



# **2.4&5.8GHz PIFA ANT**

## **Specification**

**SHENZHEN BILIAN ELECTRONIC CO., LTD**

Add: 10~11/F, Building 1A, Huaqiang idea park, Guangming district, Shenzhen. Guangdong, China

Web: [www.b-link.net.cn](http://www.b-link.net.cn)

## Revision History

| Revision | Summary               | Release Date |
|----------|-----------------------|--------------|
| 0.1      | First edition release | 2022-09-28   |
|          |                       |              |
|          |                       |              |

Product Name: 2.4&5.8GHz PIFA Ant

Frequency: 2.4~2.5&5.1~5.83GHz

Revision: V0.1

Customer Approval:

Company:

Title:

Signature:

Date:

BL-link Approval:

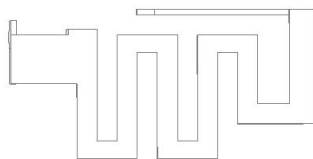
Title:

Signature:

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|  |  |  |
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## 1. Introduction



This antenna support 2.4~2.5&5.1~5.8GHz band frequency. Designed by PIFA antenna theory  
Almost Omni-directional radiation for far field.

Good port matching ,low return loss ,high efficiency can make communication more easily.

### 1.1 Features

- Operating Frequencies: 2400~2500&5100~5830MHz
- Radiation: Omni-directional radiation
- Modulation support: WLAN/BT/ZIGBEE
- SMT on board PIFA antenna

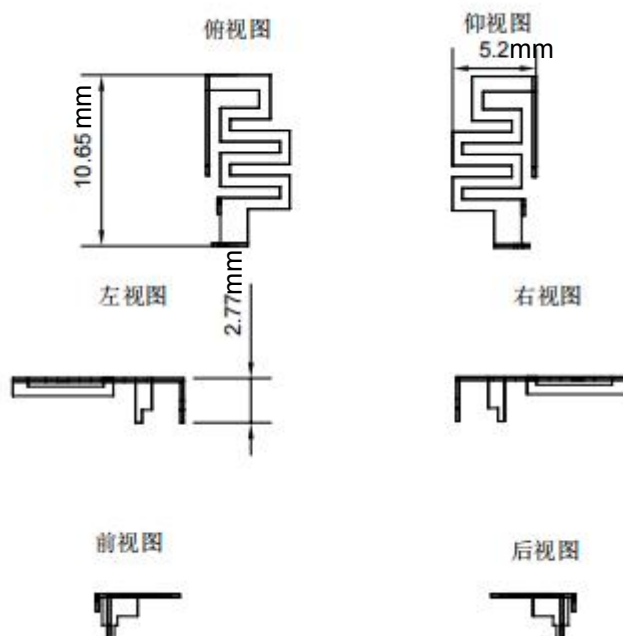
### 1.2 Applications

- IP Camera
- STB
- Smart TV
- Screen thrower
- Intelligent home furnishing
- Other devices which need to be supported by wireless network

### 1.3 General Specifications

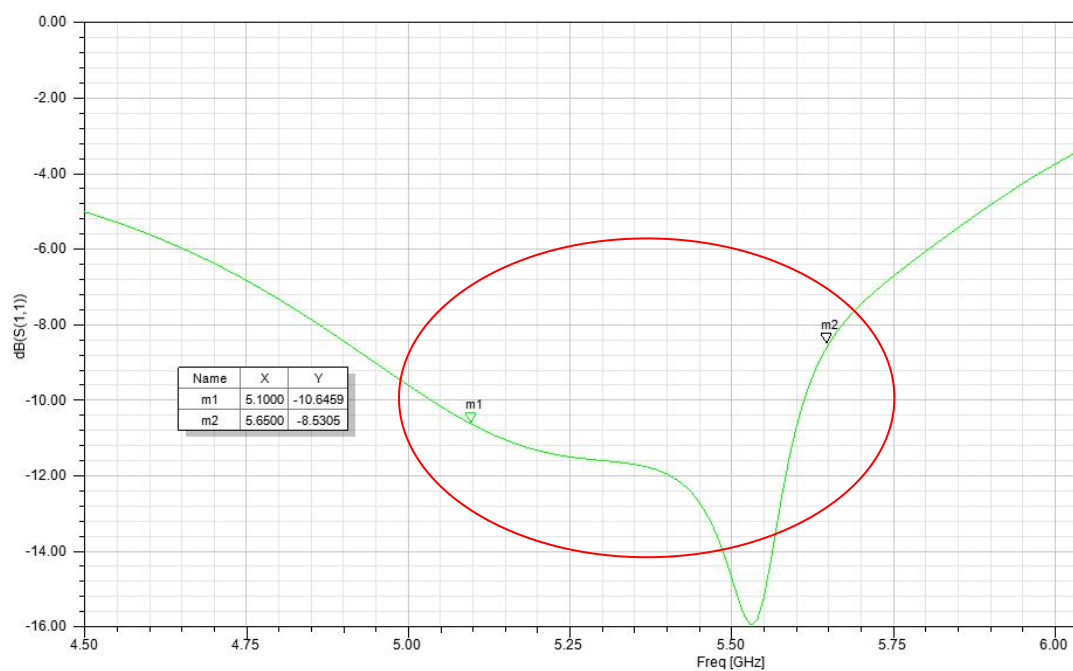
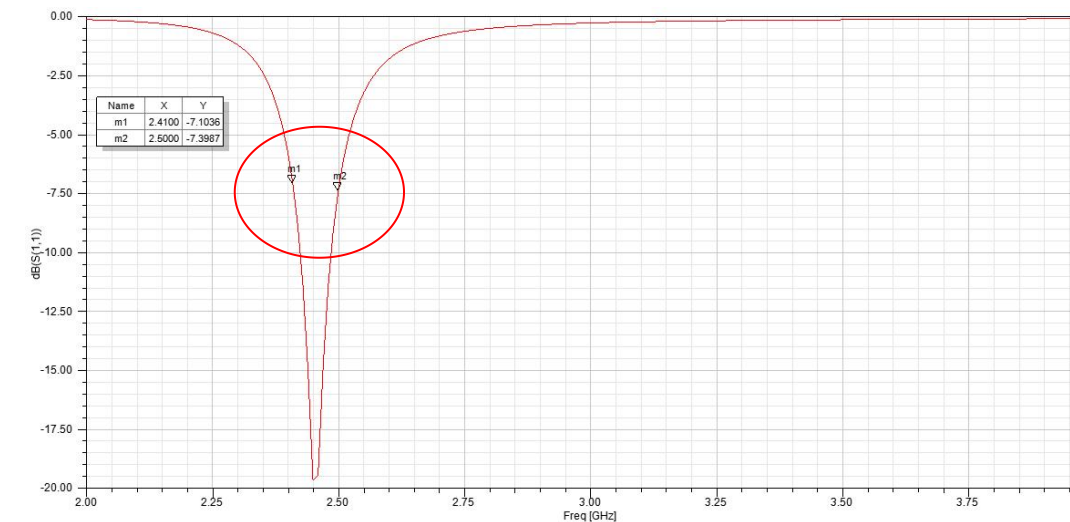
|                    |                         |
|--------------------|-------------------------|
| Product Name       | 2.4&5.8GHz PIFA antenna |
| Frequency          | 2400~2500&5100~5800MHz  |
| Modulation support | WLAN/BT/ZIGBEE          |
| VSWR               | $\leq 3$                |
| Return loss        | $\leq -6\text{dB}$      |
| Radiation          | Omni-directional        |
| Gain (peak)        | 0.5dBi                  |
| Polarization       | Linear                  |
| Admitted Power     | 2W                      |
| Connector          | SMT on board            |
| Efficiency         | 35%~50%                 |
| Cable              | NI                      |

### 2. Mechanical Specifications



SMT on board PIFA antenna, inside of wireless products. Antenna's material is Copper-Nickel-Zinc Alloy.

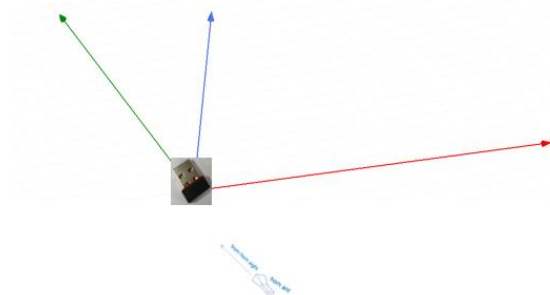
### 3. S-parameter



Return loss:  $\leq -6\text{dB}$

VSWR:  $\leq 3$

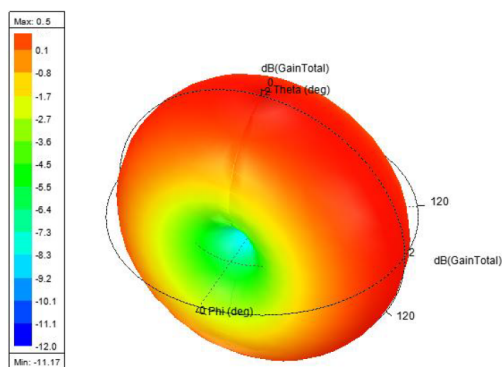
## 4. Radiation parameter



### 4.1 Gain and efficiency

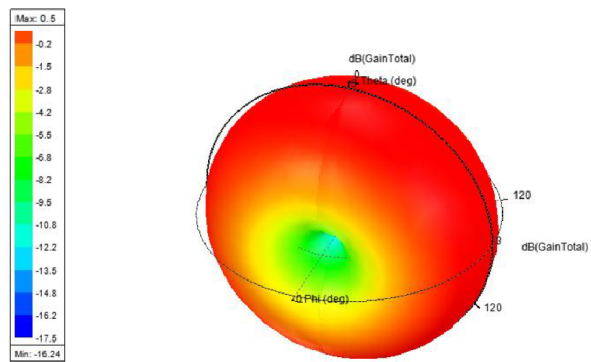
| Frequency  | Gain   | efficiency |
|------------|--------|------------|
| 2.4&5.8GHz | 0.5dBi | 35%~50%    |

### 4.2 Radiation Pattern



3D radiation(2.45GHz)

XZ plane(5.5GHz)



3D radiation(5.5GHz)