

Helix Antenna HX-CH3602A

Harxon Patented QHA[®] Technology Inside

Harxon
a *BDStar* company

SMALL AND LIGHT ANTENNA WITH QHA TECHNOLOGY FOR UAV



HARXON QHA TECHNOLOGY

Harxon's QHA technology ensures HX-CH3602A stable performance of wide-angle circular polarization (WACP), and small antenna phase center deviation (PCV), which ensures a precise positioning accuracy.

TRACKING IN CHALLENGING ENVIRONMENTS

HX-CH3602A is able to track visible satellites under challenging conditions, providing the positioning solutions with precision and reliable data. It can be widely used in plant protection, tree lines, also for UAV power patrol, GIS surveying where high precision operations are needed.

STRONG ANTI-INTERFERENCE PERFORMANCE

The antenna LNA features excellent out-of-band rejection performance, which can suppress the electromagnetic interference, providing the stability and reliability of GNSS signals. Also it effectively avoids disconnection danger when UAVs are operated under tower and electric power patrol.

SMALL SIZE AND LIGHT WEIGHT

The light weight and small size HX-CH3602A antenna can lighten the loads of UAVs, as well as a standard SMA male connector for easy integration. Its IP67 ruggedized design can protect it from dust and water.

KEY FEATURES

- Support GPS, Glonass, Galileo, Beidou, QZSS, and SBAS signal reception
- Stable phase center guarantees the accuracy of positioning within millimeter level
- Strong anti-interference ability to endure the harsh operating environments
- 25g light weight for lower power consumption
- IP67 ruggedized protection

Helix Antenna HX-CH3602A

Harxon Patented QHA Technology Inside

Harxon
a *BDStar* company

PERFORMANCE

Signal Received

GPS	L1
GLONASS	L1
GALILEO	E1
BDS	B1
QZSS	L1
SBAS	L1

Nominal Impedance 50 Ω

Polarization RHCP

Axial Ratio ≤ 3 dB

Gain at Zenith (90°)

1559-1610MHz 2.5dBi(maximum)

LNA Gain 33dB(typical)

Noise Figure ≤ 1.5 dB

Output/Input VSWR ≤ 2.0

Operation Voltage +3.3 to +12VDC

Operation Current 35mA(maximum)

Phase Center Deviation(PCV) ± 3 mm

Group Delay Ripple < 15 ns

MECHANICAL

Dimensions $\phi 27.5 \times 59$ mm

Connector SMA male

Weight ≤ 25 g

Mounting customers design own installation

ENVIRONMENTAL

Temperature

Operating -40°C to +70°C

Storage -40°C to +70°C

Humidity 95% non-condensing

Water/Dust Resistance IP67^②

Regulatory Compliance CE, RoHS

For the most recent details of this product:

<http://en.harxon.com/products-detail.php?Proid=116>

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

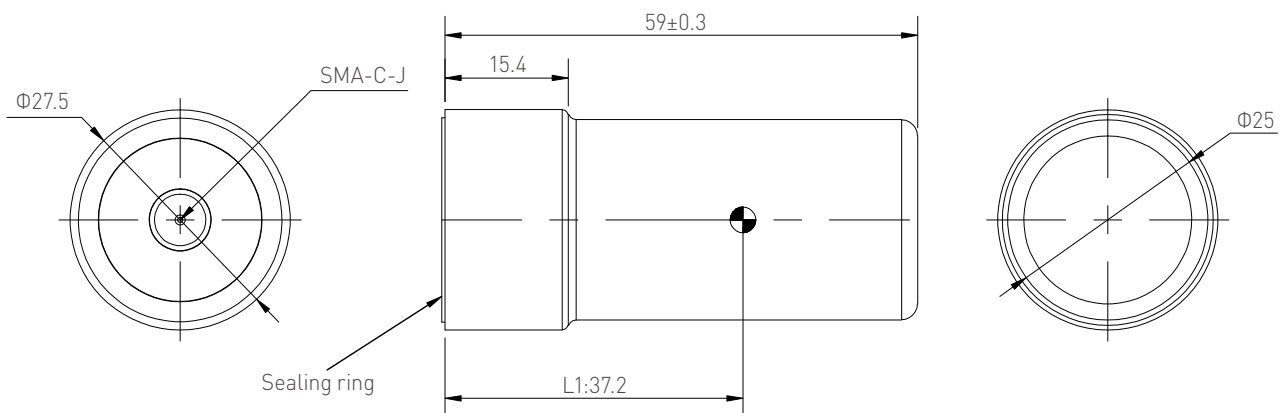
Version 2 Specifications subject to change without notice.

©2020 Harxon Corporation. All rights reserved.

Printed in China

December 2019

Structure & Phase Center Drawing (mm)



TOP VIEW

SIDE VIEW

BOTTOM VIEW

Undeclared tolerance: ± 0.3 mm