

## AN01a GNSS 有源天线 GNSS active antenna



### 产品描述 PRODUCT DESCRIPTION

AN01a 是一款同时支持 GPS L1、北斗 B1 以及 GALILEO E1 频率的 GNSS 有源天线，可广泛应用于车载导航、定位跟踪、安防等应用场景。AN01a 内置高增益低噪声放大器，采用高带外抑制滤波器滤除干扰信号，保证在恶劣电磁环境下仍可正常工作。天线具有增益高，主瓣波束宽，防水等特点，可长期室外工作。

AN01a is a GNSS active antenna supporting GPS L1, Beidou B1 and GALILEO E1 frequencies, which can be widely used in vehicle-mounted navigation, positioning and tracking, security and other application scenarios. AN01a built-in high gain low noise amplifier, using high out of band suppression filter to filter out interference signals, to ensure the normal operation in the harsh electromagnetic environment. The antenna has the characteristics of high gain, wide main lobe beam, waterproof and can work outdoors for a long time.

### 产品应用 APPLICATIONS

适用于车载、物联网设备应用。

It is suitable for vehicle positioning and IOT applications.

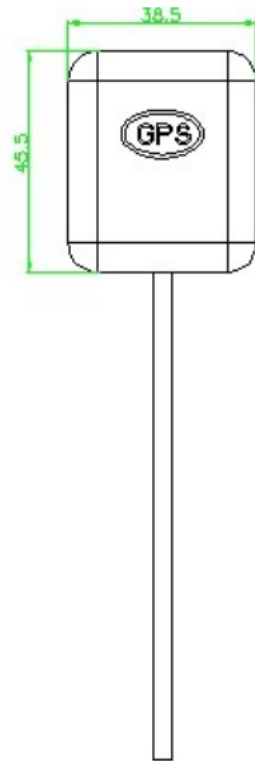
### 主要技术指标 MAIN SPECIFICATIONS

天线特性 ANTENNA	
天线结构 Patch Architecture	陶瓷结构 (Ceramic structure)
中心接收频率范围 (MHz) Range of Receiving Frequency	1561-1575.42MHz
带宽 Band Width(MHz) (Return Loss $\leq$ -10dB)	$\geq$ 10 dB
驻波比 V.S.W.R (in Center Frequency)	$\leq$ 1.5dB
增益 Gain (Zenith)(dBi typ) (with 70mmSquare GND plane)	3.5dB
偏振方式 Polarization	右旋圆极化 Right-Handed Circular
特性阻抗 Impedance	50 ohm
低噪声放大器特性 LNA	
中心频率范围 Center frequency range	1561-1575.42MHz

放大器增益 Amplify gain	28±2 dB
驻波比 VSWR	≤2.0
噪声系数 noise figure	≤1.5dB
直流电压 DC voltage	3-5V
直流电流 DC current	12mA typ. (3.3 VDC)
<b>机械结构与环境特性 MECHANICALS &amp; ENVIRONMENTAL</b>	
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	2.0m
天线外壳 Radome	ABS+PC
产品重量 Weight	60g
安装方式 Attachment Method	磁铁/胶贴 (Magic/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 $\pm 0.2\text{MM}$