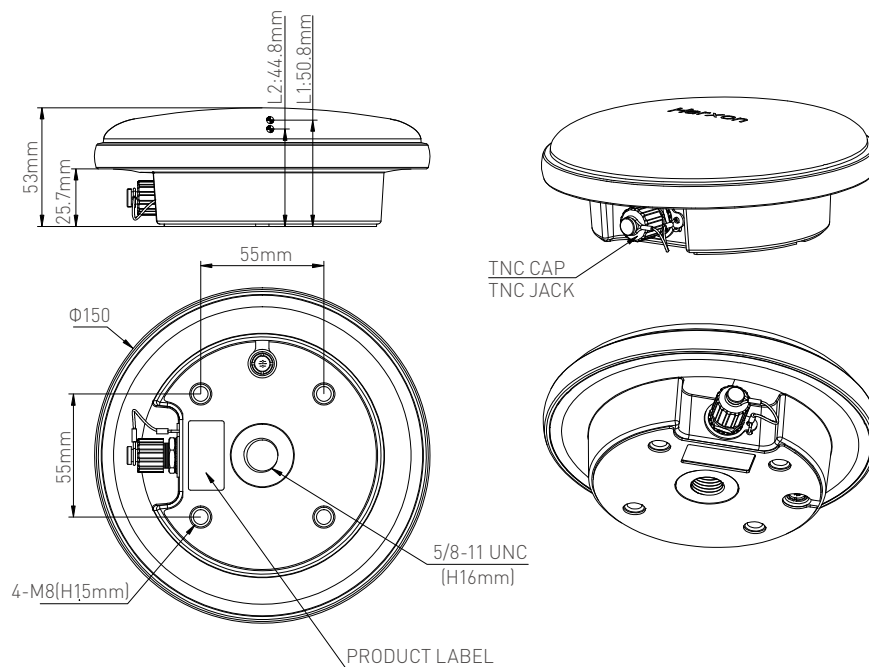
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Structure & Phase Center Drawing (mm)



Undeclared Tolerance: ±0.3mm