



AX3702

Survey Antenna

Overview

The AX3702 is a survey antenna. It can receive GPS L1/L2, GLONASS L1/L2, and BeiDou B1/B2/B3 signals, which can be used in land survey, marine survey, channel survey, seismic monitoring, bridge survey, container operation, agriculture applications, etc. The AX3702 was calibrated in NGS. Customers can use the antenna for GPS-only or three-constellation navigation applications.

The AX3702 has high gain and wide beam width to ensure that connected GNSS receivers perform well at low elevation angle signals. The phase center of this antenna remains constant as the azimuth and the elevation angles of the satellites change. Signal reception is unaffected by the rotation of the antenna or satellite elevation, so placement and installation of the antenna can be completed with ease.

Key features

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

An internal multi-path-rejection board eliminates multi-path interference errors

Has a multi-feed design to ensure superposition of phase center and geometrical center, and minimize the influence of multipath errors

Water and dust-proof design

Internal lightning proof circuit protects LNA from being damaged by high voltage surges

Very low noise figure



Technical Specifications

Performance

Frequencies:	GPS L1/L2, GLONASS L1/L2, BeiDou B1/B2/B3
Impedance:	50Ω
Polarization:	RHCP
Axial Ratio:	≤3dB
Azimuth Coverage:	360°
Output VSWR:	≤2.0
Peak Gain:	5.5dBi
Phase Center Offset:	54.04mm
Phase Center Accuracy:	±2mm

Environmental

Operating Temperature:	-45°C ~ +85°C
Storage Temperature:	-45°C ~ +85°C
Humidity:	95% not condensing

LNA

LNA Gain:	40±2dB
Noise Figure:	≤2.0dB
Output VSWR:	≤2.0
Operation Voltage:	3.3V~12V DC
Operation Current:	≤45mA
Ripple:	±2dB

Mechanical

Dimension:	φ 152x62.2mm
Connector:	TNC Female
Screw Hole for assembly:	5/8"×11 UNC Female
Weight:	374g

Structure Overview

