# AX3702 Mini Survey Antenna



#### Overview

The AX3702 is a mini 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:<br>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 Error:                                       | ±2mm   |  |

#### LNA

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

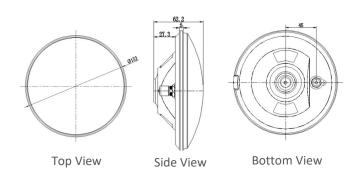
## Mechanical

| Size:      | φ 152x62.2mm |
|------------|--------------|
| Connector: | TNC Female   |
| Weight:    | 374g         |

#### Environmental

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

## **Structure Overview**



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