

# Antenna-AX3705

## *Helix Antenna*

AX3705 is a helix antenna, which supports four constellations and dual frequency, and is designed for UAV system and mobile devices. It can be used in aerial photographs, telemetry technology, disaster monitoring, traffic patrol and security monitoring, etc. This helix antenna has exceptional pattern control, polarization purity and high efficiency in a very compact form factor. Antenna element has high gain and wide beam width to ensure the signal receiving performance of satellite at low elevation angle.

### **Key Features:**

- Supports GPS L1/L2, GLONASS G1/G2, BDS B1/B2/B3 and Galileo E1/E5b.
- High stability and high repeatability at phase center
- Antenna with high gain can has a superior tracking performance at low elevation angle
- Very low noise figure
- SMA male connector
- Ground plane independent
- GIS & RTK applications





## Technical Specifications

### Antenna Specification

- Frequencies..... GPS L1/L2, GLONASS G1/G2, BDS B1/B2/B3, Galileo E1/E5b
- Impedance..... 50ohm
- Polarization..... RHCP
- Axial Ratio.....  $\leq 2\text{dB}$
- Azimuth Coverage.....  $360^\circ$
- Output VSWR.....  $\leq 2.0$
- Peak Gain.....  $> 2\text{dBi}$

### Environment Specification

- Storage Temp.....  $-55^\circ\text{C} \sim +85^\circ\text{C}$
- Operating Temp.....  $-40^\circ\text{C} \sim +85^\circ\text{C}$
- Humidity..... 95% No-condensing
- Water&Dust-proof ..... IP67

### Structure Overview

### LNA Specification

- LNA Gain.....  $32 \pm 2\text{dB}$
- Noise Figure.....  $\leq 1.5\text{dB}$
- Output VSWR.....  $\leq 2.0$
- Operation Voltage.....  $3 \sim 16\text{VDC}$
- Operation Current.....  $\leq 35\text{mA}@3.3\text{V}$
- Ripple.....  $\pm 1.5\text{dB}$

### Mechanical Specification

- Dimension.....  $\phi 31 \times 50.4\text{mm}$
- Weight.....  $< 19\text{g}$
- Connector..... SMA male

Information and related materials are subject to change without notice. © Copyright 2017 Tersus GNSS Inc.