

**Shenzhen yGalax Technologies
Limited**

Project Name: TD20-ANT

Ver: V6.0

date: 2025.01.8

Antenna specification

Project Name: TD20-ANT

Antenna type: PIFA antenna

Customer PN.: Shanghai TUGE Data Technologies Co., Ltd.

Transfer Date: 2025.01.08

Supplier Confirm	Project	Engineer	Quality
date	2025.01.8	2025.01.8	2025.01.8

Customer confirm	PM	Electron	MD	PD	QE
date					

conclusion	☐ MP ☐ Limits use () K ☐ ROHS				
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Supplier name: Shenzhen yGalax Technologies Limited**The Supplier address:** Unit F, 4/F,
BlockA, Junxiangda Plaza, Zhongshanyuan Road,
Nanshan District, Shenzhen, China

1. Specification overview

This specification describes the condition of WIFI antenna.

2. Appearance

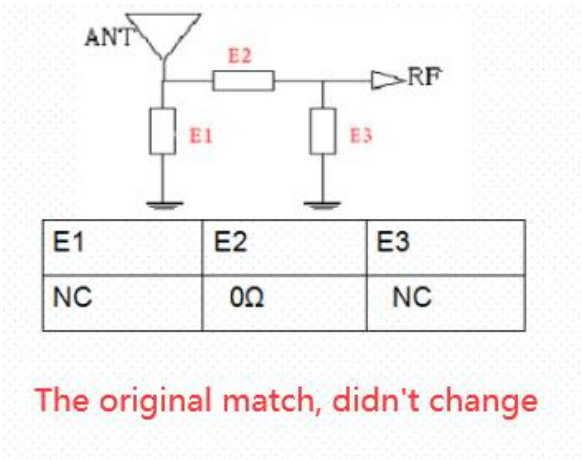


3. Electrical properties

3.1. Antenna frequency band

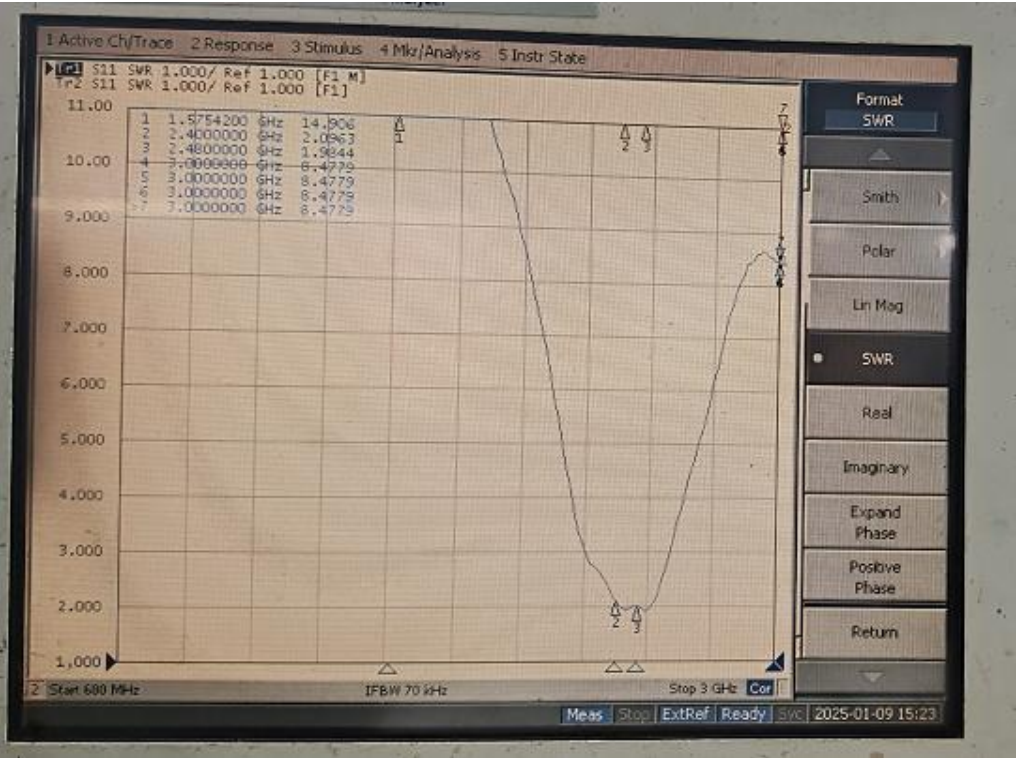
	2.4G WIFI
Emission spectrum(MHz)	2400~2500
Receiving frequency band(MHz)	2400~2500

3.2. Matching circuit

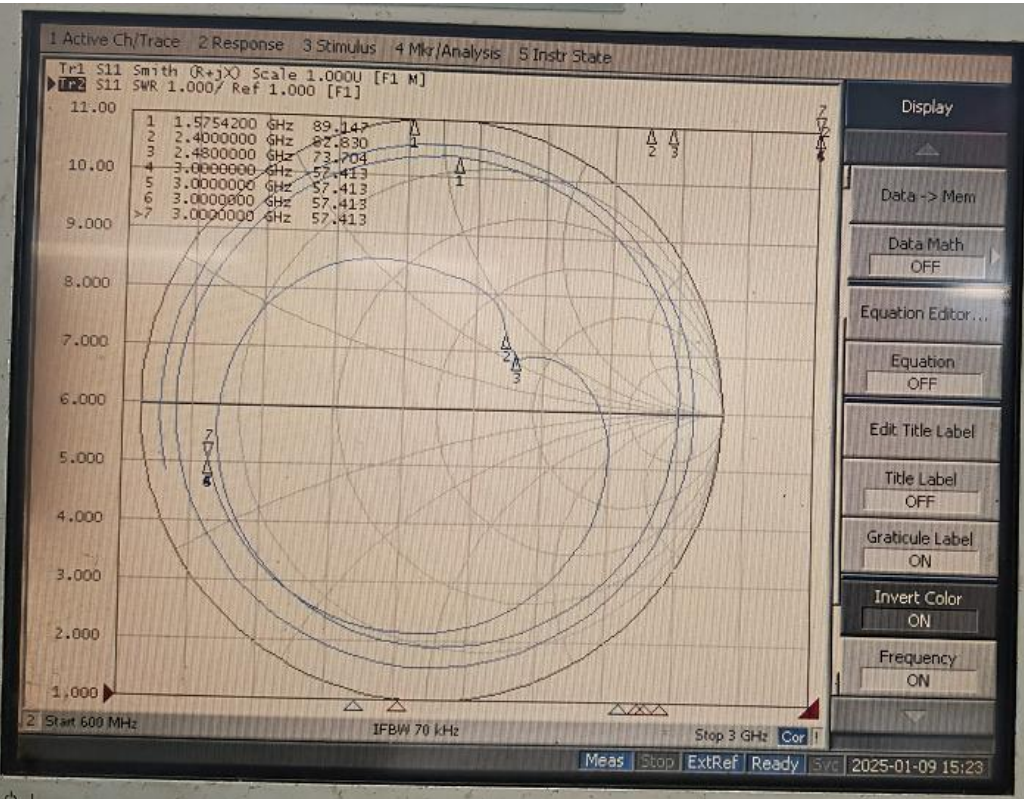


3.3 Impedance requirements
50 ohm

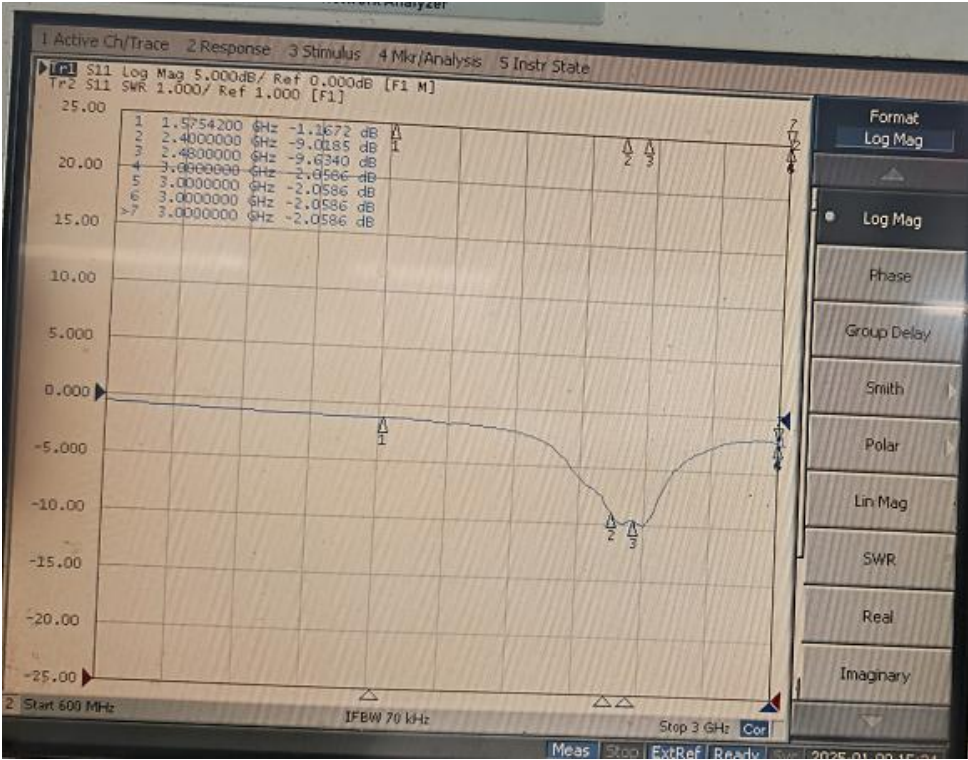
1. WIFI / Passive standing wave diagram



2.WIFI/ Passive Smith chart

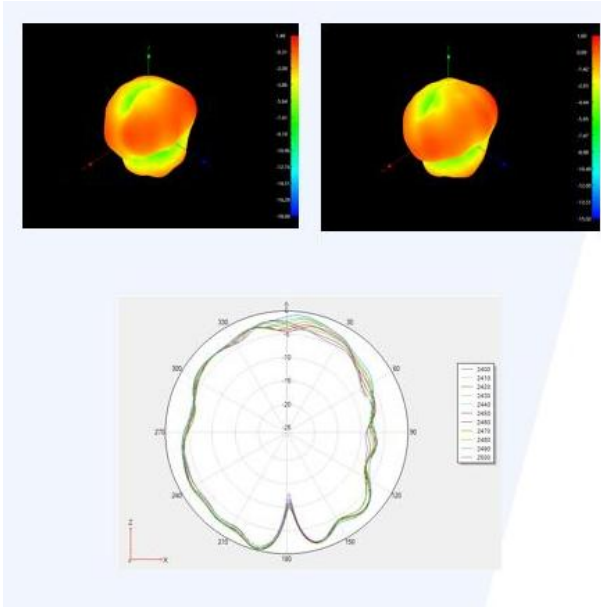


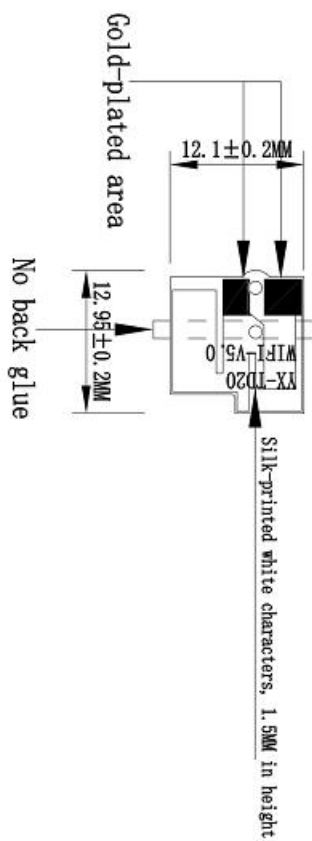
3.WIFI/ Return loss



4.WIFI/ Passive gain efficiency

Frequency	Efficiency	Gain/dBi
2400	55.76	2.83
2410	53.66	2.77
2420	55.76	2.72
2430	54.35	2.61
2440	54.58	2.49
2450	53.43	2.21
2460	52.53	2.07
2470	49.92	1.62
2480	52.98	2.05
2490	51.97	1.85
2500	50.03	1.77





Describe:
1. Content "XXXX" indicates production date (year and week, e.g. 2101)

Note:

1. MATERIAL :18/25 (one and a half) electrolytic copper, PI base MATERIAL.. The green line shows the outline of the copper layer, and the purple line shows the shape.

2. Tolerance requirements are not noted: A. copper foil to copper foil ± 0.05 B. Copper foil to shape ± 0.15 (special requirements)

A. Tolerance from hole to shape $+/-0.15(+/-0.10$ if special requirements)

3. Nickel plating: Ni: 2-7 μ m Al: not less than 0.025 μ m (salt spray must be over 48h), ink:

4. This FPC adhesive is 3M 9471LSE, the adhesive should be super strong!

5.1. ST size: The minimum measurement quantity is any 35 product sizes selected from 500 For CPK analysis.

5.2. * size is the key control size;

5. Any material modification must be approved in writing by the yolaax Engineering Department and passed all tests by the yolaax Quality Department;

7. Products must meet ROHS/HS/REACH standards;

REVISION	ECOM	REVISION NOTE	AUTHOR	DATE
AI		New release		08/01/25

WIFI FPC (black)		XXX	XXX	P/N	ED. PT	1	REMARK
ITEM	PART NAME	CLIENTE NAME	CLIENTE NUMBER		MATERIAL	QTY	
GENERAL TOLERANCE TABLE							
LINEAR	ANGULAR	 		PART NAME			
		UNIT	PART NUMBER	YX0628-TD20			
DIVISION	TOLERANCE	DIVISION	TOLERANCE				
0-0.0	±0.05	0-5°	±0.5°				
10-50	±0.10	5-10°	±1°				
50-60	±0.15	10-15°	±1.5°				
≥60	±0.2						
This document is property of precision Technology it can not be copied, updated and taken out concept/entries be allowed							
A4		R DR		XXXXXX			
SCALE		FULL		PAGE		REV	
YX0628 (WIFI FPC)						A1	

Delivery method: single pcs packaging