

	Date	07/08/2026	Version No.	V1.0
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Shenzhen Rongshengyuan Technology Co.,Ltd

PRODUCTSPECIFICATION

Customer	Shenzhen Smart Care Technology Co.,Ltd.
Customer's partnumber	Align50
Product MaterialCode	R-Ant-A50
Working Band	2400-2500MHz
IssueDate	2026-07-08
Release Version	V1.0
Author	Carol Yang

Carol Yang

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1 PRODUCT TECHNICAL SPECIFICATION

Electrica Specifications	
Frequency Range (MHz)	2400-2500
Bandwidth(MHz)	100
Input Impendence(Ω)	50
VSWR	<2
Gain (dBi)	-6.5
Polarization Type	Vertical
Mechanical Specifications	
Antenna Length(mm)	
Antenna Type	FPC Antenna
Operatin Temp($^{\circ}$ C)	-30~70
Storing Temp($^{\circ}$ C)	-30~70

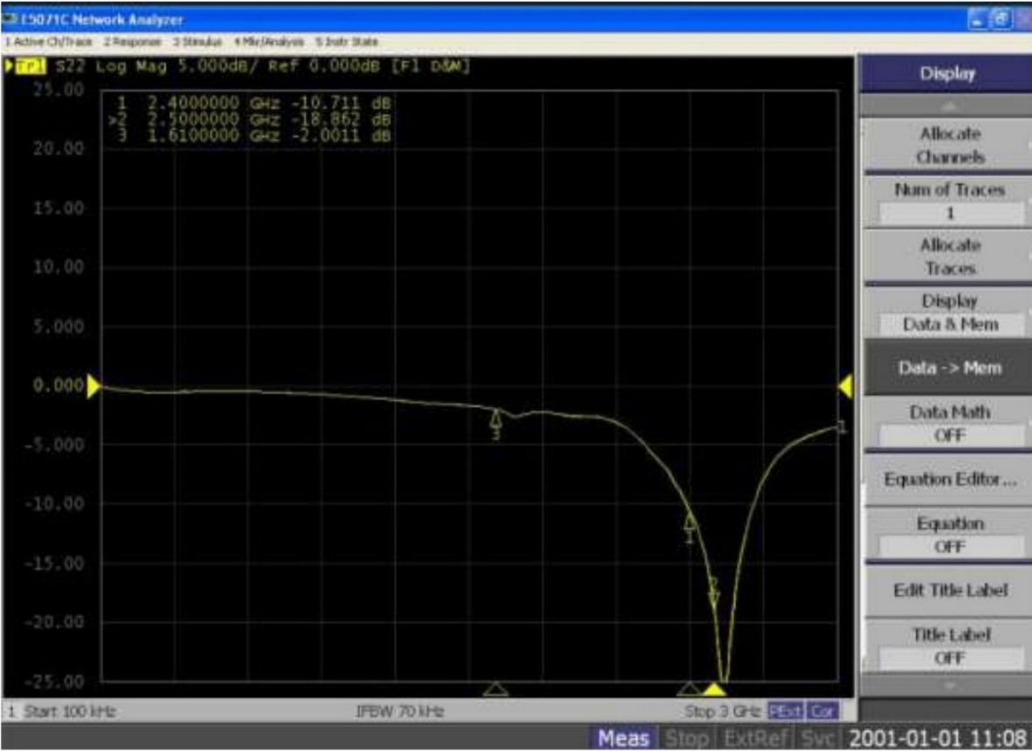
2 PRODUCT ELECTRICAL PERFORMANCE PARAMETER

1.Product picture

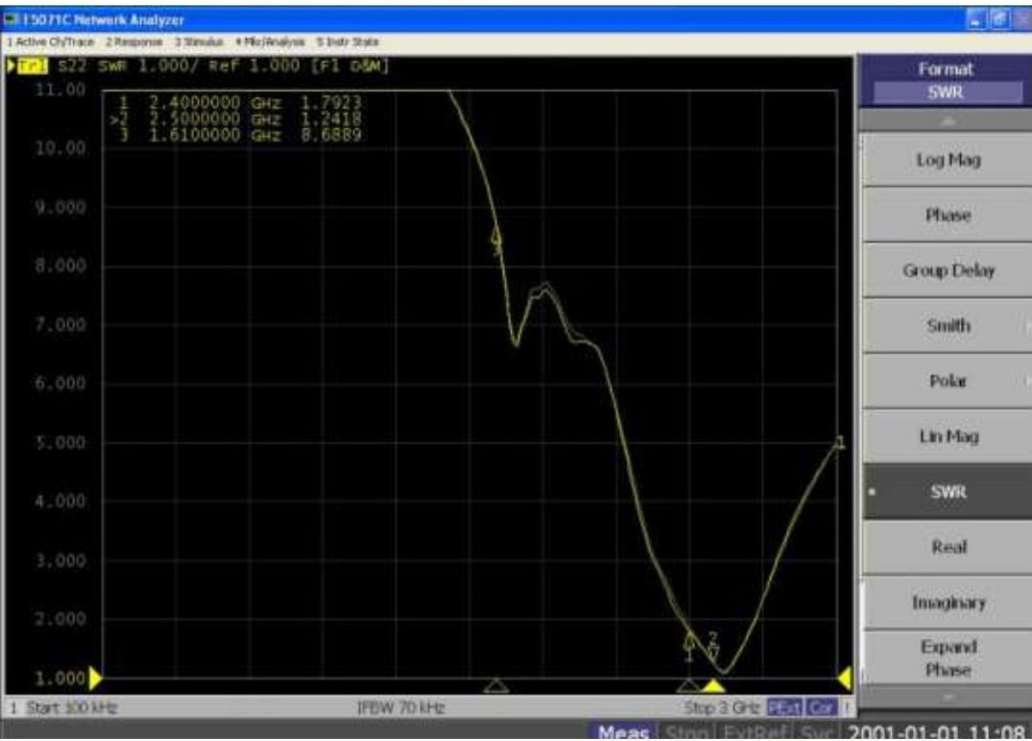


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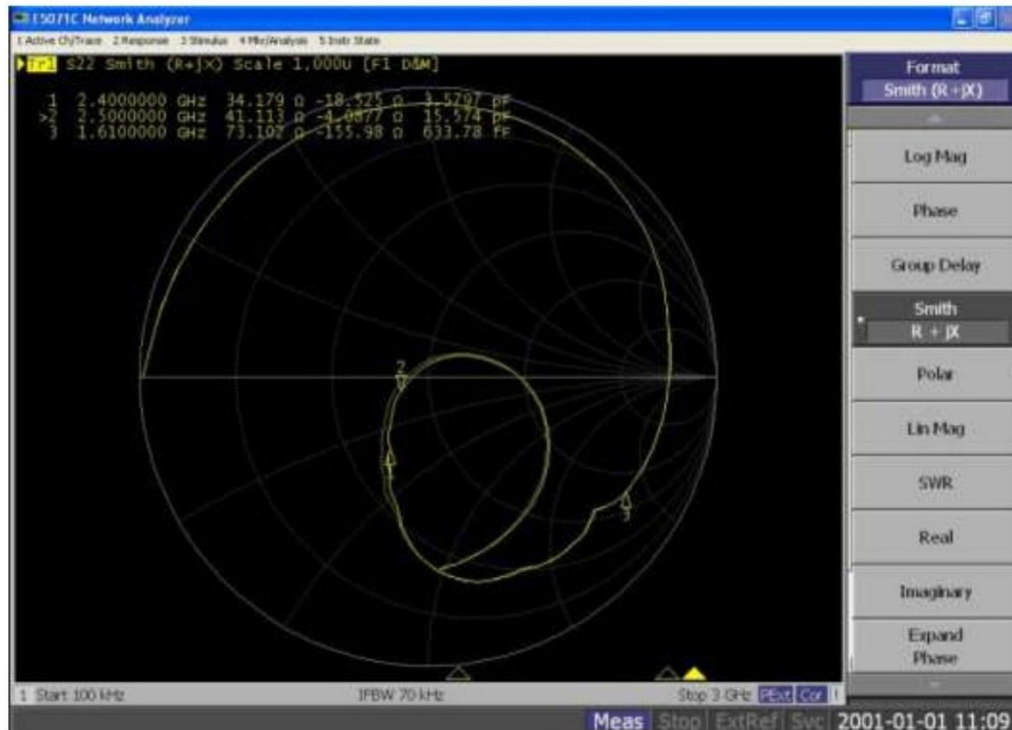
2.2 S11



2.3 VSWR



2.4 Smith Chart



3

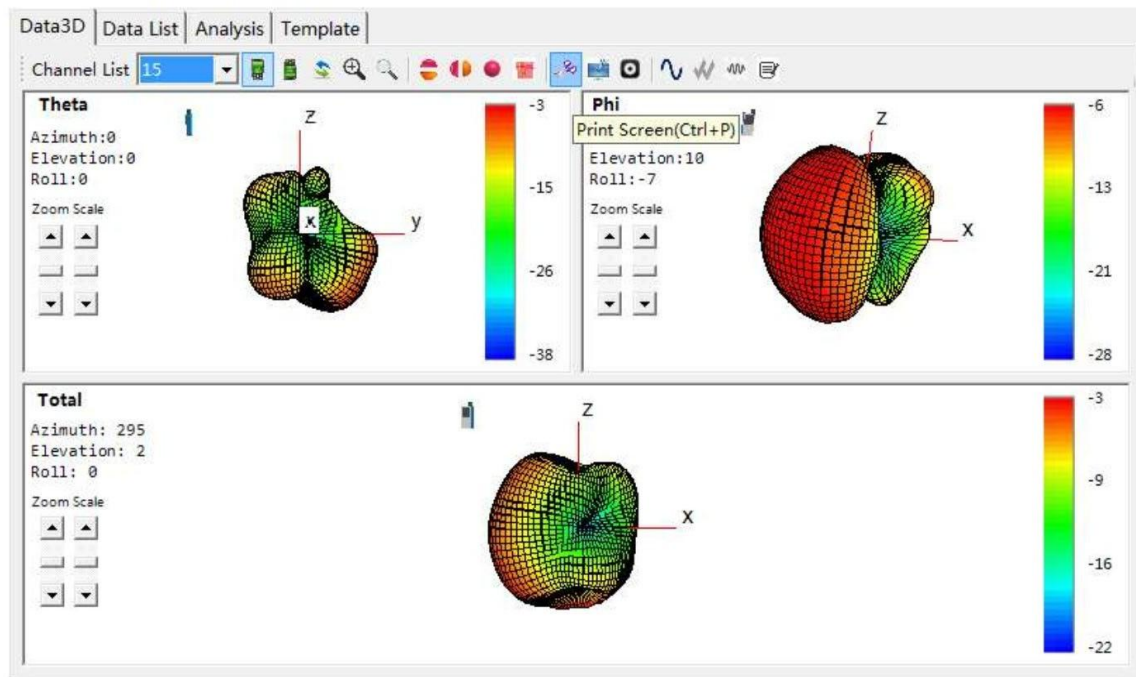
Fre (MHz)	Gain (dBi)	Eff. (dB)	Eff.(%)
2400	-7.04562	-10.97	7.99
2410	-6.64526	-10.86	8.2
2420	-6.50743	-10.73	8.45
2430	-6.79697	-10.89	8.14
2440	-6.94113	-11.08	7.81
2450	-6.80277	-10.69	8.53
2460	-6.88146	-10.36	9.2
2470	-6.7746	-10.29	9.35
2480	-7.01326	-10.14	9.68
2490	-7.42272	-10.21	9.52
2500	-7.53843	-10.39	9.14

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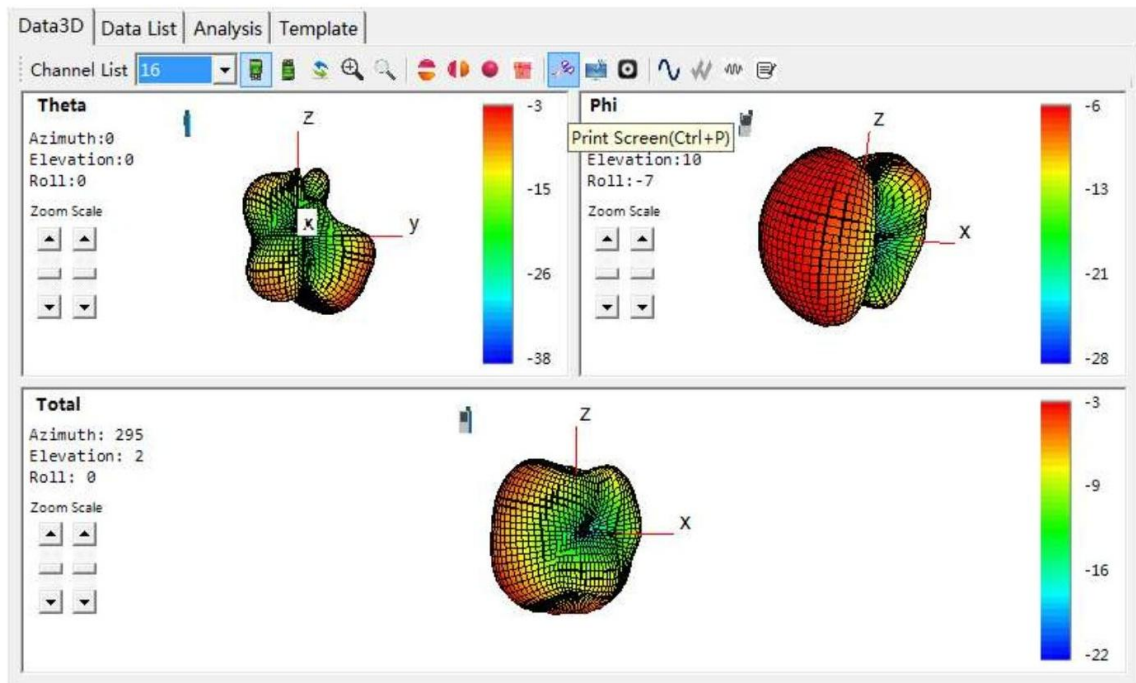
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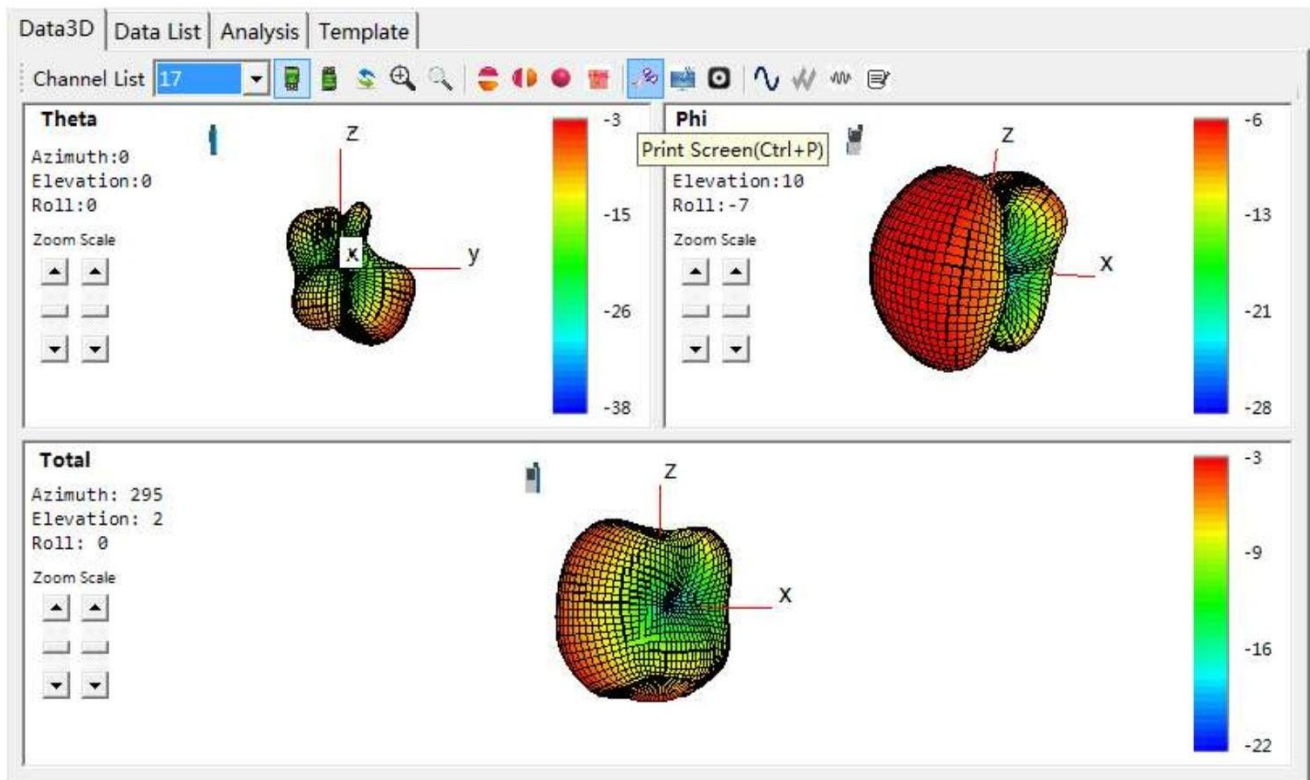
2.6 Radiation Pattern 2408MHz

2408MHz

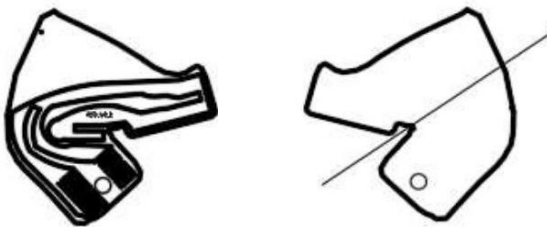


2450MHz





3 Product dimensions



U注:

1. “*” 尺寸为重点管控尺寸。
2. 未注尺寸以图形为准，未注公差参考公差表。
3. 所有产品均需满足客户样可靠性测试。
4. 外形冲切平顺，不可伤到内部线路，铜箔走线公差 ± 0.05 以内。
5. 金手指镀金。
6. 半对半哑黑 镀金，胶纸常规即可。
7. 丝印白色字符 R-A50 V2.2。

UNIT:mm