

# GNSS Survey 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 electro magnetic 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, Beidou and Galileo signals reception
- Stable phase center guarantees the accuracy of positioning within millimeter-level
- Strong anti-interference ability to endure the challenging operating environments
- Small form factor with IP67 ruggedized structure

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## PERFORMANCE

### Signal Received

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

**Nominal Impedance** 50Ω

**Polarization** RHCP

**Axial Ratio** ≤3dB

### Gain at Zenith (90°)

1164-1300MHz	5.5dBi(maximum)
1520-1615MHz	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

For the most recent details of this product:

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

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**Version 1** Specifications subject to change without notice.

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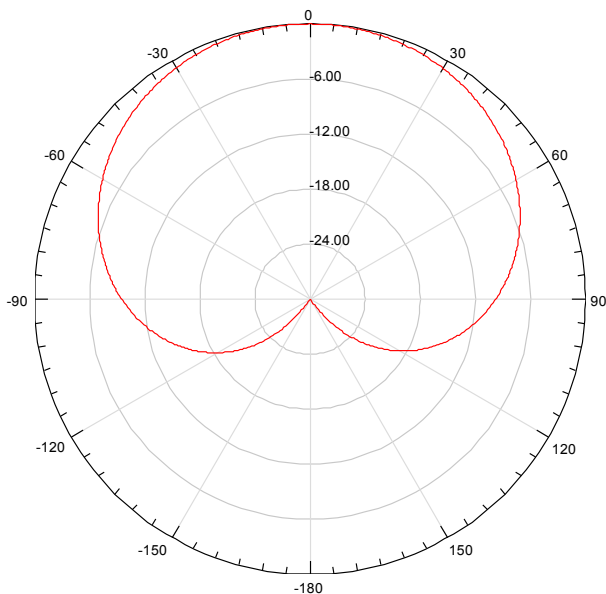
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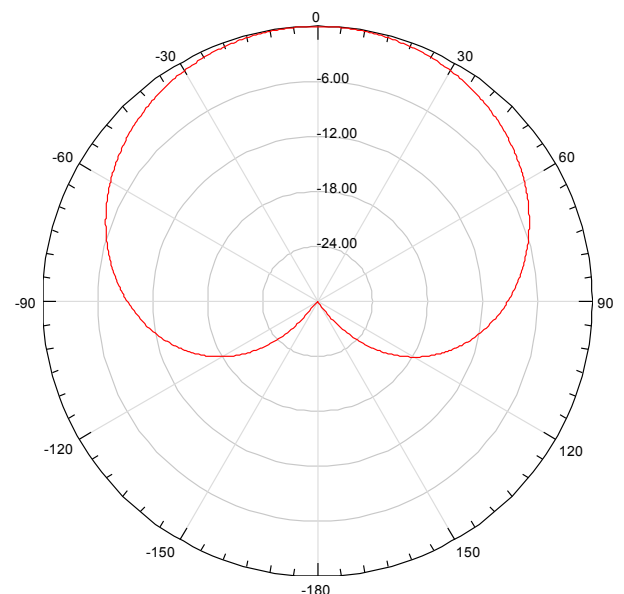
## Harxon Survey Antennas:

Model	GPS			GLONASS			GALILEO				BDS			L-Band
	L1	L2	L5	L1	L2	L3	E1	E5a	E5b	E6	B1	B2	B3	
GPS1000	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
GPS600	✓	✓	—	✓	✓	—	—	—	—	—	✓	✓	✓	✓
HX-CS3607A	✓	—	—	✓	—	—	—	—	—	—	✓	—	—	—

## NORMALIZED RADIATION PATTERN



1520MHz~1615MHz



1164MHz~1300MHz