

Antenna-AX3702

Mini Survey Antenna

AX3702 is a mini survey antenna. It receives GPS L1/L2/L5, GLONASS L1/L2 and BDS B1/B2/B3, Galileo E1/E5a/E5b frequencies, which can be used in land survey, marine survey, channel survey, seismic monitoring, bridge survey, container operation, agriculture applications, etc. Customers can use the antenna for GPS-only or three-constellations applications.

It has high gain and wide beam width to ensure that the satellite performs well at receiving signals at low elevation angle. 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 multi-constellation and multi- frequency
 - GPS L1/L2/L5, GLONASS L1/L2 and BDS B1/B2/B3, Galileo E1/E5a/E5b
 - Multi-path rejection board inside eliminates multi-path influence to measurement error.
- Adopts multi feed design to ensure superposition of phase center and geometrical center; and minimize influence to measurement error.
- Water & dust-proof design ensures absolute sealing of kernel parts; capable of long time outdoor operation.
- Lightning proof circuit inside protects LNA from being damaged by surge immunity.
- Very low noise figure.



Technical Specifications

Antenna Specification

- Frequencies..... GPS
L1/L2/L5, GLONASS L1/L2 and BDS B1/B2/B3,
Galileo E1/E5a/E5b
- Impedance..... 50ohm
- Polarization..... RHCP
- Axial Ratio..... $\leq 3\text{dB}$
- Azimuth Coverage..... 360°
- Output VSWR..... ≤ 2.0
- Peak Gain..... 5.5dBi
- Phase Center Error $\pm 2\text{mm}$

Environment Specification

- Storage /Operating Temp..... $-45^\circ\text{C} \sim +85^\circ\text{C}$
- Humidity.....95% No-condensing

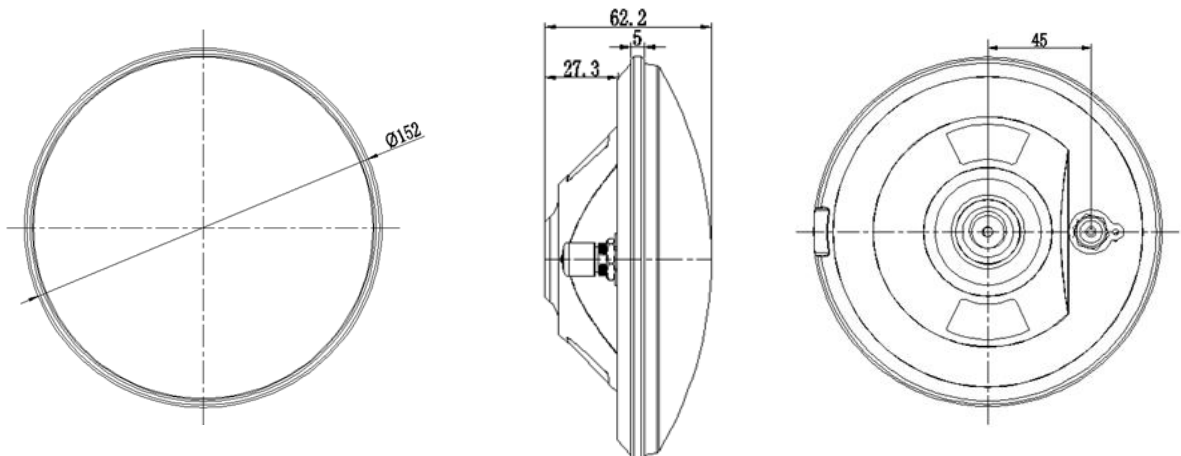
LNA Specification

- LNA Gain..... $40 \pm 2\text{dB}$
- Noise Figure..... $\leq 2.0\text{dB}$
- Output VSWR..... ≤ 2.0
- Operation Voltage..... $3.3 \sim 12\text{V DC}$
- Operation Current..... $\leq 45\text{mA}$
- Ripple $\pm 2\text{dB}$

Mechanical Specification

- Dimension..... $\phi 152 * 62.2\text{mm}$
- Connector.....TNC Female
- Weight.....374g

Structure Overview



Top View

Side View

Bottom View

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