

SPECIFICATION



Shenzhen feixin wireless communication co., ltd

2.4G SMT patch  
antenna product  
specification book

|                      |                              |                             |                    |
|----------------------|------------------------------|-----------------------------|--------------------|
| guest house hold     |                              | frequently stage            | 2400-2500MHz       |
| product name         | 2.4G SMT steel antenna       | edition basis               | A1                 |
| Customer item        |                              | Flying core material number | FX-2.4G-SMT-GP-A02 |
| Material description | 2.4G SMT patch steel antenna |                             |                    |
| R F design           | jianshe chen                 | Radio frequency manager     | Zhang Junfeng      |
| structural design    | Xie yufei                    | Structure manager           | Liu dong           |
| technical director   | Chen kai                     | sun period                  | 2024-07-25         |

Customer

Does the assembly meet your☐NG

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## catalogue

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## I. Product pictures

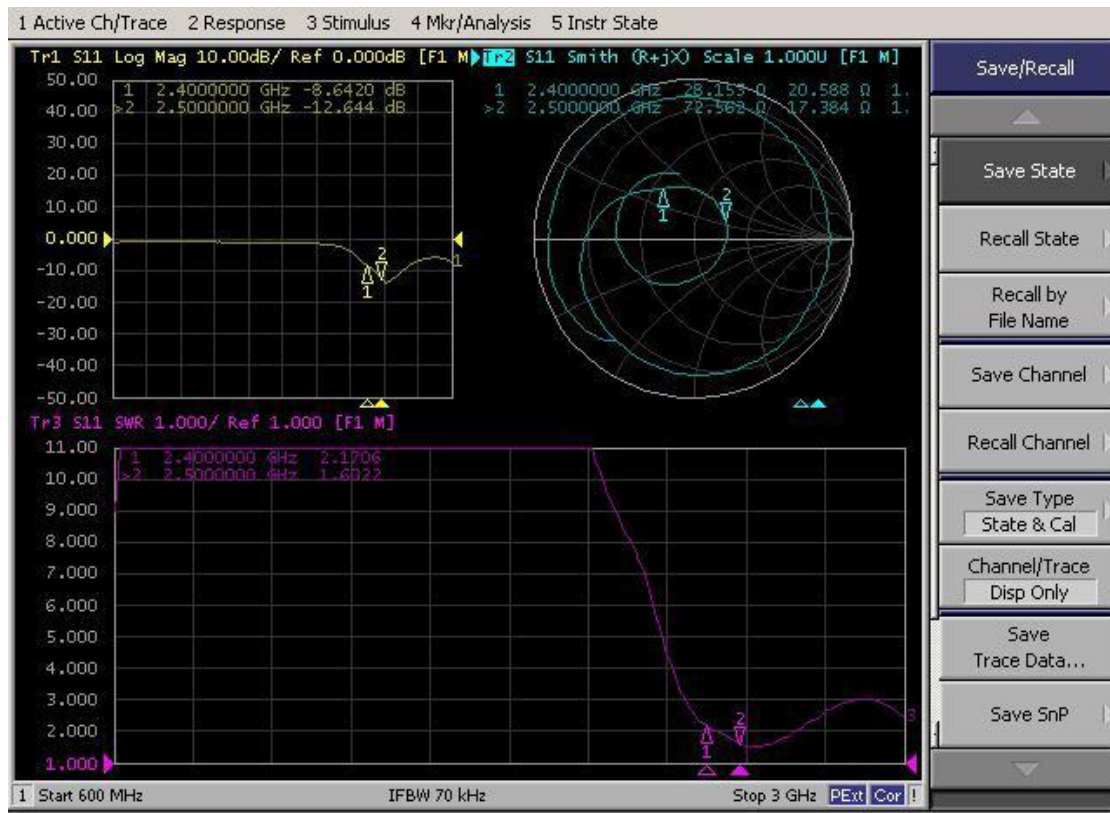


Second, the product parameters

| Product test parameters                                          |                           |                             |                        |
|------------------------------------------------------------------|---------------------------|-----------------------------|------------------------|
| Product Name (name)                                              | 2.4G SMT patch antenna    | Product type (Model Type)   | FX-2.4G-SMT-GP-A02     |
| Electrical performance indicators<br>(Electrical Specifications) |                           |                             |                        |
| Frequency range (frequency range)                                | 2400-2500MHz              | Polarization (polarization) | perpendicular/vertical |
| Input Impedance                                                  | 50 $\Omega$               | radiation direction         | omnidirection          |
| Standing wave ratio (VSWR)                                       | $\leq 3.0$                | Power capacity (power)      | 50W                    |
| Gain                                                             | 2dBi                      | Bandwidth                   | 100MHz                 |
| Mechanical Specifications (mechanical specifications)            |                           |                             |                        |
| Dimensions (dimensions)                                          | 9.20*5.20*3.3 $\pm$ 0.3mm | Shell color (Radome Color)  | Silver white           |
| Connector model (connector)                                      | SMT patch                 | Cable Length                | \                      |
| Shell material Radome Material                                   | ABS                       |                             |                        |

|                                                     |             |                                                   |             |
|-----------------------------------------------------|-------------|---------------------------------------------------|-------------|
| <b>Working temperature</b><br>(Working Temperature) | -40°C-+95°C | <b>Storage temperature</b><br>(Limit Temperature) | -40°C-+95°C |
|-----------------------------------------------------|-------------|---------------------------------------------------|-------------|

Third, S11( VSWR, Return loss, Smith) data

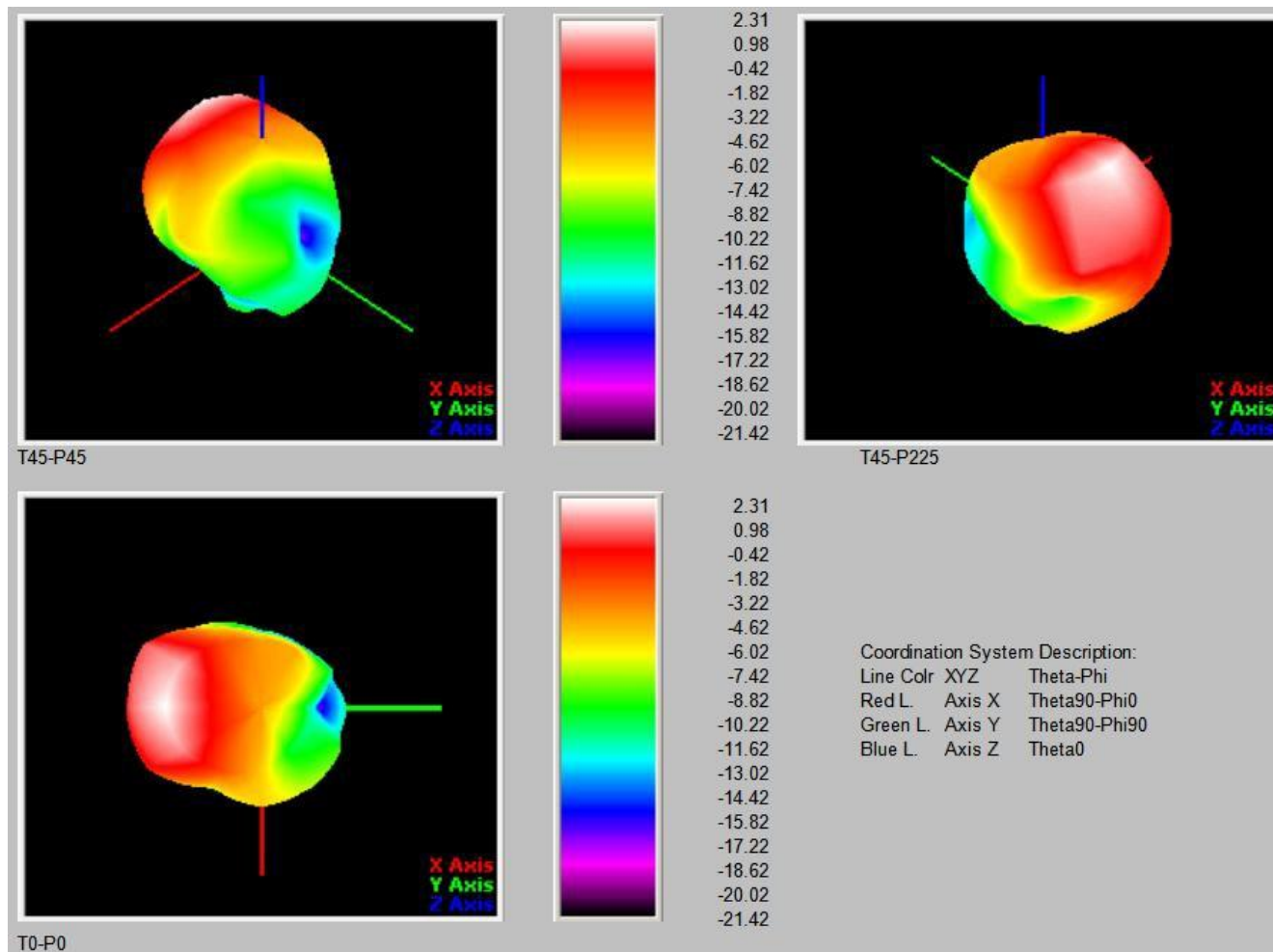


### (1) Antenna test efficiency (%) and Gain (gain)

| Test Point ID | Freq. (MHz) | Gain (dBi) | Efficiency (%) |
|---------------|-------------|------------|----------------|
| <u>1</u>      | 2400.0      | 2.87       | 59.1%          |
| <u>2</u>      | 2410.0      | 1.95       | 56.0%          |
| <u>3</u>      | 2420.0      | 2.10       | 60.2%          |
| <u>4</u>      | 2430.0      | 2.04       | 57.6%          |
| <u>5</u>      | 2440.0      | 2.19       | 60.3%          |
| <u>6</u>      | 2450.0      | 2.31       | 61.9%          |
| <u>7</u>      | 2460.0      | 2.37       | 60.6%          |
| <u>8</u>      | 2470.0      | 2.40       | 60.5%          |
| <u>9</u>      | 2480.0      | 1.90       | 66.8%          |
| <u>10</u>     | 2490.0      | 2.37       | 69.3%          |
| <u>11</u>     | 2500.0      | 2.46       | 66.9%          |

## (2) Antenna apple diagram

Passive -Freq2450.00MHZ



## IV. Structural Drawings

|  |  |    |  |    |      |    |
|--|--|----|--|----|------|----|
|  |  | 标准 |  | 签名 | 修改内容 | 日期 |
|  |  |    |  |    |      |    |

技术要求:

- 1.材质: 不锈钢304镀镍 T=0.30;
- 2.带\*号尺寸与带公差尺寸为重点管控尺寸, 其他尺寸按明细栏公差管控;
- 3.毛边不大于料厚的1/4, 刀口对接处段差不大于0.1mm;
- 4.表面干净, 无油污, 脏物等;
- 5.无压痕, 断裂, 变形等不良;
- 6.产品需过48小时盐雾实验。
- 7.产品符合RDPHS标准与可信可靠性测试要求,

展开图

| 第三规格         |       |    |      | 20241023            |       |    |      |
|--------------|-------|----|------|---------------------|-------|----|------|
| 项目           | 名称    | 设计 | 日期   | 项目                  | 名称    | 审核 | 日期   |
| 0~3          | ±0.05 | Φ  | 0.02 | 3~30                | ±0.08 | ○  | 0.03 |
| 30~50        | ±0.10 | ◎  | 0.02 | 50~80               | ±0.12 | ⊥  | 0.02 |
| 角度           | ±3°   | ∠  | 0.05 | 材料                  |       | 批准 |      |
| 第 1 页, 共 1 页 |       |    |      | 单位 mm 比例 1:1 版本 R.A |       |    |      |

## FOXIN 深圳飞芯无线通讯有限公司