Mini Survey Antenna GPS500

GPS500 receives GPS L1/L2, GLONASS L1/L2 and BeiDou B1/B2/B3 frequencies, which can be used in land survey, marine survey, channel survey, seismic monitoring, bridge survey, container operation and agriculture applications. It is especially designed for precision triple frequency positioning. The same antenna can be used for GPS only or dual or triple constellation applications.

It has high gain and wide beam width to ensure the signal receiving performance of satellite at low elevation angle. The phase center of this antenna remains constant as the azimuth and elevation angle 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.

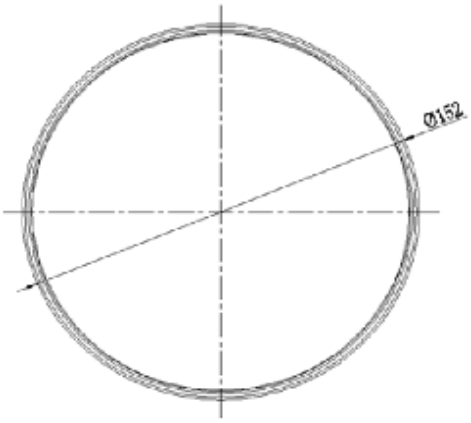
Key Features

- Support GPS L1/L2, GLONASS L1/L2 and BeiDou B1/B2/B3 frequencies
- Multi-path rejection board inside can eliminate the multi-path influence to measurement error
- Adopt multi feed design to ensure the superposition of phase center and geometrical center, and minimize the influence to measurement error
- Water and dust-proof design ensures absolute seal of kernel parts, capable for long time outdoor operation
- Very low noise figure
- Lightning proof circuit inside can protect the LNA from being damaged by surge immunity

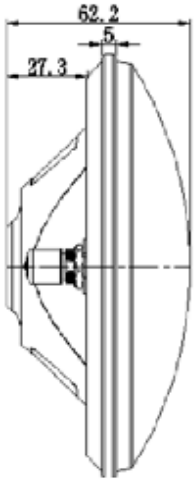
Technical Specifications

Antenna Specification	
Frequency Range	GPS L1/L2 GLONASS L1/L2 BeiDou B1/B2/ B3
Impedance	50 ohm
Polarization	RHCP
Axial Ratio	≤ 3 dB
Azimuth Coverage	360°
Output VSWR	≤ 2.0
Peak Gain	5.5 dBi
Phase Center Error	± 2 mm
LNA Specification	
LNA Gain	40 ± 2 dB
Noise Figure	≤ 2.0 dB
Output VSWR	≤ 2.0
Operation Voltage	3.3 ~ 12V DC
Operation Current	≤ 45 mA
Group Delay	≤ 5 ns
Mechanical Specification	
Dimension	φ 152*62.2 mm
Connector	TNC Female
Weight	435 g
Environment Specification	
Storage Temp	-55° C to +85° C
Operating Temp	-45 °C to +85° C
Humidity	95% No-condensing

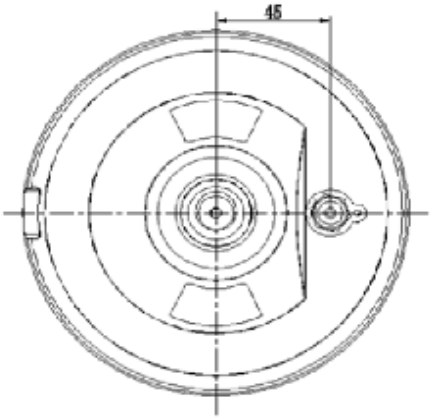
Top View



Side View



Bottom View



Dimension (mm)

swift NAVIGATION