GNSS Aviation Antenna HX-CA7603A

Harxon
a BDStar company

HIGH PRECISION COMPACT GNSS ANTENNA FOR AVIATION

HIGH PHASE CENTER STABILITY

HX-CA7603A features a multi-point feeding deign to achieve greater phase center stability. It effectively improves measurement accuracy and provides better positioning solution.

TRACKING IN CHALLENGING ENVIRONMENTS

The ability to receive low elevation signals with high gain and wide beam width makes HX-CA7603A a suitable choice for tracking visible satellites and provide stable and precision GNSS data under different flight attitudes.

STRONG ANTI-INTERFERENCE PERFORMANCE

The antenna LNA features an 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 dangerous when receivers are being interfered by wireless communication systems, for example power grid, communication base station or radio modem applications.

SMALL SIZE WITH RUGGEDIZED STRUCTURE

The dimension of HX-CA7603A is only 90*27.5mm (without connector) with a light weight of 150 gram, which makes it ideal to be placed over the professional drones, unmanned vessels or where high precision operations are needed. The IP67 ruggedized cover can protect the antenna from dust and water, furthermore ensure long-time outdoor operation due to its patented waterproof and breathable design.

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 challenging operating environments**
- **Small form factor with IP67 ruggedized structure**

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PERFORMANCE

Signal Received	
GPS	L1/L2
GLONASS	L1/L2
GALILEO	E1
BDS	B1/B2/B3
QZSS	L1/L2
SBAS	L1
Nominal Impedance	50Ω
Polarization	RHCP
Axial Ratio	≤3dB
Gain at Zenith (90°)	
1164-1278MHz	3dBi(maximum)
1520-1615MHz	4dBi(maximum)
LNA Gain	36dB(typical)
Noise Figure	≤2dB
Output/Input VSWR	≤2.0
Operation Voltage	+3.3VDC to +12VDC
Operation Current	45mA(maximum)
Group Delay Ripple	<5ns

MECHANICAL

Dimensions	¢90*27.5mm
Connector	SMA female
Weight	≤150g
Mounting	4 M4 screws installation

ENVIRONMENTAL

Temperature	
Operating	-40℃ to +85℃
Storage	-55℃ to +85℃
Humidity	95% non-condensing
Water/Dust Resistance	IP67
Regulatory Compliance	CE, FCC, RoHS, REACH

For the most recent details of this product:
https://en.harxon.com/products-detail.php?ProId=173

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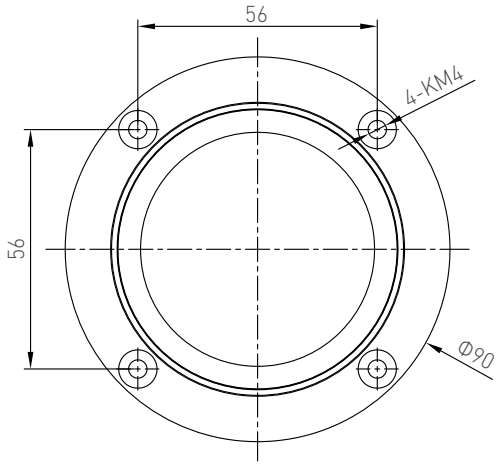
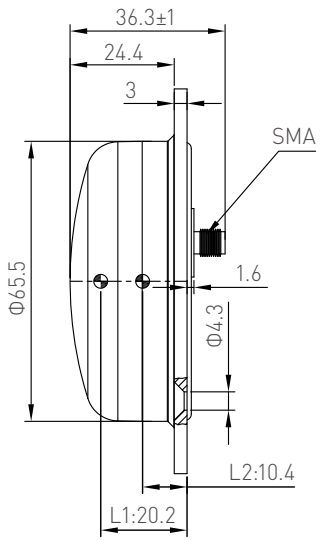
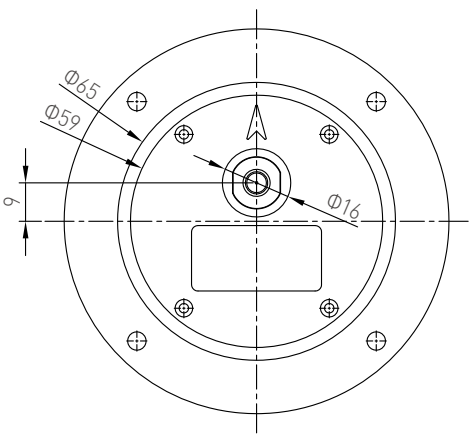
Structure& Phase Center Drawing (mm)



TOP VIEW



SIDE VIEW



BOTTOM VIEW

Undeclared tolerance:±0.3mm