

# Rubber Duck Antenna

## AT101



Datasheet  
V 1.0.0



## Version Note

Version	Details	Contributor(s)	Date	Notes
1.0.0	First edit	Michelle	2026.03.06	

## Part Number

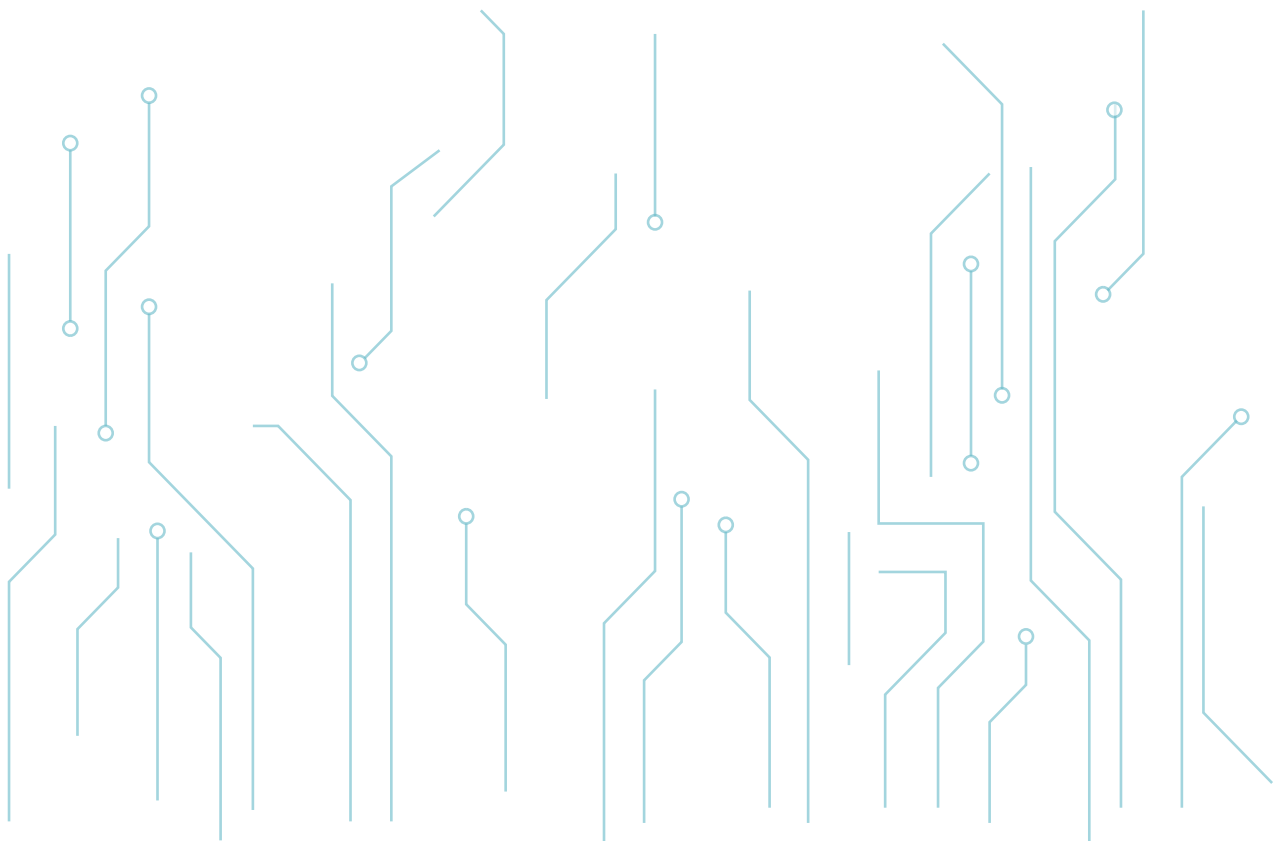
Model	Hardware Code
AT101	-

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[https://en.minewsemi.com/file/AT101\\_Datasheet\\_EN.pdf](https://en.minewsemi.com/file/AT101_Datasheet_EN.pdf)



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# 1 PRODUCT OVERVIEW

## 1.1 Overview

AT101 is a highly adaptable rubber-dipped antenna specifically designed for the 2.4 GHz band (2400-2500 MHz). Featuring an SMAJ connector and 50Ω input impedance, it measures 195±2 mm overall. Its foldable design balances practicality and portability, making it suitable for various devices requiring wireless signal transmission. The antenna fully complies with RoHS environmental standards.



## 1.2 Product Features

- Stable electrical performance: Covers the core frequency band of 2400-2500MHz, with a voltage standing wave ratio (VSWR)  $\leq 2.0$ . Maximum gain reaches 3.52dBi, while efficiency remains within the range of 54.7%-72.44%. Signal parameters meet standards, fulfilling wireless communication transmission requirements.
- Compliance is guaranteed: Strictly conforms to the ROHS 2015/863/EU environmental standards.

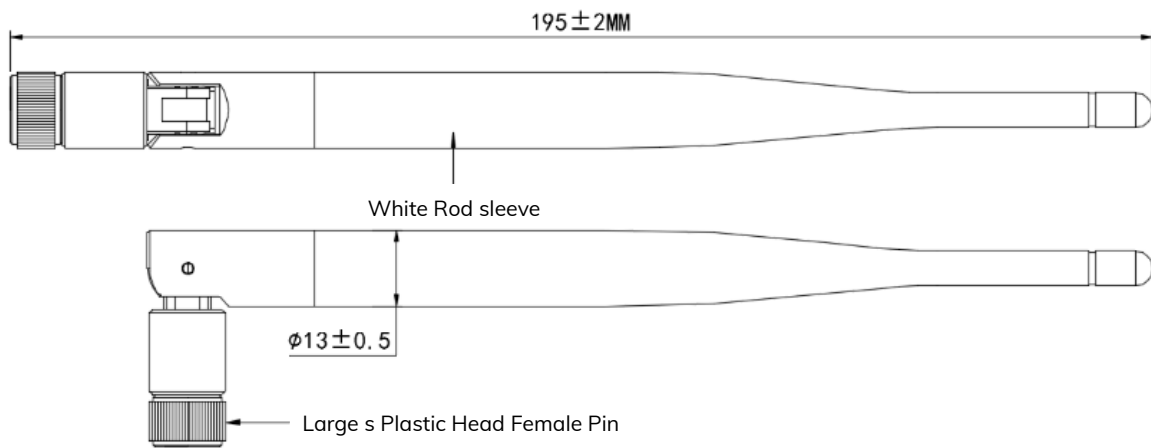
## 1.3 Electrical Properties and Mechanical Properties

Electrical Specifications	
Frequency Range	2400-2500MHz
VSWR	$\leq 2.0$
GAIN	$\leq 3.52$ dBi
Radiation	OMNI
Polarization	LINEAR
Input Impedance	50 $\Omega$

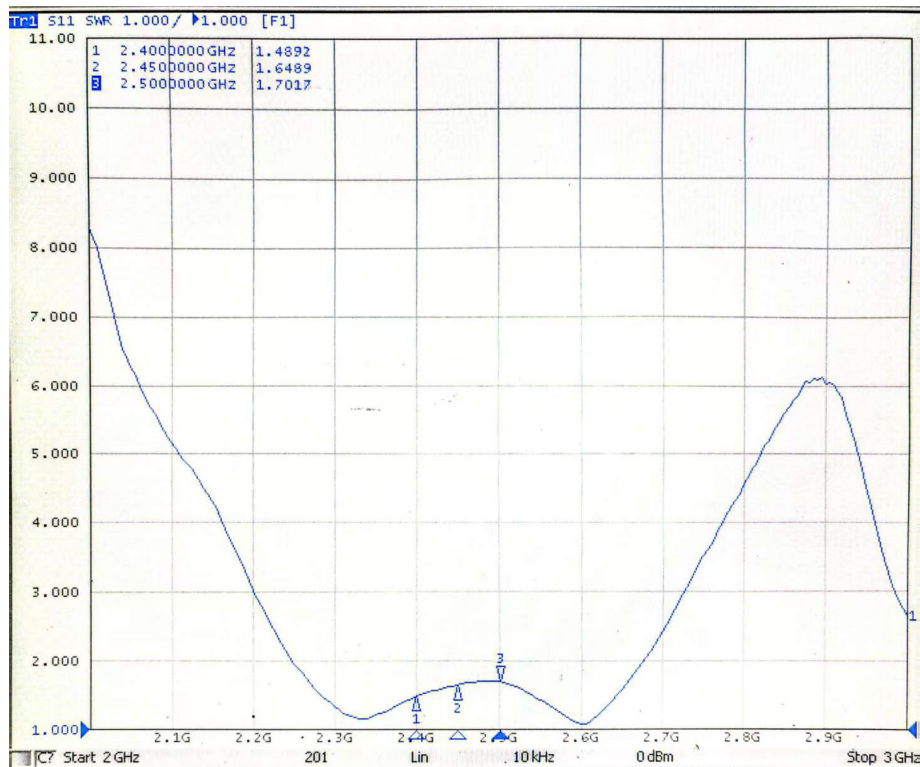
## Mechanical Specifications

Input Connector	SMAJ
Antenna Material	ABS & COPPER
Working Temperature	-30°C ~ +80°C
Working Humidity	40~85%
Weight	17g±1g

## 2 ANTENNA STRUCTURE DIMENSIONS



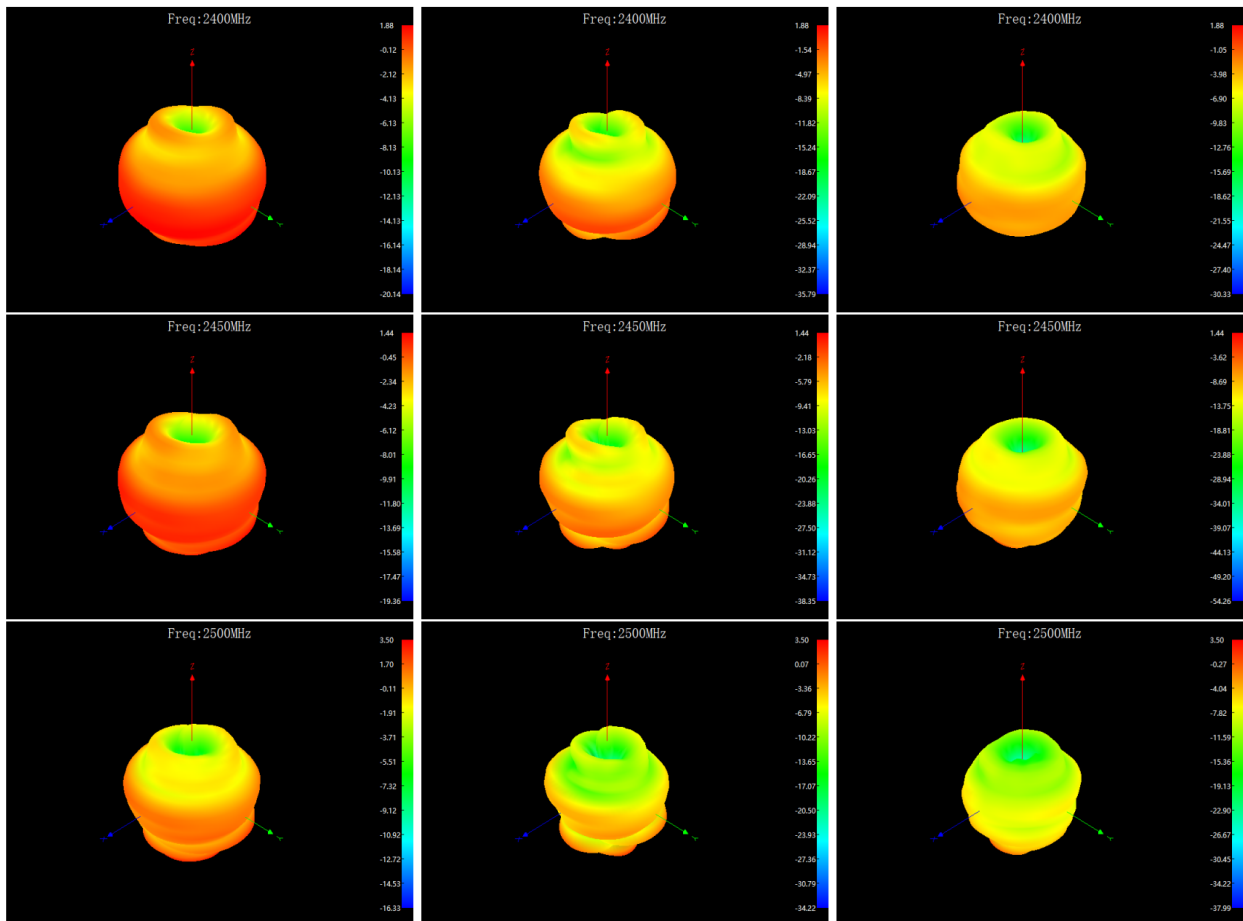
## 3 PASSIVE TEST DATA

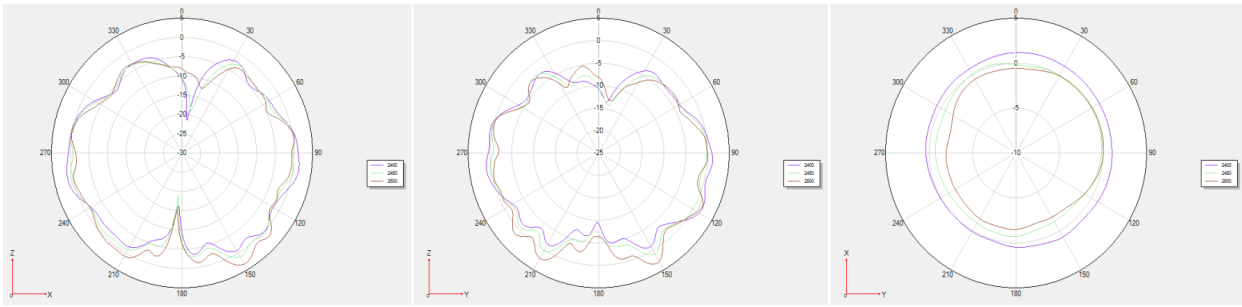


## 4 GAIN EFFICIENCY TEST DATA





Frequency/MHz	Efficiency / %	MaxGain/dBi
2400	67.3	1.88
2410	66.22	2.06
2420	66.07	1.63
2430	69.18	1.43
2440	72.44	2.21
2450	64.57	1.44
2460	67.45	2.42
2470	54.7	1.97
2480	61.38	3.09
2490	58.08	3.52
2500	55.46	3.5

## 5 DIRECTION DIAGRAM





## 6 PACKAGING INFORMATION

Products	Packaging 1	Packaging 2	Shipping cartons
	 PE袋	 PE袋	 纸箱
Rubber Duck Antenna	1PCS/bag	50PCS/bag	20 bags / carton

## 7 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, OHSAS18001, 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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