

# 深圳市千目通讯科技有限公司

Shenzhen Qianmu Communication Technology Co.,Ltd.

## Antenna Acknowledgement

Applicable model	XY07-GPS		
Customer			
Specification description			
	Product content	Specifications	Customer material code
Specification description	GPS antenna	GPS antenna/25*25*4mm/IPEX I/L=58mm	
Change resume			
Serial number	Date	Edition	Brief description of the change content
1	2023-08-24	V1.0	New project
2			
3			

Supplier sample confirmation					
Research and develop	Organization	Check		Decide	
				PASS <input checked="" type="checkbox"/> FAIL <input type="checkbox"/>	
Customer sample confirmation					
Electron	Organization	Project	Purchase	Character	Check
Reasons for rejection or other precautions:					

## 1.Product application

Ceramic antennas are mainly used for receiving. Beidou, GPS satellite signal is used to provide high-precision positioning services for aviation, navigation, communication, personnel tracking, consumer entertainment, surveying and mapping, timing, vehicle monitoring management, vehicle navigation and information services. It has the characteristics of high gain and stability; it is suitable for vehicle positioning, navigator, personal wear, handheld, drone and other civil products.

## 2. Antenna characteristics

Technical requirements	Technical indicators	Remarks
Range Of Receiving Frequency	Beidou B1: 1 561.089MHz ±2.046Megahertz GPS L1: 1575.42MHz ±1.023MHz	
Center Frequency		
Gain at Zenith	3.0dBi	At30*30 mmTest on the grounding plate
Gain at 10° Elevation	/	At30*30 mmTest on the grounding plate
Output VSWR	<1.5	Central frequency
Impedance	50Ω	
Band Width	±2.5Megahertz	Return Loss≤-10dB Return of damage≤- 10dB
Polarization	Right-hand circular polarization (RHCP)	
Axis ratio	<5dB	Central frequency
Horizontal coverage angle	360°	

### 3. Built-in antenna indicators

Technical requirements	Technical indicators
Gain (excluding feeders)	18±3dB (LNA Gain only)
Noise figure	<1.2dB (LNA only)
Output VSWR	<2
Output impedance	50Ω
Passband Ripple	±1.0dB (LNA only)
1dB compression point output	>-10dBm (LNA only)
Prime power	2.8~3.5V
Operating current	8~12 Master of Arts

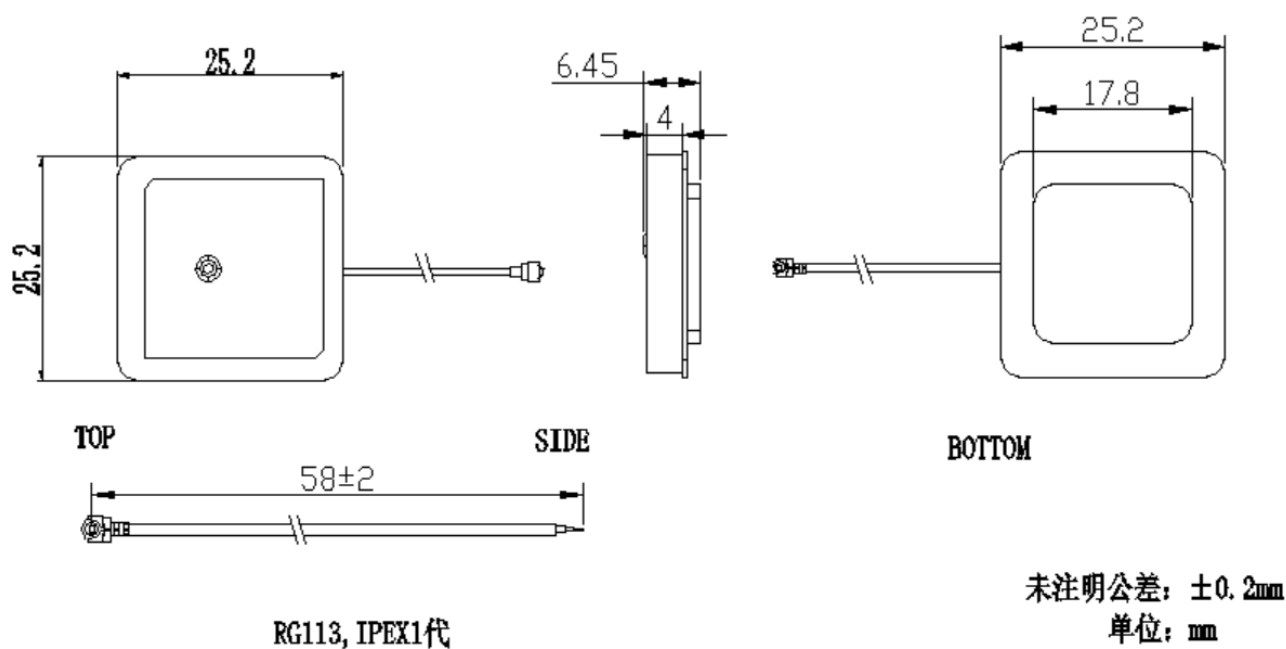
### 4. Working environment

Operational Temperature	-25°C~+75°C
Storage Temperature	-40°C~+85°C
Wet degree	40%~95%

### 5. Structural characteristics

Size	25.3*25.3*6.5
Cable	RG113
Length	58
Connector	IPEX1Act for

## 6、Structure and physical diagram



Unit:Mm

## 7、Precautions for product use

7.1 Pay attention to moisture and moisture resistance during the use of the product; ensure the installation direction and flatness of the antenna on the machine; Good welding.

7.2 Before using the product, ensure that the actual test effect, product size specifications, etc. have been confirmed;

7.3 The front of the product should be installed in front of the sky as much as possible to ensure good reception of satellite signals.