FORA® GNSS
ПРЕИМУЩЕСТВО ЛИДЕРА

Geobox Fora A1000

Geobox Fora A1000 is a four-system full-frequency external measurement antenna covering GPS, GLONASS, BDS, and GALILEO, which meets the current needs of multi-system compatibility of measurement equipment.It can be widely used in geotechnical surveying, oceanographic surveying, hydrographic surveying, dredging surveying, seismic monitoring, bridge deformation monitoring, landslide monitoring, terminal container operations and other occasions.



Tracking in a complex environment

The antenna unit has the characteristics of high gain and wide beam width of the direction pattern, which ensures that the antenna still has a strong signal reception effect at low elevation angles, and ensures that the satellite can be quickly locked in complex environments such as shading, and the GNSS navigation signal can be output stably, such as woods, building blockage, etc.

Compact size

It has a compact appearance, and its dimensions are only φ152*62.2mm.The sturdy and reliable structure has a protection level of IP67, which can protect it from dust, ultraviolet rays and water.And standard TNC female connector for easy integration.

Key features

- Support the full frequency band signal of the GNSS four-system.
- The structure is reliable and the protection level is IP67.
- Strong anti-interference ability and can withstand harsh working environments.
- The stable phase center ensures millimeter-level positioning accuracy.

Powerful anti-interference performance

The antenna LNA has excellent out-of-band suppression performance, which can suppress useless electromagnetic wave signals, avoid interference by the receiver by other wireless communication systems, and effectively reduce the risk of system failure, such as electromagnetic interference from power grids, communication base stations, radio stations, etc.

Highly stable phase center

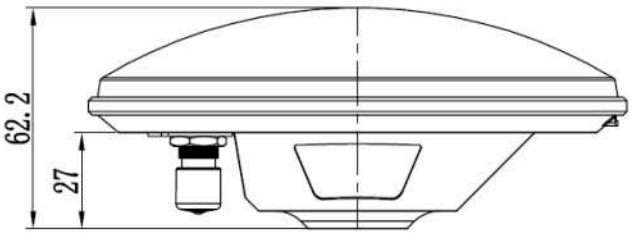
The antenna part adopts a multi-feed point design scheme to realize the coincidence of the phase center and the geometric center, and minimize the influence of the antenna on the measurement error.

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Performance parameters

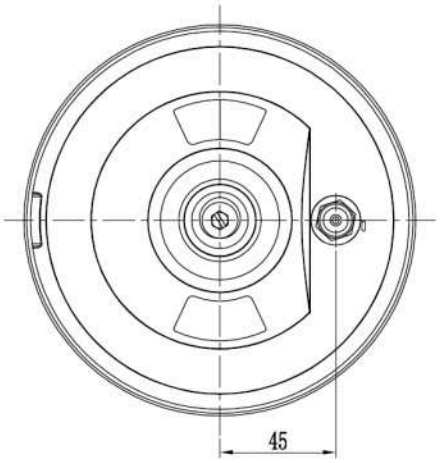
Antenna characteristics	
Frequency range	GPS L1/L2/L5 BDS B1I/B2I/B3I/B1C/B2a/B2b GLONASS L1/L2/L3 GALILEO E1/E5a/E5b/E6 QZSS L1/L2/L5/L6 SBAS L1/L5 IRNSS L5 L-Band
Impedance	50 ohms
Polarization method	right-handed circular polarization
Antenna axis ratio	≤3dB
Horizontal plane coverage angle	360°
Output standing wave	≤2.0
Maximum gain	5.5dBi
Phase center error	±2mm
Low noise amplifier index	
Gain	L2：36±2dB L1：34±2dB
Noise figure	≤2dB
Output standing wave	≤2.0
In-band flatness	±2dB
Operating voltage	+3.3～+12VDC
Operating current	≤45mA
Differential transmission delay	≤5ns
Structural characteristics	
Antenna size	Φ152*62.2mm
weight	≤500g
Joint form	TNC female head
Installation method	Centering rod installation, thread specification: 5/8"-11UNC
Working environment	
Operating temperature	-40℃～+85℃
Storage temperature	-55℃～+85℃
Humidity	95% non-condensing

Three views of the product (dimensional tolerance ±0.3mm)

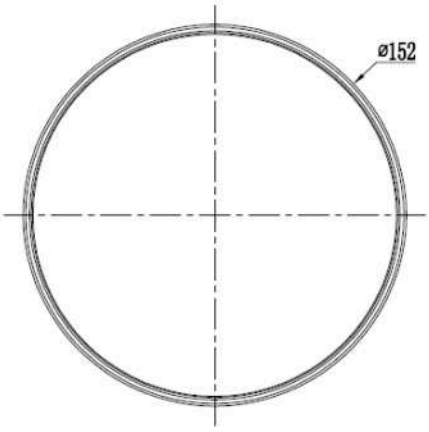


Side view

Geobox Fora A1000



Bottom view



Top view

Product label

Label size: 35.5*22.5mm, the label content is shown in the figure below.(The SN barcode style is for reference, and it is actually printed according to the SN barcode rule program file)