



AX3705

Helix Antenna

Overview

The AX3705 is a helix antenna that supports three satellite constellations and dual frequencies, which is designed for UAV systems and mobile devices. It can be used in aerial photography, 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. The antenna has a high gain and a wide beam width to ensure that satellite signals can be received at low elevation angles.

Key Features

Supports GPS L1/L2, GLONASS L1/L2, BeiDou B1/B2 signal reception

High stability and high repeatability at phase center

High antenna gain having superior tracking performance at low elevation angles

Very low noise figure

SMA male connector

Ground plane independent

GIS & RTK applications

Ultra-light weight





Technical Specifications

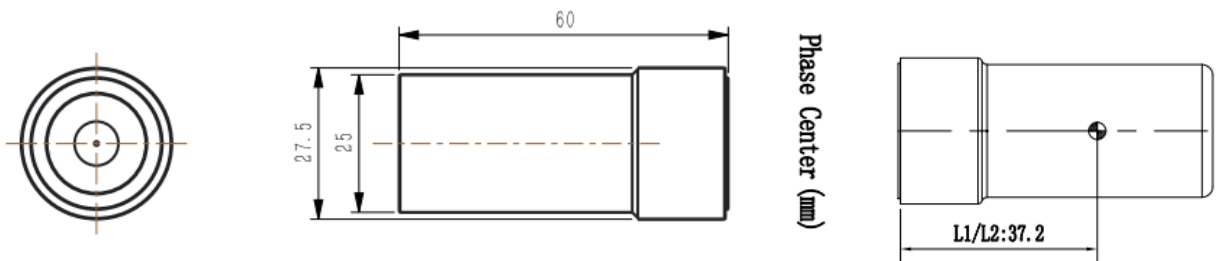
Performance

Frequencies:	GPS L1/L2, GLONASS L1/L2, BeiDou B1/B2
Peak Gain:	
1217-1257MHz	2dBi
1559-1610MHz	2.5dBi
Polarization:	RHCP
Axial Ratio:	≤3dB
Impedance:	50Ω
Phase Center Offset:	37.2mm
Phase Center Accuracy:	±3mm

Mechanical

Size:	φ 27.5x60mm
Connector:	SMA Male
Weight:	≤19g

Structure Overview



LNA

LNA Gain:	33dB(typical)
Noise Figure:	≤1.5dB
Output/Input VSWR:	≤2.0
Operation Voltage:	3.3V~12V DC
Operation Current:	55mA (max)
Group Delay Ripple:	< 15ns

Environmental

Operating Temperature:	-40°C ~ +70°C
Storage Temperature:	-40°C ~ +70°C
Humidity:	95% not condensing
Dust- & Waterproof:	IP65

