

|                      |                                            |
|----------------------|--------------------------------------------|
| name of the supplier | Huaian Dingze Electronic Technology Co LTD |
| name of the material | WiFi Double frequency glue stick antenna   |
| Part Number          | AR2458-109SMA                              |

# Antenna specification

## 一、Summary

This antenna is a WiFi dual band terminal glue stick antenna, and its working frequency is 2400-2500MHz/5150-5850MHz. It is widely used in WiFi products, Bluetooth headsets and audio, PAD, mobile phone multifrequency antennas, and various terminal devices. It adopts a small volume and bendable design, which can provide good data transmission and communication functions.



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## 二、Technical Requirement

### 2.1 Antenna Index

|   | Technical requirement | Technical indicators     |
|---|-----------------------|--------------------------|
| 1 | Operating frequency   | 2400-2500MHz/515-5850MHz |
| 2 | Max Antenna gain      | 3.0dBi                   |
| 3 | Polarization mode     | Linear polarization(LP)  |
| 4 | output VSWR           | < 2.0                    |
| 5 | Output impedance      | 50Ω                      |

### 2.2 Environmental Adaptability

|   |                       |               |
|---|-----------------------|---------------|
| 1 | Operating temperature | -40°C ~ +65°C |
| 2 | Storage temperature   | -55°C~ +85°C  |
| 3 | relative humidity     | 10%~95%       |

### 2.3 Mechanical Properties

|   |                  |                                                      |
|---|------------------|------------------------------------------------------|
| 1 | Antenna size     | Φ10*109mm, See Fig. 1 Reference Dimension of Antenna |
| 2 | Antenna weight   | 10g                                                  |
| 3 | Output connector | SMA-J                                                |
| 4 | Shell color      | ABS, black                                           |

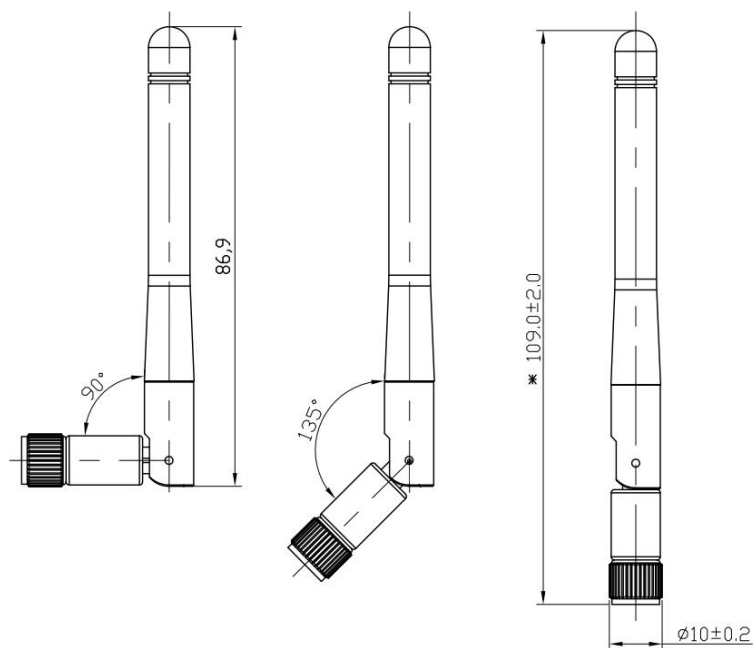
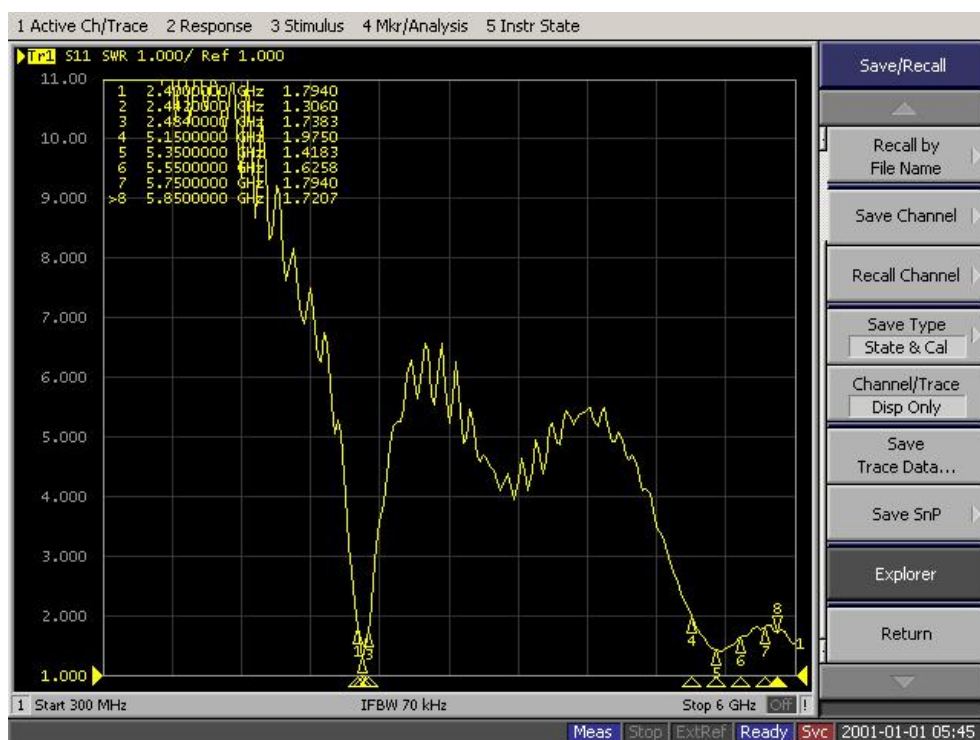


Figure 1 Outline Dimension of Antenna

## ≡ Test Data

### 3.1 VSWR



3.1 Antenna gain and pattern

| Frequency ID    | 1     | 2     | 3     | 4     | 5     | 6     | 7     |
|-----------------|-------|-------|-------|-------|-------|-------|-------|
| Frequency (MHz) | 2400  | 2420  | 2440  | 2460  | 2480  | 2500  | AVG   |
| Gain (dBi)      | 2.76  | 2.84  | 2.93  | 3.0   | 2.97  | 2.84  | 2.89  |
| Efficiency (%)  | 60.95 | 56.53 | 56.15 | 52.82 | 52.09 | 57.64 | 56.02 |

| Frequency ID    | 1     | 2     | 3     | 4     | 5     | 6     | 7     | 8     | 9     |
|-----------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Frequency (MHz) | 5150  | 5250  | 5350  | 5450  | 5550  | 5650  | 5750  | 5850  | AVG   |
| Gain (dBi)      | 2.65  | 2.86  | 2.95  | 3.0   | 2.99  | 2.91  | 2.84  | 2.76  | 2.87  |
| Efficiency (%)  | 45.34 | 46.10 | 46.34 | 46.28 | 57.73 | 66.85 | 75.97 | 75.09 | 57.46 |

Antenna pattern (3D) :

