

Survey GNSS Antenna GPS1000

Harxon
a *BDStar* company

HIGH PRECISION GNSS ANTENNA FOR SURVEYING APPLICATIONS



HIGH PHASE CENTER STABILITY

GPS1000 features a multi-point feeding design to achieve greater phase center stability. It effectively improves measurement accuracy and provides better positioning solutions.

TRACKING IN CHALLENGING ENVIRONMENTS

The ability to receive low elevation signals with high gain and wide beam width makes GPS1000 an excellent choice for tracking visible satellites under challenging conditions, providing the positioning solutions with precision and reliable data. It can be widely used in GNSS surveying applications where high precision is needed, such as obstructed environment of tree lines or construction.

STRONG ANTI-INTERFERENCE PERFORMANCE

The antenna LNA features an excellent out-of-band rejection performance, which can suppress the electromagnetic interference, providing the stability and reliability of GNSS signals. Also it effectively avoids disconnection dangerous when receivers are operated under complex electro magnetic environments such as communication base station applications or urban area.

DURABLE, EASY-INSTALLATION DESIGN FOR PRECISION APPLICATIONS

Its compact and lightweight design, making GPS1000 highly portable and suitable for outdoor operating in precision applications. The patented waterproof and breathable design, durable enclosure has been proven to sustain the harsh conditions by meeting IP67, easily protecting GPS1000 from dust and water for quite a long time.

KEY FEATURES

- Support GPS, Glonass, Galileo, Beidou, QZSS, IRNSS and SBAS signal reception
- Stable phase center guarantees the accuracy of positioning within millimeter-level
- Strong anti-interference ability to endure the challenging operating environments
- IP67 ruggedized structure

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PERFORMANCE

Signal Received

GPS	L1/L2/L5/L-Band
GLONASS	L1/L2/L3
BDS	B1/B2/B3
GALILEO	E1/E6/E5a/E5b
QZSS	L1/L2/L5/L6
IRNSS	L5
SBAS	L1/L5

Nominal Impedance 50Ω

Polarization RHCP

Axial Ratio ≤3dB

Gain at Zenith (90°)

1164-1300MHz	5.5dBi(maximum)
1525-1615MHz	5.5dBi(maximum)

LNA Gain 40dB(typical)

Noise Figure ≤2dB

Output/Input VSWR ≤2.0

Operation Voltage +3.3VDC to +12VDC

Operation Current 45mA(maximum)

Group Delay Ripple <5ns

MECHANICAL

Dimensions φ152*62.2mm

Connector TNC female

Weight ≤500g

Mounting BSW5/8"-11 screw, 12-14mm

ENVIRONMENTAL

Temperature

Operating -40°C to +85°C

Storage -55°C to +85°C

Humidity 95% non-condensing

Water/Dust Resistance IP67

Regulatory Compliance NGS, FCC, CE, RoHS

For the most recent details of this product:

<http://en.harxon.com/products-detail.php?Proid=48>

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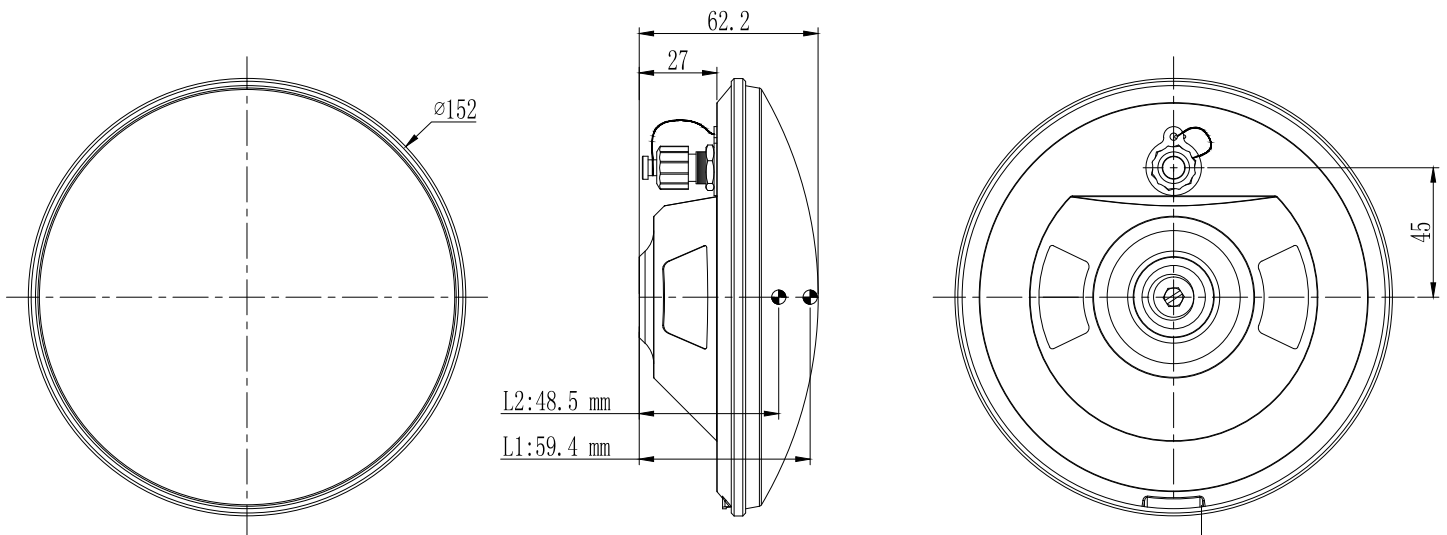
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Structure& Phase Center Drawing (mm)



TOP VIEW

SIDE VIEW

BOTTOM VIEW

Undeclared tolerance:±0.3mm