

GNSS Antenna HANT-X603A

SMALL AND LIGHT ANTENNA WITH QHA TECHNOLOGY FOR UAV



TRACKING IN CHALLENGING ENVIRONMENTS

HX-CHX603A 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-CHX603A 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 signalreception
- 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

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PERFORMANCE

Signal Received	
GPS	L1/L2/L5
GLONASS	L1/L2/L3
GALILEO	E1/E5a/E5b
BDS	B1/B2/B3
Nominal Impedance	50Ω
Polarization	RHCP
Axial Ratio	! 3dB
Gain at Zenith (90°)	
1559-1610MHz	2.5dBi(maximum)
LNA Gain	33dB(typical)
Noise Figure	! 1.5dB
Output/Input VSWR	≤2.0
Operation Voltage	+3.3 to + 12VDC

Operation Current	35mA(maximum)
Phase Center Deviation(PCV)	±3mm
Group Delay Ripple	< 15ns

MECHANICAL

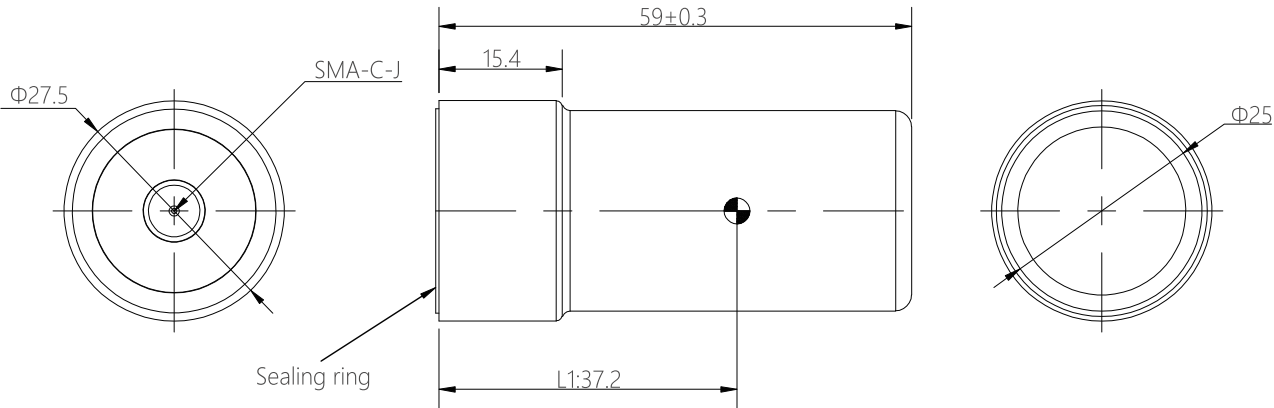
Dimensions	φ27.5*59mm
Connector	SMA male
Weight	≤25g
Mounting	customers design own installation

ENVIRONMENTAL

Temperature	
Operating	-40 ℃ to +70℃
Storage	-40 ℃ to +70℃
Humidity	95% non-condensing
Water/Dust Resistance	IP65 ^o
Regulatory Compliance	CE, RoHS

1.QHA : quadrifilar helix antenna
2.Outside the bottom seal ring

Structure& Phase Center Drawing (mm)



TOP VIEW

SIDE VIEW

BOTTOM VIEW

Undeclared tolerance: ± 0.3 mm