

Shenzhen DEWEIMA Communication Equipment Co.,Ltd

SPECIFICATION SHEET FOR APPROVAL

CUSTOMER NAME	Shenzhen unique Scales Co.,Ltd
CUSTOMER P/N	ESP32-C2
PART NAME	WiFi/BT Antenna
DWM NO.	
APPROVAL REV.	DWM-V1.0

CONTRACTOR			DATE: 2023-07-02
QA CHECKED	ME CHECKED	RF CHECKED	MANAGER CHECKED

CUSTOMER		DATE:
Approved By	Checked By	Prepared By

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Product Specification

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WiFi/BT Antenna

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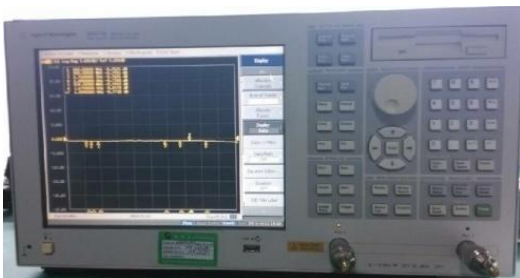
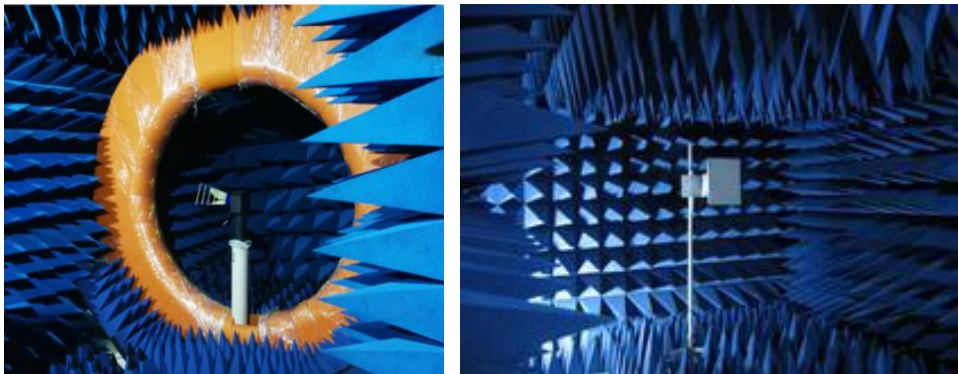
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1. Product Application

Terminal of the antenna products can only be used for WiFi/BT antenna.

2. The test environment, equipment

Item	Description	Test Condition	Requirement
2.1	Passive testing	The VSWR measurement devices are connected in sequence: Agilent5071B Network Analyzer → measurement Cable → Customer-providing Devices.	VSWR: 2400-2500MHz $\leq$ 2
		Test equipment	
			
Item	Description	Test Condition	
2.2	Active test	The antenna is tested within the cell mainboard provided by clients. Follow picture shows the measurement condition of the antenna been put on the measurement device, which is used for all measurement of electric performances.	
2.3	Microwave Anechoic chamber (Satimo&ETS)	Test equipment	
			



Product Specification

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WiFi/BT Antenna

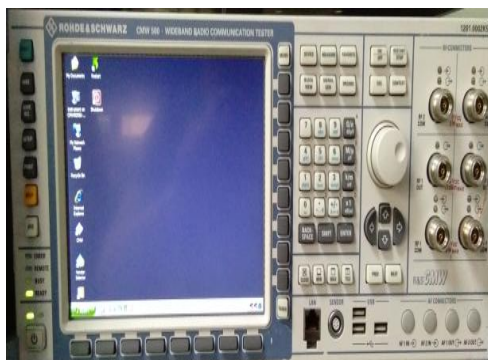
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CMW500
Agilent5071B
2.4 AgilentE4405B
Agilent8960





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3. WiFi/BT Antenna description

3.1 WiFi/BT Technology Parameters

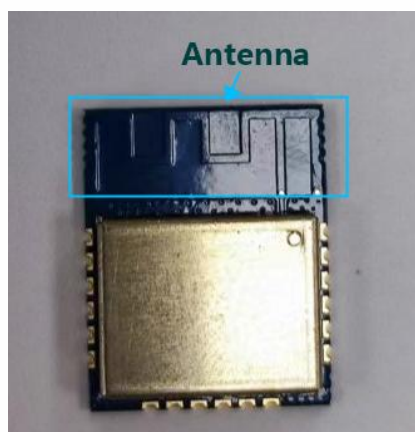
WiFi/BT Frequency Range: 2400MHz-2500MHz

WiFi/BT antenna type: IFA Antenna (PCB Antenna)

Operating Humidity: 90% R.H.MAX

Temperature Rating: 0°C ~ +40°C

3.2 WiFi/BT antenna position



3.3 WiFi/BT 3VSWR/Return Loss/Smith:





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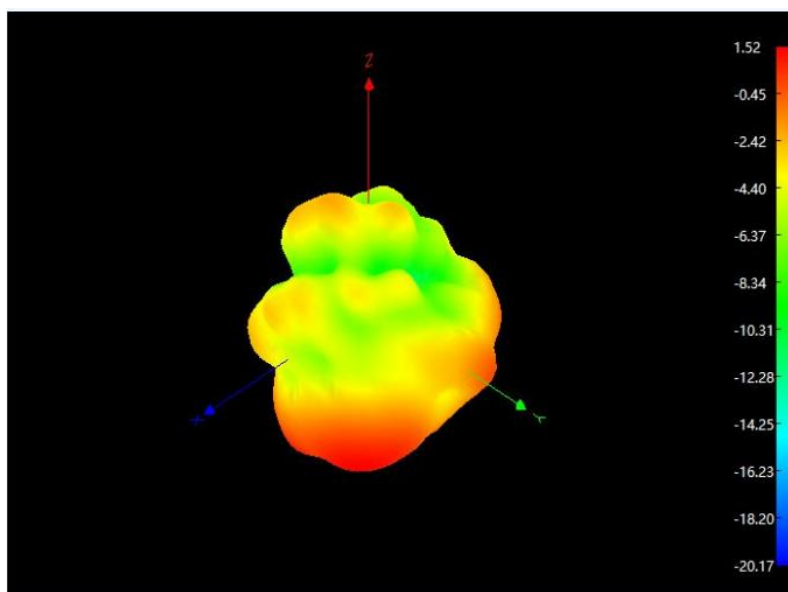
3.4 WiFi/BT Efficiency And Gain:

Frequency / MHz	Efficiency / dB	Efficiency / %
2400	-4.54	35.16
2410	-4.72	35.73
2420	-4.7	33.88
2430	-3.88	40.93
2440	-4.14	38.55
2450	-4.45	35.89
2460	-4.56	35
2470	4.36	36.64
2480	-4.29	37.24
2490	-4.51	35.4
2500	-4.18	38.19

Frequency / MHz	Gain/ dBi
2400	1.52
2410	1.37
2420	1.46
2430	1.19
2440	0.85
2450	1.01
2460	1.35
2470	1.29
2480	1.61
2490	1.96
2500	1.61

3.5. WiFi/BT 3D Pattern

2400MHz



2450MHz



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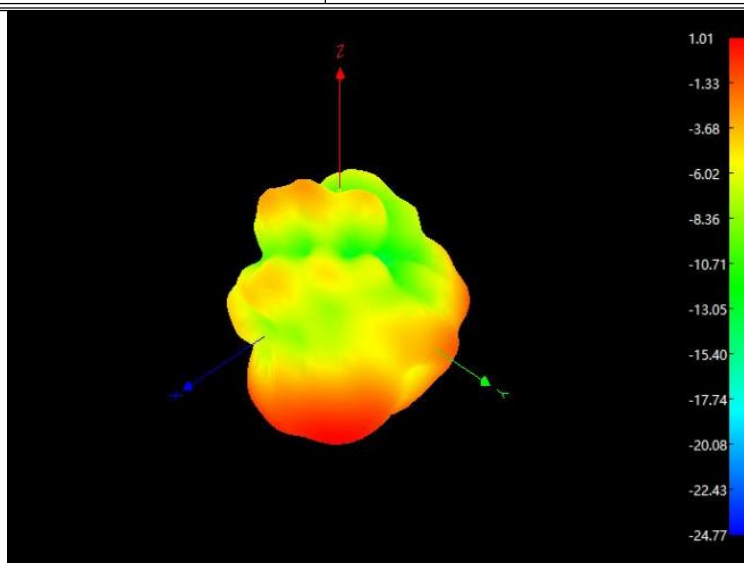
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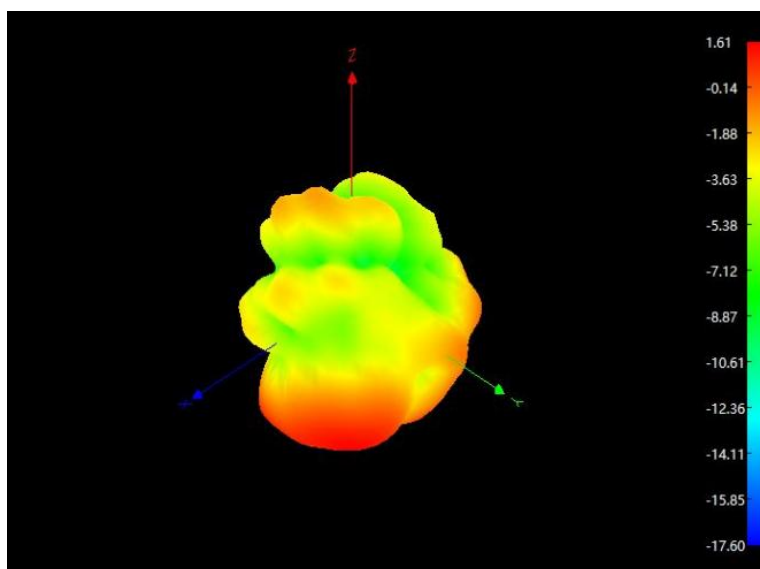
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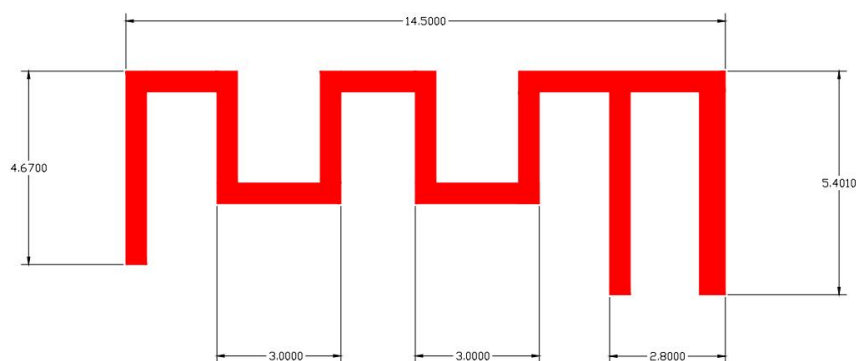
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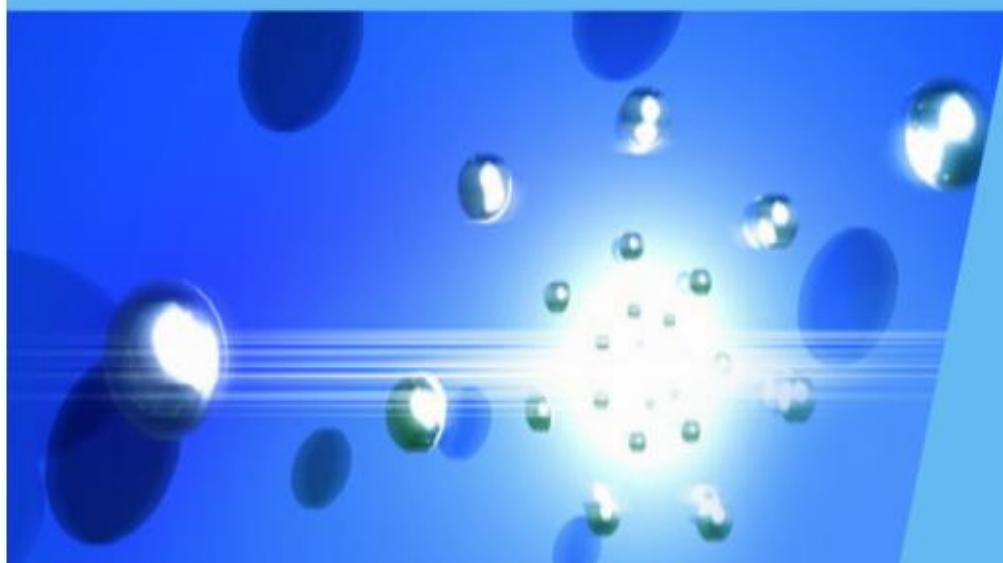
2500MHz



3.6 WiFi/BT Engineering drawings:



Professional RF R&D institutions



Thank You !

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