

# GNSS Antenna AG201



Datasheet  
V 1.0.0



## Version Note

Version	Details	Contributor(s)	Date	Notes
1.0.0	First edit	Michelle	2026.03.05	

## Part Number

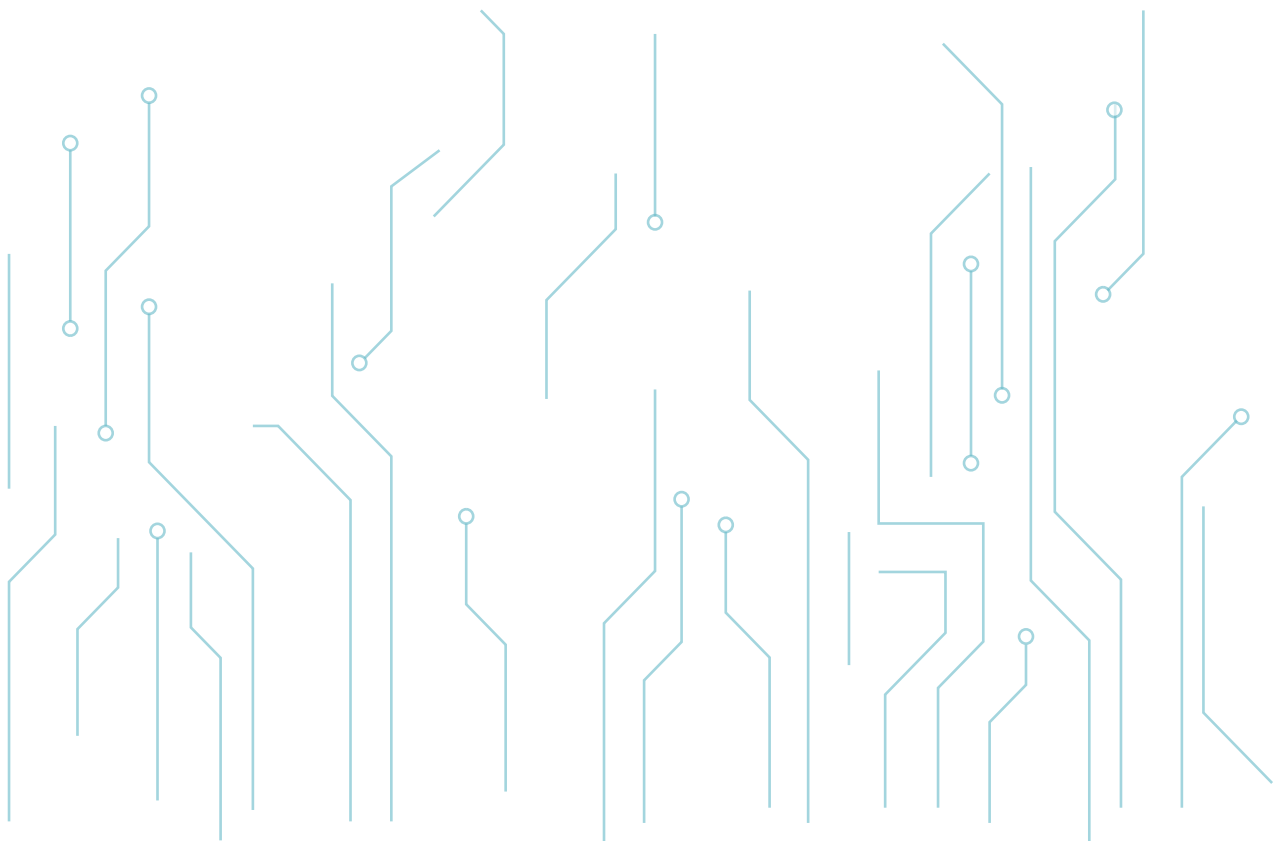
Model	Hardware Code
AG201	-

Click the icon to view and download the latest product documents electronically.  
[https://en.minewsemi.com/file/AG201\\_Datasheet\\_EN.pdf](https://en.minewsemi.com/file/AG201_Datasheet_EN.pdf)



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# 1 PRODUCT OVERVIEW

## 1.1 Overview

AG201 is an external ceramic GNSS antenna specifically designed for dual-satellite systems (GPS/BeiDou). Featuring a compact size and right-hand circular polarization technology, it delivers strong omnidirectional signal reception. As a highly adaptable core component for miniaturized positioning devices, it efficiently meets precise positioning requirements.



## 1.2 Product Features

- Dual-system compatibility: Focused on mainstream GPS/BeiDou navigation systems for precise signal reception.
- Stable Performance: VSWR  $\leq 1.5$ , Gain  $\leq 3.5$  dBi, 50 $\Omega$  standard input impedance, efficient signal transmission.
- Compact and compliant: Meets RoHS environmental standards with a compact size suitable for space-constrained devices.

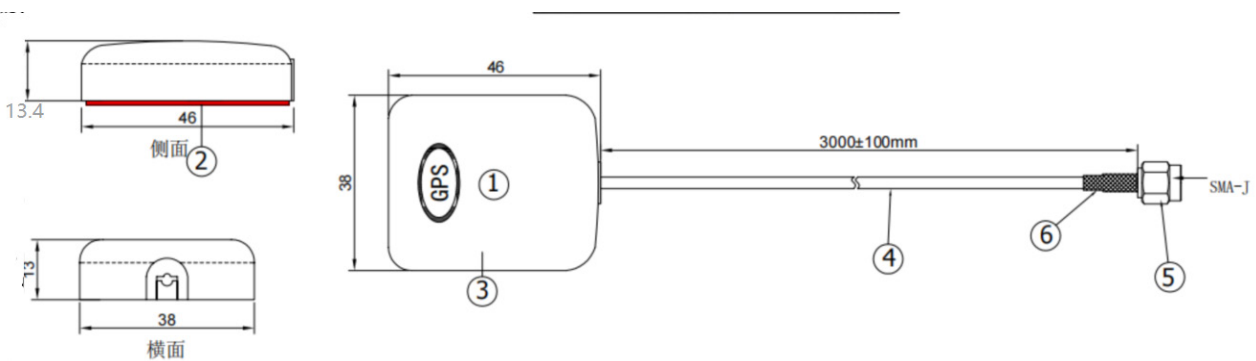
## 1.3 Electrical Properties and Mechanical Properties

Electrical Specifications	
Frequency Range	GPS/Beidou 1575.42 $\pm$ 7Mhz/1561.098 $\pm$ 7Mhz
VSWR	$\leq 1.5$
GAIN	$\leq 3.5$ dBi
LNA GAIN	28 $\pm$ 3dBi
Axial Ratio @ Zenith	$\leq 3$
Output VSWR	$\leq 2.0$
Noise figure	$\leq 1.8$ dB
Polarizatin	RHCP
nput Impedance	50 $\Omega$
Supply Voltage	3-5V
Operating current	$\leq 25$ mA

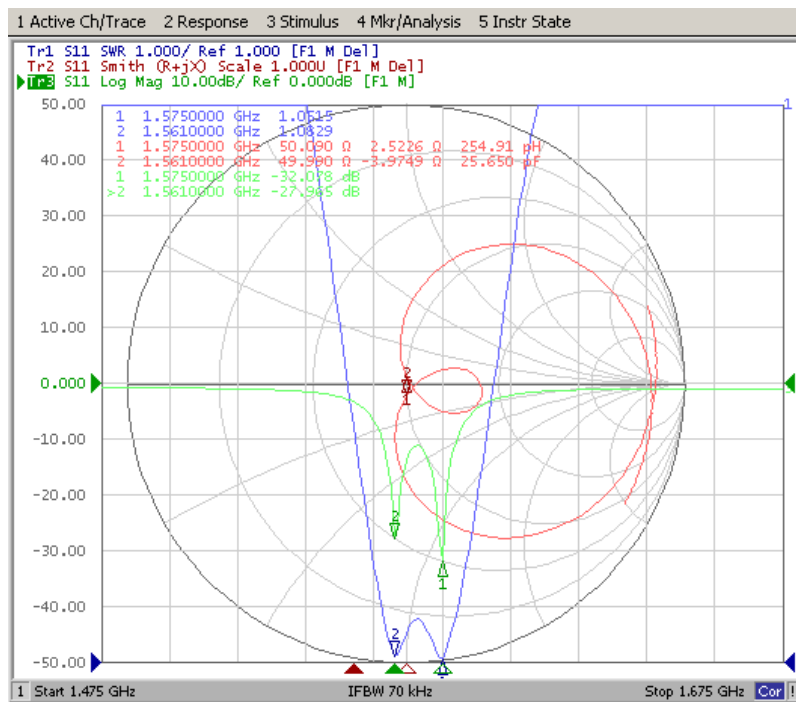
## Mechanical Specifications

Input connector	SMAJ
Antenna Structure	Ceramic Overlapping Structure
Antenna Element	25*25*4
Cable Length	3m
Working Temperature	-30 C ~ +80 C
Working Humidity	40~85%
Weight	60.9g±1g

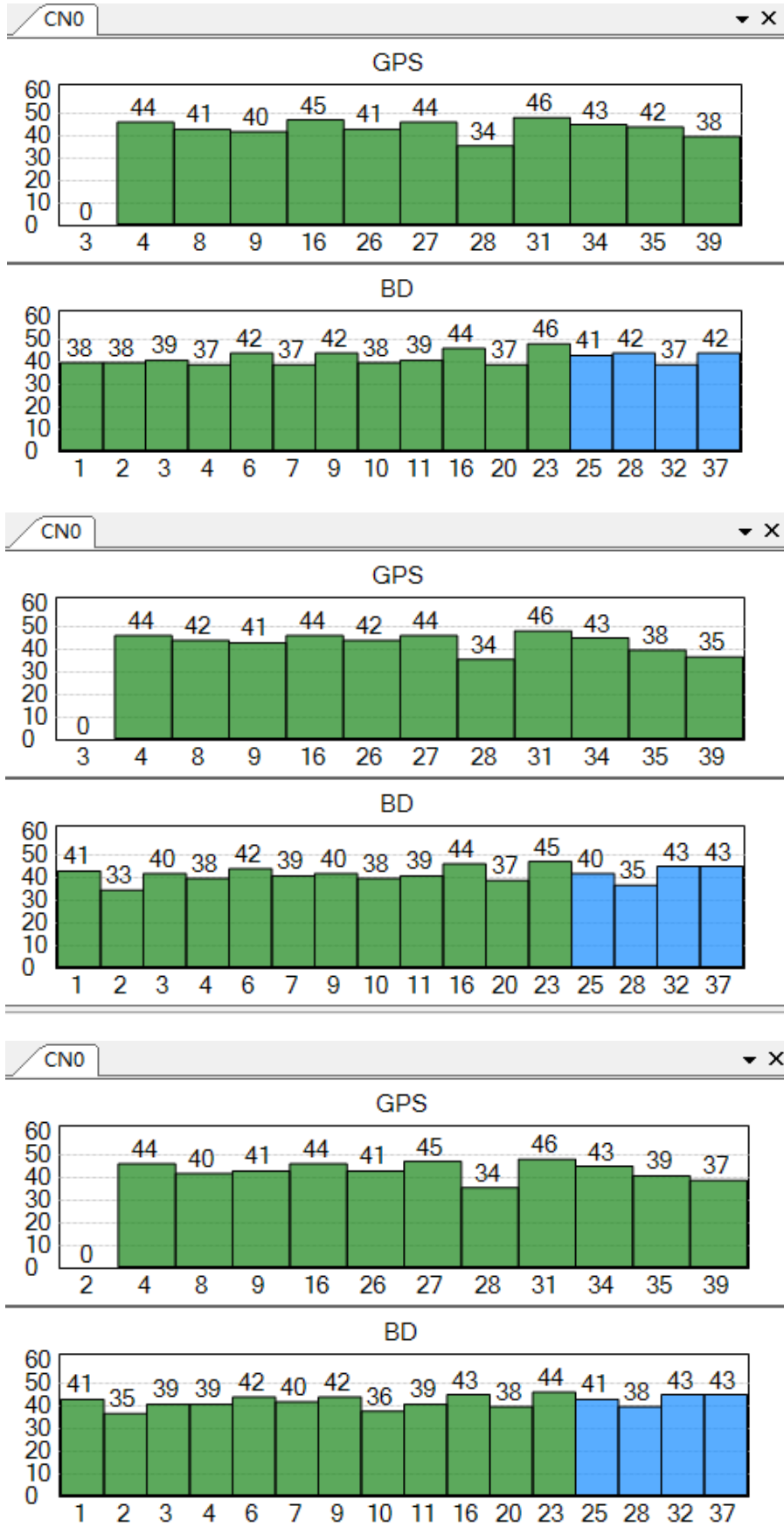
## 2 ANTENNA STRUCTURE DIMENSIONS






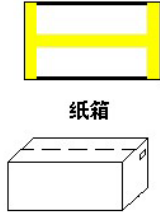
## 3 PASSIVE TEST DATA



# 4 ELECTRICAL PERFORMANCE INDEX



## 5 PACKAGING INFORMATION

Products	Packaging 1	Packaging 2	Shipping cartons
			
GNSS Antenna	1PCS/bag	50PCS/bag	20 bags / carton

## 6 QUALITY

Cognizant of our commitment to quality, we operate our own factory equipped with state-of-the-art production facilities and a meticulous quality management system. We hold certifications for ISO9001, ISO14001, ISO27001, OHSA18001, BSCI.

Every product undergoes stringent testing, including transmit power, sensitivity, power consumption, stability, and aging tests. Our fully automated module production line is now in full operation, boasting a production capacity in the millions, capable of meeting high-volume production demands.

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