

# Specification

Sample name: GPS built-in antenna Line specification and model:  
1540A 1568

## Performance and parameters

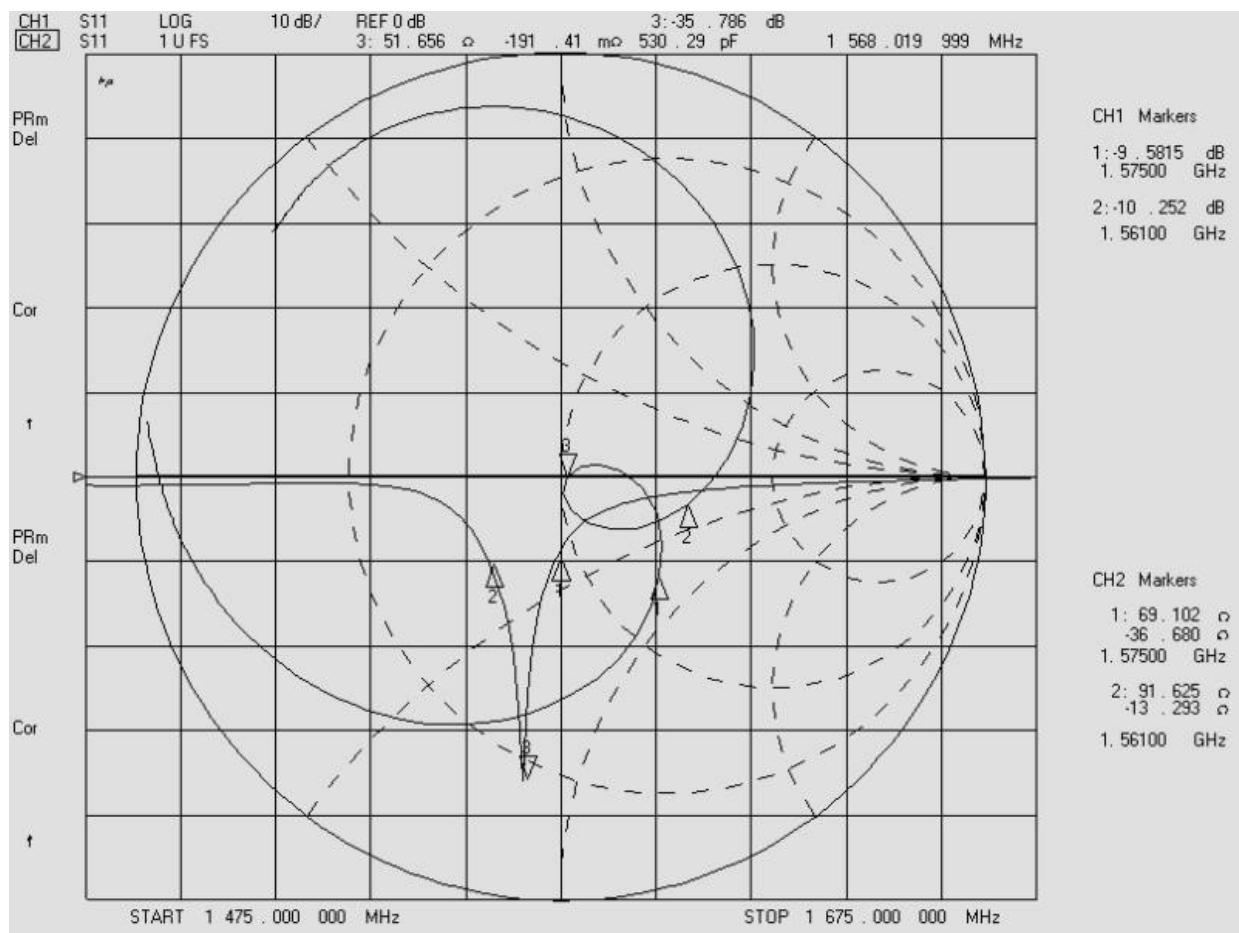
### Technical specifications of TFGPS1540 antenna

This antenna is a GPS ceramic antenna, receiving GPS L1/ BD2 B1 band signals. It adopts right-handed spiral circular polarization design, and has the characteristics of low reflection loss, small axis ratio and high gain.

#### 1. Characteristics of GPS dielectric antenna

Technical requirement	Technical index
Center Frequency	$1568 \pm 3\text{MHz}$
Gain	3 dBi
Horizontal covering Angle	$360^\circ$
Output VSWR	1.5 maximum
Polarization	Right Hand Circular Polarization(RHCP)
Impedance	$50\Omega$
Antenna axis ratio	$\leq 5\text{dB}$
10dB Band Width	$\pm 20\text{MHz}$

#### 2 Impedance diagram



### 3 LAN 特性

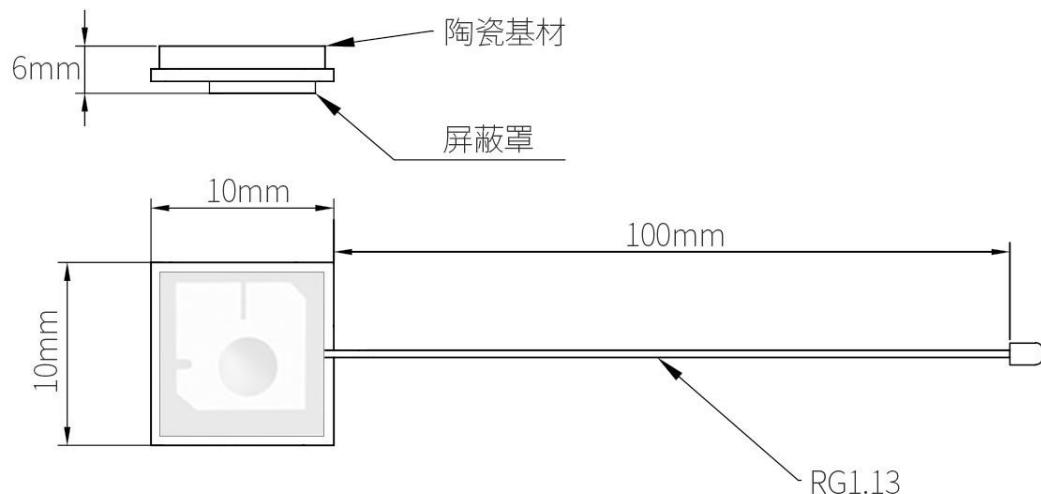
gain Out-of-band suppression (off center frequency) Operating voltage Working current Joints and wires Line length	$18 \pm 2 \text{dBi}$
Noise coefficient	$\leq 2.0 \text{dB}$
Output standing wave	$\leq 2.0$
In-band flatness	$\pm 1.0 \text{dB}$
Output P1dB compression point	$\geq -10 \text{dBm}$
Out-of-band suppression (off center frequency)	$> 35 \text{dBc}$ (除 1575±100MHz 外)
Operating voltage	3.3-5VDC
Working current	$\leq 10 \text{mA}$
Joints and wires	IPEX I /1.13 Black

Line length	$L=**\text{mm}$ (The distance from the edge of the antenna to the middle part of the connector core)
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### 3 Environmental Characteristics

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

### 4 Antenna structure diagram



### 5 Physical picture

