

# G7001

## Product introduction

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G7001 is a three-system for seven-frequency handheld antenna that supports GPS, BDS, and GLONASS. It can be widely used in surveying, high-precision drones and other industries. especially suitable for light portable equipment and drone applications, such as personnel and high-precision positioning equipment, patrols, security monitoring, power line patrols, etc.

## Technical characteristics

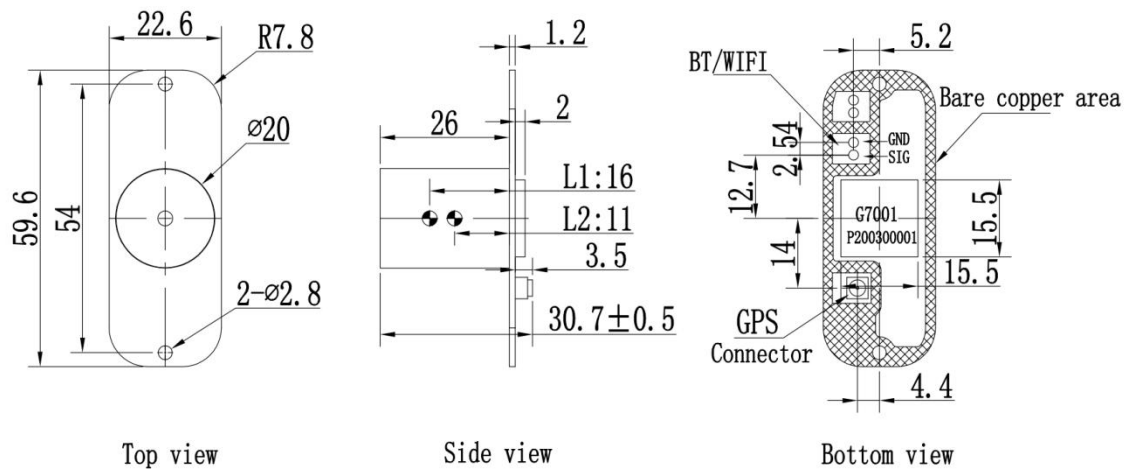
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- 1、 The passive antenna has the advantages of high gain, wide beam and low elevation angle, and it can receive the satellite normally in the severely obstructed environment;
  - 2、 This antenna has wide working bandwidth , it can support multi-system and multi-frequency operation mode, especially the B3 frequency point, which greatly improves the system stability ;
  - 3、 Small Size, light weight, reliable structure. Protection level can reach IP67 and the single antenna can meet IP65 after Assembly, which greatly improves the reliability of the drone, such as waterproof, impact, etc;
  - 4、 The antenna has high out-of-band suppression, which can effectively avoid the system instability caused by signal interference such as communication base station and GNSS interference equipment.
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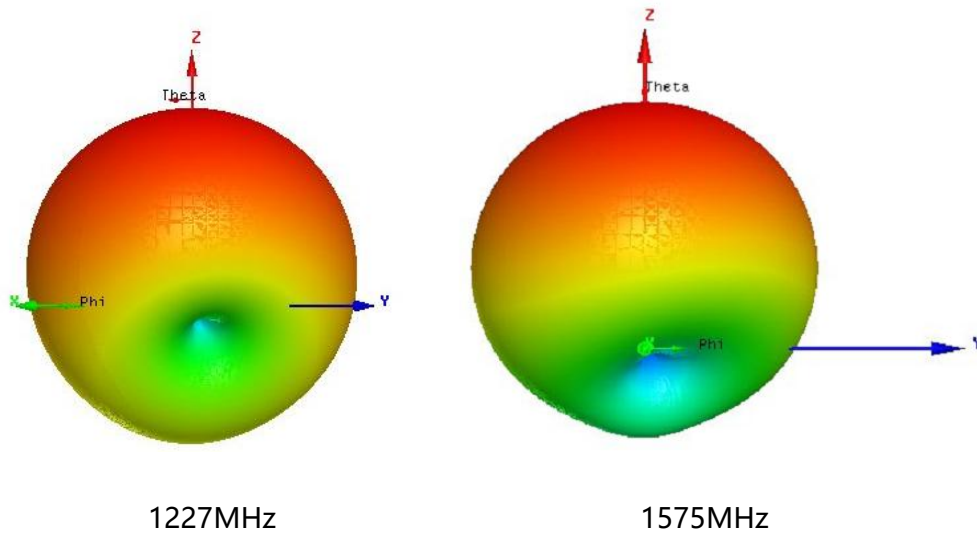
## Technical Parameters

Passive antenna characteristics		Low noise amplifier characteristics		Structure & environmental adaptability	
Frequency Range	BDS B1/B2/B3 GPS L1/L2 GLONASS G1/G2 BT/WIFI 2400-2480MHz	Gain	$33 \pm 2\text{dB}$	Connector form	Customer settings
Antenna impedance	$50\Omega$	Noise figure	$\leq 1.5\text{dB}$	Antenna size	$59.6 \times 22.6 \times 30.7\text{mm}$
Polarization mode	Right-handed circular polarization	Output voltage standing wave ratio	$\leq 2.0$	Installation method	2 M2.5 screws for installation
Antenna axis ratio	$\leq 3\text{dB}$	In-band flatness	$\pm 1\text{dB}$	Operating temperature	$-40^{\circ}\text{C} \sim +70^{\circ}\text{C}$
Horizontal coverage	$0^{\circ} \sim 360^{\circ}$	Operating voltage	DC3.3~12V	Storage temperature	$-55^{\circ}\text{C} \sim +70^{\circ}\text{C}$
GNSS Antenna output voltage standing wave ratio	$\leq 1.5$	Working Electric Current	$\leq 50\text{mA}$	Storage humidity	95% non-condensing
GNSS Highest gain	1dBi				
BT/WIFI Antenna output voltage standing wave ratio	$\leq 2.0$				
BT/WIFI Highest gain	2 dBi				

## Structural characteristics

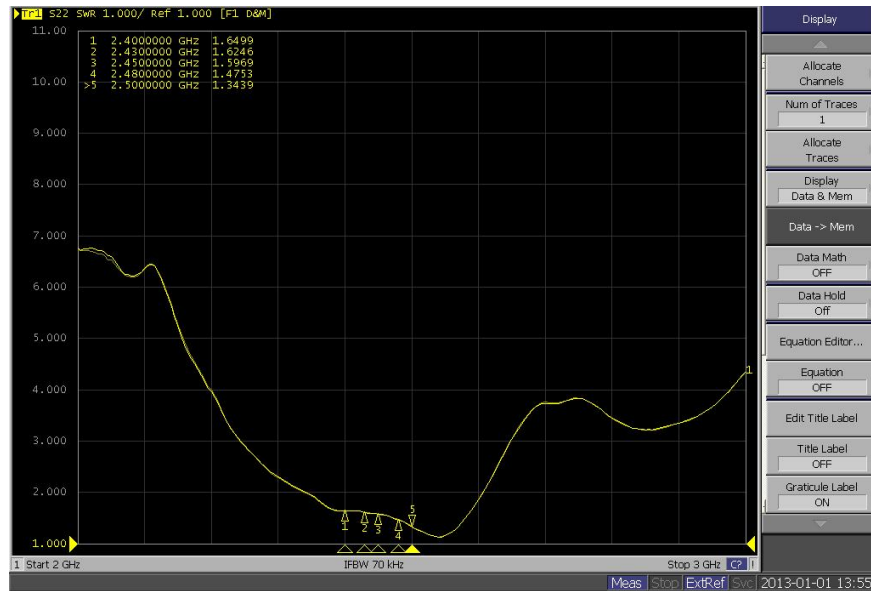


### 3 D Polar Plot

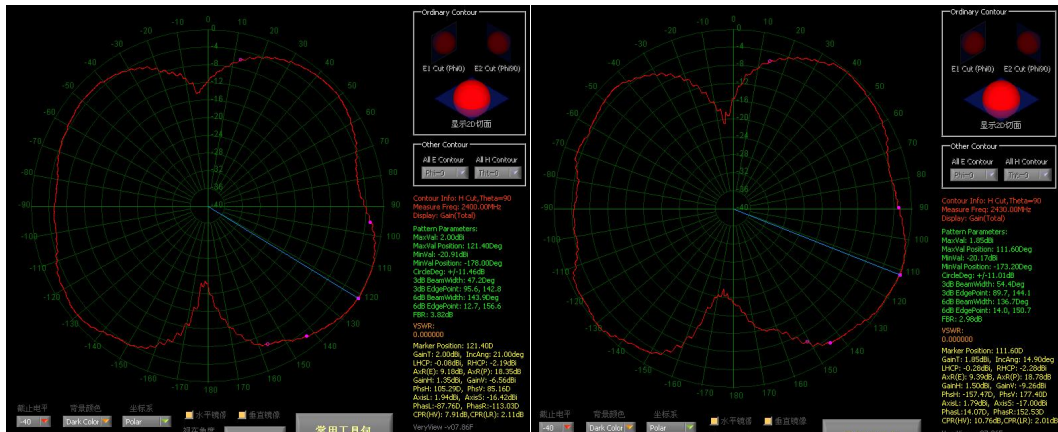


### BT/WIFI Antenna Performance

Frequency (MHz)	2400	2430	2450	2480
Highest gain (dBi)	2.00	1.85	1.70	1.84

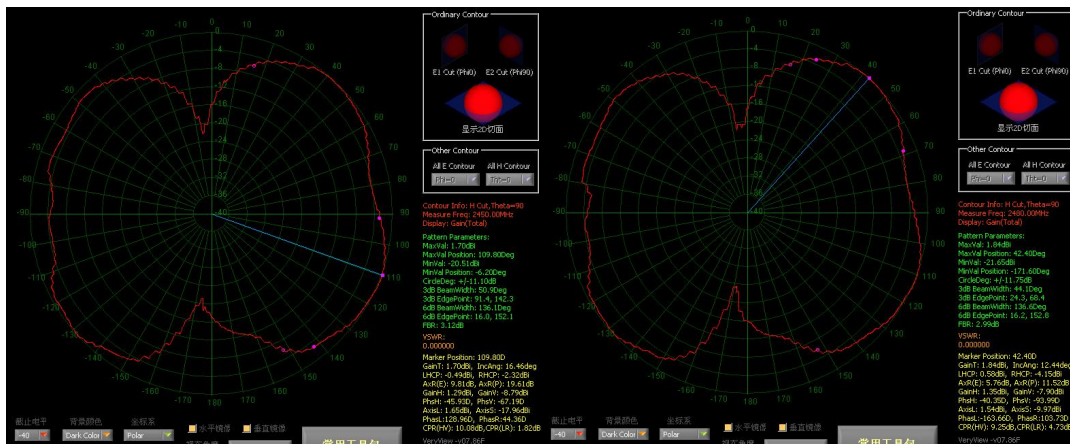


BT/WIFI Standing wave ratio



2400MHz Polar Plot

2430MHz Polar Plot



2450MHz Polar Plot

2480MHz Polar Plot