



Shenzhen Xingtong Wieress Technology Co., Ltd

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Address: 3rd Floor, Building A1, Jiuwei Qiangrongdong Industrial Zone, Xixiang, Bao'an District, Shenzhen

Product specification sheet

Product number:

Product Name: WIFI stick antenna

Product part number: SYX.1.2.001

producer	Reviewer	Date
Jiajun Huang	Yanlong Wu	2024-05-15

Customer confirmation

Customer Name: SHENZHEN WESION TECHNOLOGY CO., LTD.
Approval:
Time:
Notes:

 Shenzhen Xingtong Wieress Technology Co., Ltd		Date	2024-05-15
		Version	A0
		Document number	XT-YF-004
Product Name	WIFI stick antenna	Product number	

1.Product Constrution

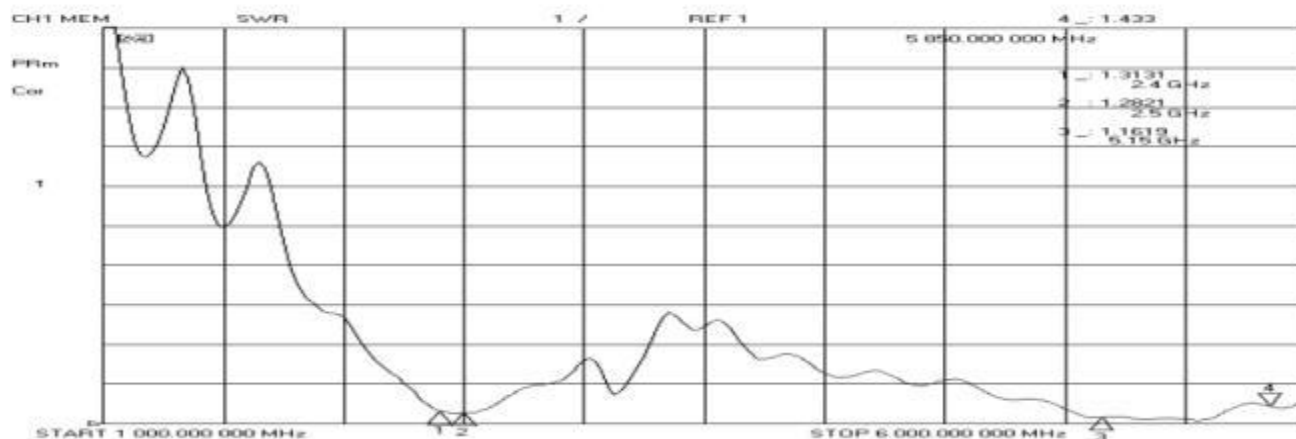
- 1. Antenna material: silicone+ABS+copper tube+SMA
- 2. Packaging process: assembly+welding+electroplating
- 3. Antenna size: 108.5 * 9.4 (tolerance $\pm 1\text{mm}$)
- 4. Product description: 2.4G+5.8G dual band wifi antenna, total length $108.5 \pm 1\text{mm}$, SMA male pin with 90 degree bending connector

2.parameters

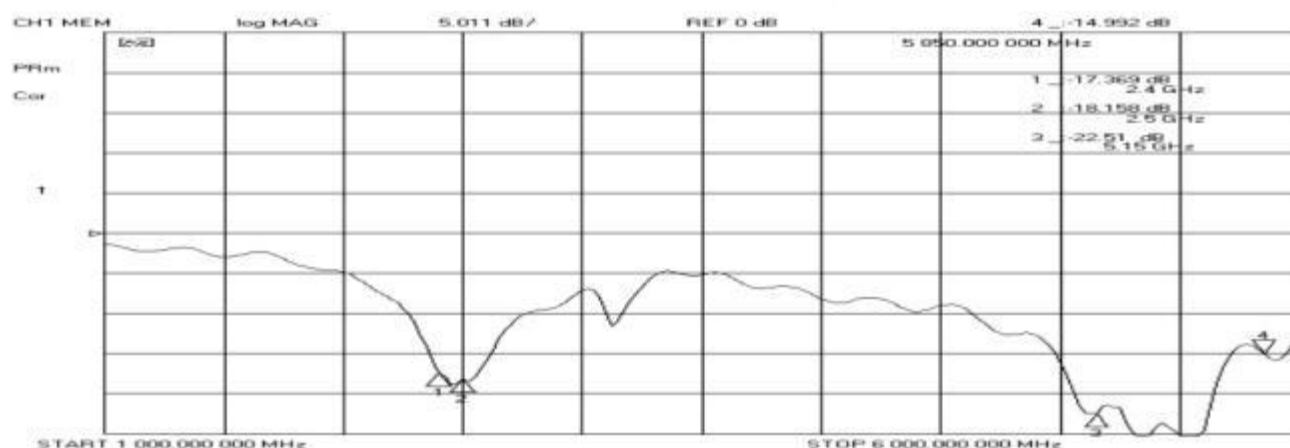
- Scope of use: Customer supplied machines
- Antenna frequency: 2400-2500Mhz 5150-5850Mhz
- Antenna voltage standing wave ratio: 2.4G<1.5 5.8G<1.5
- Antenna free space gain: 2.4 $\geq$ 2.0dbi 5.8 $\geq$ 2.0dbi
- Antenna impedance: 50 Ω
- Installation method: SMA connection to motherboard OUT

3.Antenna S11 value

- 3.1: Antenna standing wave ratio



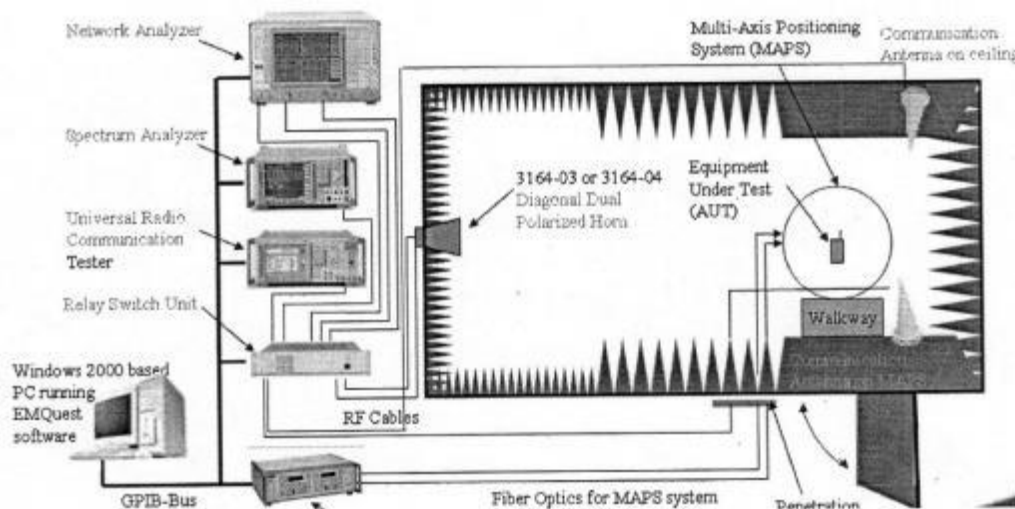
- 3.2: Antenna return loss value



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4. Antenna (OTA) testing environment

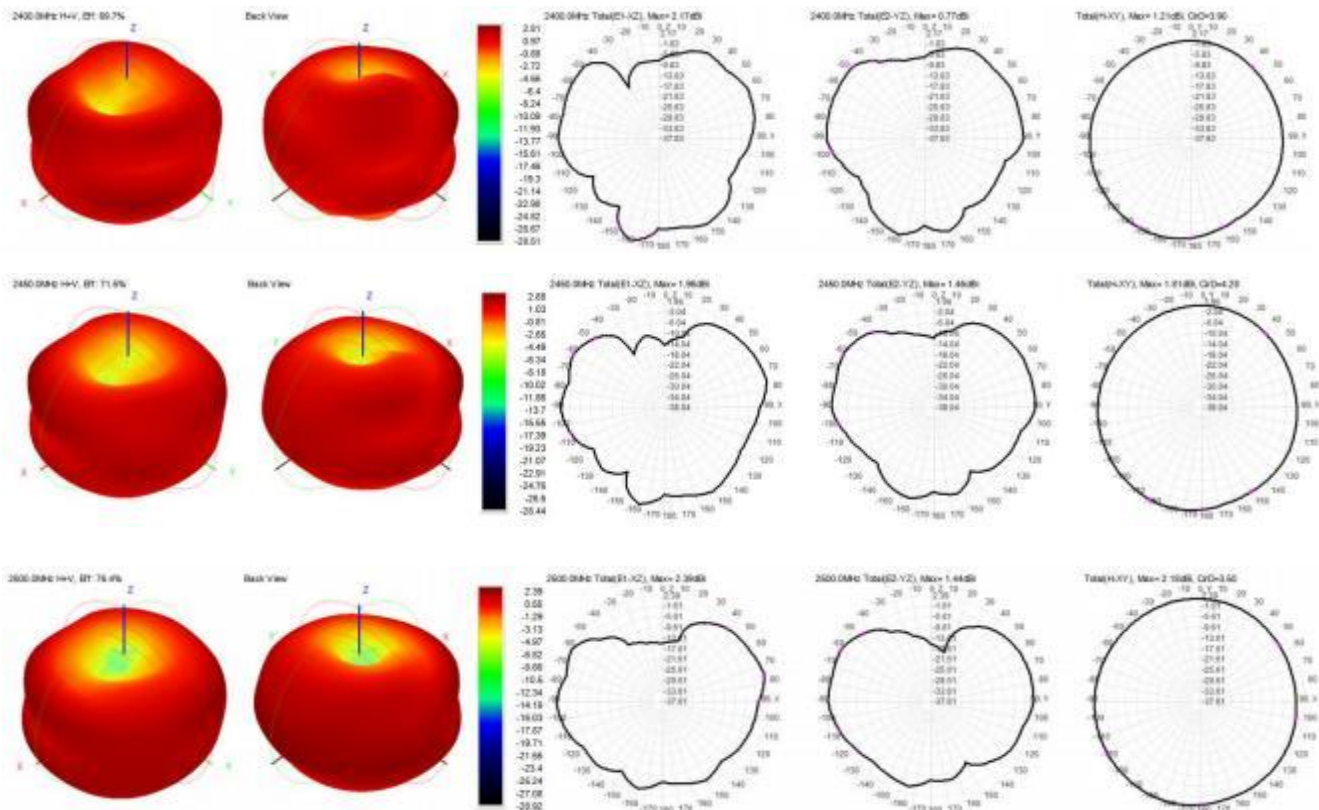
■ 4.1: Testing environment and instruments: 3D microwave anechoic chamber, network analyzer, PC testing software, engineering samples, 10dB attenuator, etc



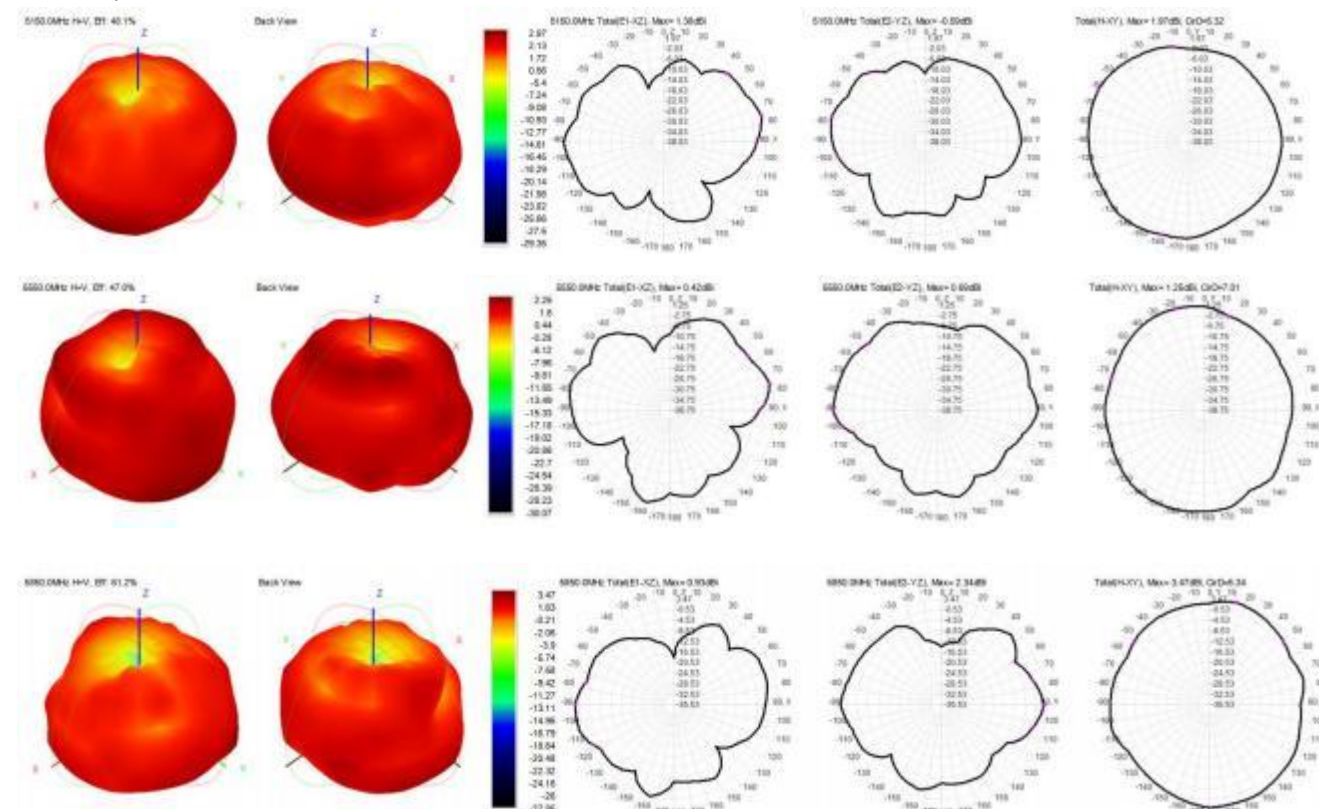
■ 4.2: Antenna efficiency/gain

Frequency (MHz)	Directivity (dBi)	Efficiency (dB)	Efficiency (%)	Gain (dBi)
2400	4.37	-1.56	69.80	2.81
2410	4.47	-1.67	68.00	2.79
2420	4.48	-1.57	69.70	2.91
2430	4.44	-1.60	69.30	2.84
2440	4.47	-1.60	69.10	2.87
2450	4.33	-1.45	71.60	2.88
2460	4.09	-1.34	73.50	2.76
2470	3.94	-1.24	75.20	2.70
2480	3.69	-1.08	77.90	2.60
2490	3.48	-1.15	76.70	2.33
2500	3.56	-1.16	76.50	2.39
5150	5.13	-3.17	48.20	2.97
5200	4.87	-2.86	51.70	3.26
5250	5.08	-2.84	52.00	2.24
5300	4.62	-2.86	51.70	3.18
5350	4.76	-2.69	53.80	2.07
5400	4.84	-2.84	52.00	3.13
5450	4.79	-2.92	51.00	2.87
5500	4.85	-3.42	45.50	2.43
5550	4.52	-3.27	47.10	2.25
5600	4.45	-3.45	45.20	2.75
5650	5.12	-3.50	44.70	2.63
5700	6.05	-3.02	49.90	3.03
5750	4.84	-2.90	51.30	2.94
5800	5.27	-3.17	48.20	2.09
5850	5.60	-2.13	61.30	3.47
5900	5.74	-2.49	56.40	3.25

4.3: Antenna OTA-2.4G-3D



4.4: Antenna OTA-5.8G-3D



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5. Attached diagram:

■ 5.1: Antenna Engineering Drawing

