D-Helix™ Antenna HX-CH7603A

Harxon Patented D-QHA[1] Technology Inside

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INNOVATIVE PATENTED D-QHA TECHNOLOGY WITH SUPERIOR TRACKING PERFORMANCE

ADVANCED D-QHA TECHNOLOGY

Harxon's D-QHA technology significantly enhances the low-elevation angle tracking capabilities, it ensures D-Helix™ Antenna more stable performance of wide-angle circular polarization (WACP), and smaller antenna phase center deviation (PCV), which ensures a more precise positioning accuracy.

TRACKING IN CHALLENGING ENVIRONMENTS

D-Helix™ Antenna is able to track any visible satellites under challenging conditions, providing the positioning solutions with higher precision and reliable data.

The ability to track low elevation satellites while maintaining a high gain makes D-Helix™ Antenna an excellent choice for any applications where the sky is partially visible, such as 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 an excellent out-of-band rejection performance, which can suppress the interference of magnetic disturbance, providing the stability and reliability of GNSS signals. Also it effectively avoids disconnection dangerous when UAVs are operated under tower and electric power patrol.

HARXON'S TOUGHEST PRECISION ANTENNA

D-Helix™ Antenna is the toughest precision antenna Harxon has designed to date, which features the latest low-wind resistance design. Moreover, D-Helix™ Antenna features ultra-durable watertight enclosures, Its IP67 ruggedized design can protect it from dust and water, as well as a standard SMA male connector for easy integration.

KEY FEATURES

- **Support GPS, Glonass, Galileo, Beidou, QZSS and SBAS signal reception**
- **D-QHA technology ensures an exceptional low elevation satellite tracking**
- **Stable phase center guarantees the accuracy of positioning within millimeter-level**
- **Strong anti-interference ability to endure the harshest operating environments**
- **38g light weight for lower power consumption**

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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°)	
1205-1278MHz	4.2dBi(maximum)
1559-1610MHz	3.8dBi(maximum)
LNA Gain	33dB(typical)
Noise Figure	≤1.5dB
Output/Input VSWR	≤2.0
Operation Voltage	+3.3 to + 12VDC
Operation Current	55mA(maximum)
Group Delay Ripple	<15ns

MECHANICAL

Dimensions	¢40*75.2mm
Connector	SMA male
Weight	≤38g
Mounting	3*3/32 " -48*DP6mm (UNC)

ENVIRONMENTAL

Temperature	
Operating	-40℃ to +70℃
Storage	-40℃ to +70℃
Humidity	95% non-condensing
Water/Dust Resistance	IP67[2]
Regulatory Compliance	CE, RoHS

1.D-QHA: Dual Quadrifilar Helix Antenna
2.Outside the bottom seal ring

For the most recent details of this product:
http://en.harxon.com/products-detail.php?ProId=104

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Version 2 Specifications subject to change without notice.

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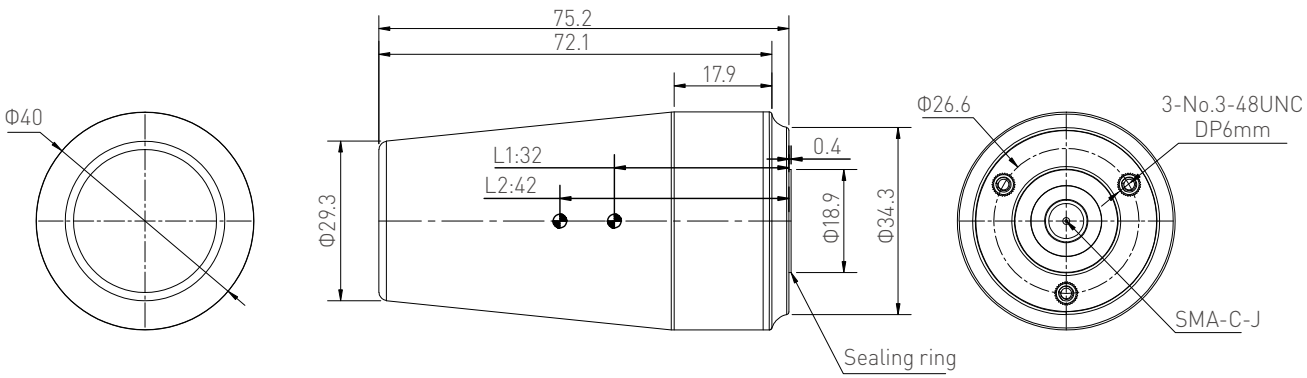
Structure& Phase Center Drawing (mm)



TOP VIEW SIDE VIEW BOTTOM VIEW

Undeclared tolerance:±0.3mm