# GNSS Survey Antenna GPS1000



# HIGH PRECISION GNSS ANTENNA FOR SURVEYING APPLICATIONS



#### HIGH PHASE CENTER STABILITY

GPS1000 features a multi-point feeding deign 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 guite 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

# **GNSS Survey Antenna** GPS1000



### **PERFORMANCE**

**LNA** Gain

**Noise Figure** 

Output/Input VSWR

Signal Received	
GPS	L1/L2/L5/L-Band
GLONASS	L1/L2/L3
BDS	B1/B2/B3
GALILEO	E1/E6/E5a/E5b
QZSS	L1,L2,L3,E6
IRNSS	L5
SBAS	L1,L5
Nominal Impedance	50Ω
Polarization	RHCP
Axial Ratio	≼3dB
Gain at Zenith (90°)	
1164-1300MHz	5.5dBi(maximum)
1520-1615MHz	5.5dBi(maximum)

Operation Voltage	+3.3VDC to +12VDC
Operation Current	45mA(maximum)
Group Delay Ripple	<

### **MECHANICAL**

Dimensions	¢152*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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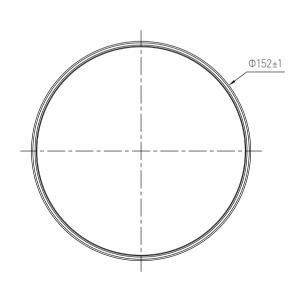


## **Structure& Phase Center Drawing (mm)**

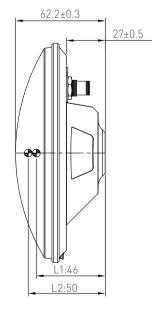
40dB(typical)

≤2dB

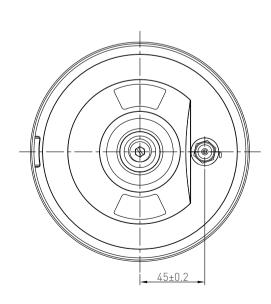
≤2.0



**TOP VIEW** 



SIDE VIEW



**BOTTOM VIEW** 

Undeclared tolerance:±0.3mm