

## AH10b GNSS 双频高精度有源天线

AH10b GNSS Dual frequency high precision active antenna



### 产品描述 PRODUCT DESCRIPTION

AH10b GNSS 双频高精度有源天线, 采用双层陶瓷介质四馈点馈电技术, 支持北斗二代、GPS、GLONASS 和 GALILEO 系统的 L1 和 L5 双频段卫星导航信号接收, 内置低噪声放大器, 采用两级滤波器、放大, 带外抑制好, 抗干扰能力强, 保证在恶劣电磁环境下正常工作。满足目前多系统兼容和高精度测量的需求。

AH10b GNSS dual-band high-precision active antenna adopts double-layer ceramic dielectric four-feed point feeding technology, supports L1 and L5 dual-band satellite navigation signal reception of Beidou II, GPS, GLONASS and GALILEO systems, built-in low-noise amplifier, adopts Two-stage filter and amplifier, good out-of-band suppression, strong anti-interference ability, to ensure normal operation in harsh electromagnetic environment. Meet the current multi-system compatibility and high-precision measurement needs.

### 产品应用 APPLICATIONS

适用于车载、设备应用, 比如车道级导航定位、低速自动驾驶等设备。

It is suitable for vehicle and equipment applications, such as lane-level navigation and positioning, low-speed automatic driving and other equipment.

### 技术特点 TECHNICAL FEATURES

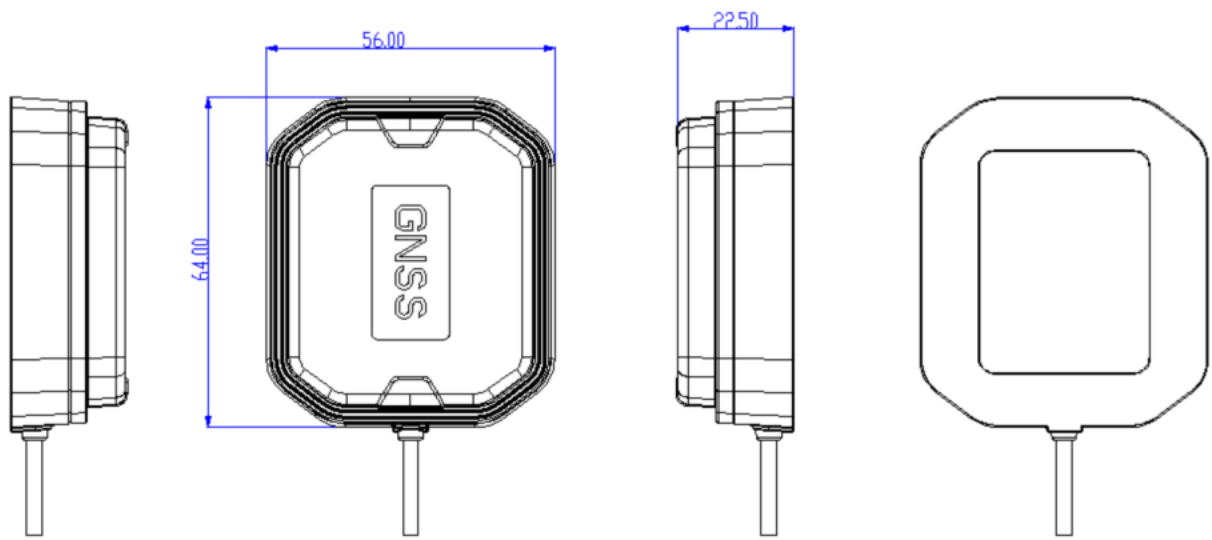
- ✓ 天线采用多馈点馈电技术, 保证了右旋圆极化和相位中心性能, 降低测量误差的影响;  
The antenna adopts multi-feed point technology, which ensures the performance of right-hand circular polarization and phase center, and reduces the influence of measurement error;
- ✓ 天线单元具有增益高、增益滚降小特点, 对低仰角卫星信号接收效果较好;  
The antenna unit has the characteristics of high gain and small gain roll-off, and has better reception effect on low-elevation satellite signals;
- ✓ 低噪声、高增益放大和出色的带外抑制;  
Low noise, high gain amplification and excellent out-of-band rejection;
- ✓ 静电防护: 15KV (空气放电);  
Electrostatic protection: 15KV (air discharge)
- ✓ 防水性能好, 可车顶安装, 易固定;  
Good waterproof performance, can be installed on the roof, easy to fix;

## 主要技术指标 MAIN SPECIFICATIONS

天线特性 ANTENNA	
天线结构 Patch Architecture	陶瓷叠层结构 (Ceramic laminate structure)
支持卫星信号 Supported positioning signal bands	BEIDOU: B1/B2a; GPS: L1/L5; Galileo: E1/E5a GLONASS: L1
最大增益 Peak Gain*	≥2.0 dBi
极化方式 Polarization	右旋圆极化 (RHCP)
天线轴比@天顶 Axial Ratio@zenith	≤1.5dB
水平面覆盖角度 Azimuth Coverage	170°
特性阻抗 Impedance	50 ohm
低噪声放大器特性 LNA	
工作频段 Frequency Range	1176.45±10.23MHz 1559MHz~1606MHz
低噪放增益 LNA Gain*	30±3.0dB (Typ. @25°C)
噪声系数 Noise Figure*	≤1.5 dB@25°C, Typ.
输出驻波比 Output VSWR	≤1.8:1 typ. 2.0:1max
工作电压 Operation Voltage	3.0~5.5V DC
工作电流 Operation Current	≤20mA
机械结构与环境特性 MECHANICALS & ENVIRONMENTAL	
天线尺寸 Dimension	见附图 the following chapters
射频输出接口 Connector	内螺纹内针 (SMA-J)
线缆长度 Cable length	3.0m
天线外壳 Radome	ABS+PC
产品重量 Weight	100g
安装方式 Attachment Method	磁吸/胶贴 (Magnetic / Adhesive)
工作温度 Operating Temp	-40°C ~ +85°C
储存温度 Storage Temp	-40°C ~ +85°C
湿度 Humidity	95% No-condensing
防水性能 Waterproof	IP66

NOTE: 磁吸固定和胶贴固定为二选一 (MAGNETIC FIXING AND ADHESIVE FIXING ARE OPTIONAL)

## 结构尺寸 STRUCTURE



公差/TOLERANCE $\pm 0.2\text{MM}$