



AX3703

GNSS Aviation Antenna

Overview

The AX3703 is a miniature, light-weight, multi-frequency GNSS aviation antenna, which can receive GPS L1/L2, GLONASS L1/L2 and BeiDou B1/B2/B3 signals.

Its outstanding performance in dynamic scenarios and its light-weight make it particularly suitable for drones and other moving platforms. Its rugged design allows it to work well in the harshest environments.

Key Features

Supports GPS L1/L2, GLONASS L1/L2 and BeiDou B1/B2/B3

Radome reduces the impact of temperature variations

Waterproof design protects antenna in harsh weather conditions

High gain, wide beam width, and suitable for low elevation angles

Multipath suppression technique improves performance in challenging environments

Multiple feed design stabilizes carrier phase center and minimizes the influence of measurement errors

Super compact design: 90mm diameter (including ground plane)

Rugged design, ideal for aviation and vehicle applications



Technical Specifications

Performance

Frequencies:	GPS L1/L2, GLONASS L1/L2, BeiDou B1/B2/B3
Peak Gain:	4dBi
Polarization:	RHCP
Axial Ratio:	≤3dB
Azimuth Coverage:	360°
Impedance:	50Ω
Output VSWR:	≤2.0
Phase Center Offset:	20.24mm
Phase Center Accuracy:	±3mm

LNA

LNA Gain:	36±2dB
Noise Figure:	≤2.0dB
Output VSWR:	≤2.0
Operation Voltage:	3.3V~12V DC
Operation Current:	≤45mA
Group Delay:	≤5ns

Mechanical

Dimension:	φ 90x41.5mm
Connector:	SMA Female
Weight:	137g

Environmental

Operating Temperature:	-40°C ~ +80°C
Storage Temperature:	-55°C ~ +85°C
Humidity:	95% not condensing
Dust- & Waterproof:	IP67

Structure Overview

