

SPECIFICATION

Shenzhen Guandetong Electronic Limited

*Shenzhen Guandetong Electronic Co., Ltd.*Antenna; True: 2.4G/5.8G 3DBL; White; L300mm; With Terminal (Waterproof RingWireDiameter 1.0mm)

Product Specification

connection		frequency range	2400-2500MHZ 5150-5800MHZ
Frequency band wire name		edition	A1
Customer part number	1. 17. 01. 00051	Guandetong part number	
Guandeton g No			
R F design	XIAO	RF Manager	LILI
Structural design	WAN	Structure Manager	HUAN
Technical Director	ADD	Date	2026-08-11

Customer confirmation:

Does the assembly meet your company's requirements: ☐OK ☐NG

catalogue

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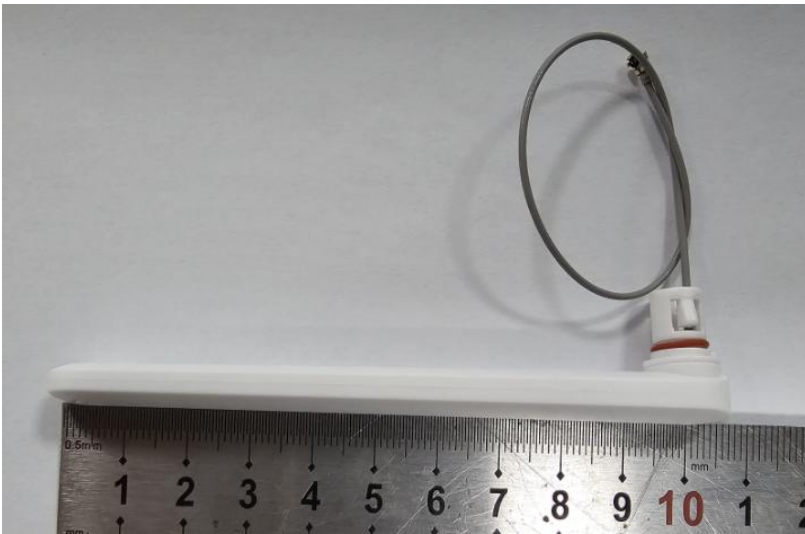
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一、 Product pictures



二、 Product parameters

Product testing parameters			
Product name	2.4G/5.8G Antenna	(Model Type)	
(Electrical Specifications)			
(Frenquency Range)	2400MHZ-2500MHZ 5150MHZ-5800MHZ	(Polarization)	perpendicular
(Impedance)	50Ω	Radiation	QXCOMM
(VSWR)	≦2.0	(Power)	50W
(Gain)	3dBi	(Bandwidth	100M
(Mechanical Specifications)			
(Dimensions)	104.7*12.8-+0.3mm	(Chassis Color)	white
(Connector)	IPEX	(Cable Length)	300±5MM
(Chassis Material)	ABS	Wire color	1.13 Gray
(Working Temperature)	-40℃-+85℃	(Limit Temperature)	-40℃-+85℃

三、S11(VSWR、Return、Smith)



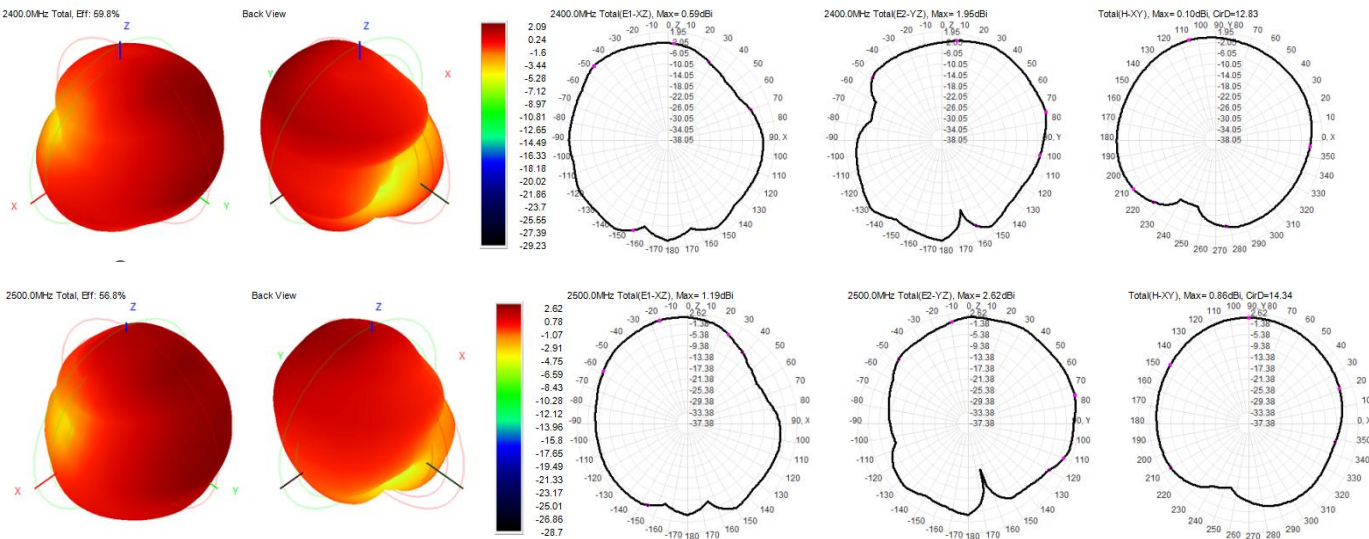
四、Antenna gain and efficiency&Apple in 3D

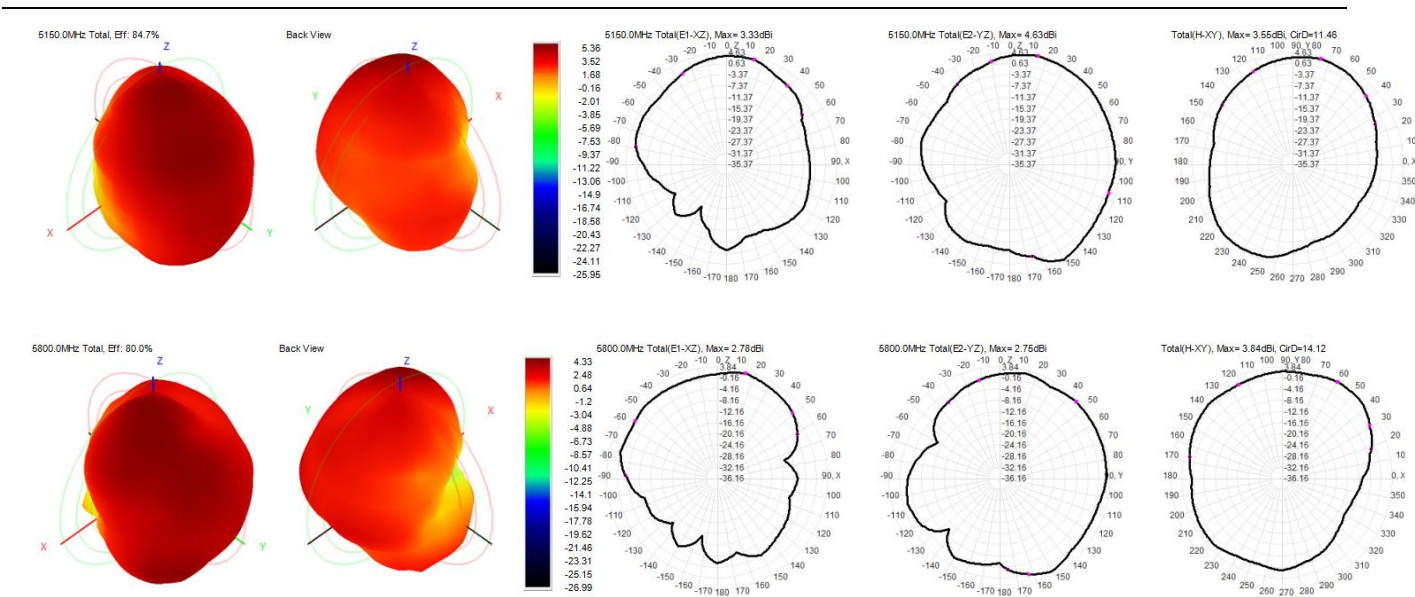
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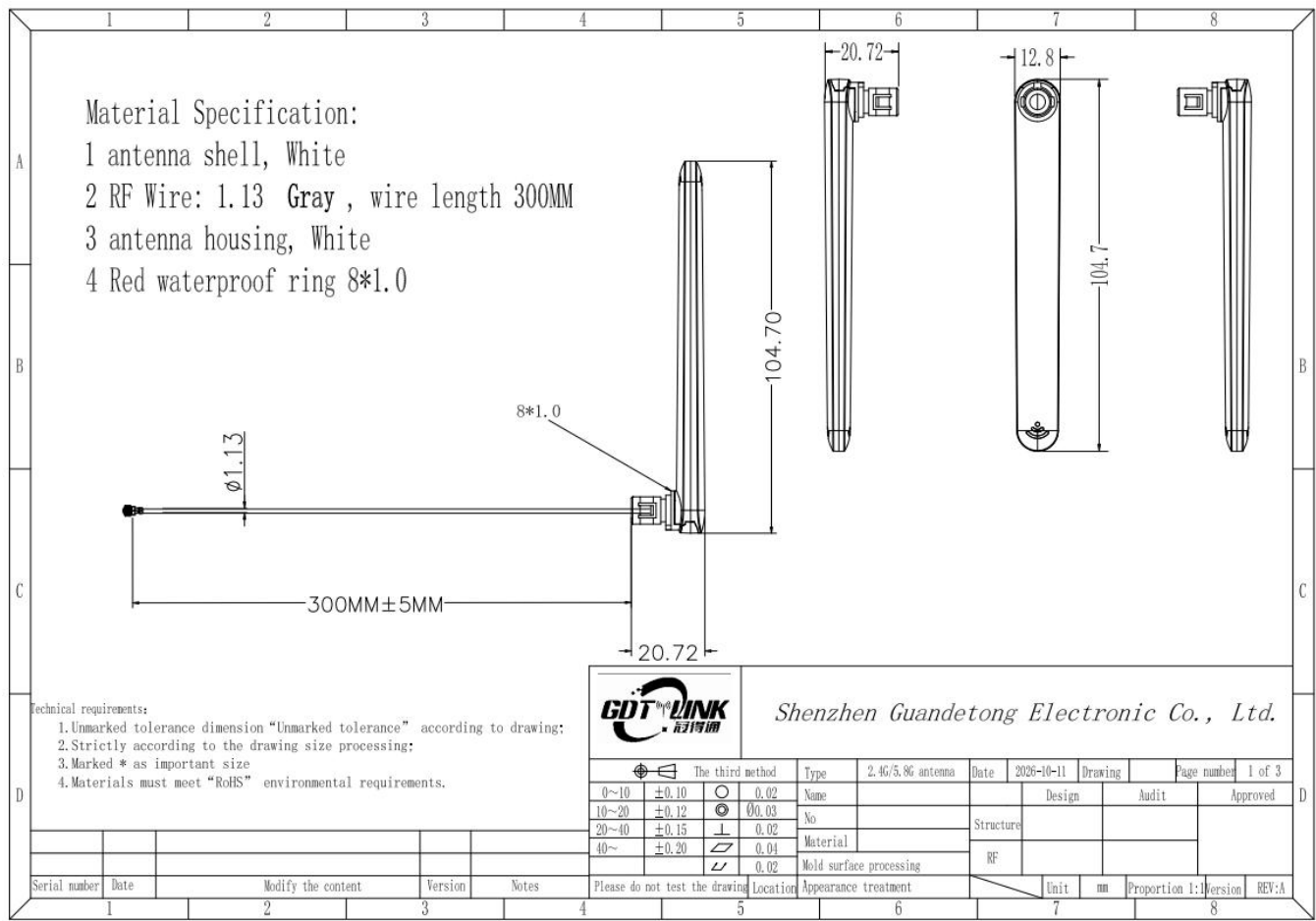
深圳市冠得通电子有限公司

序号	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
频率 (MHz)	2400.0	2410.0	2420.0	2430.0	2440.0	2450.0	2460.0	2470.0	2480.0	2490.0	2500.0	5150.0	5200.0	5250.0	5300.0	5350.0	5400.0	5450.0	5500.0	5550.0	5600.0	5650.0	5700.0	5750.0	5800.0
效率 (dB)	-2.23	-2.34	-2.26	-2.10	-2.44	-2.35	-2.16	-2.35	-2.05	-2.32	-2.46	-0.72	-0.81	-1.06	-1.07	-0.69	-0.79	-0.59	-0.62	-0.67	-0.62	-0.84	-0.40	-0.71	-0.97
增益 (dB)	2.09	1.85	2.01	2.58	2.03	2.49	2.83	2.47	3.10	2.83	2.62	5.36	5.35	5.29	5.45	6.16	5.91	6.19	5.88	5.58	5.47	4.89	5.07	4.83	4.33
效率 (%)	59.82	58.33	59.49	61.60	57.01	58.19	60.83	58.16	62.31	58.58	56.80	84.66	82.92	78.21	85.40	83.30	87.22	86.71	85.83	86.60	82.49	91.13	84.99	79.96	
方向性 (dB)	4.32	4.20	4.27	4.68	4.47	4.94	4.99	4.83	5.15	5.15	5.07	6.09	6.16	6.35	6.52	6.85	6.70	6.78	6.50	6.25	6.09	5.73	5.47	5.54	5.30
最大增益位置 (theta)	45.00	45.00	45.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	15.00	45.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	15.00	30.00	30.00
最大增益位置 (phi)	120.00	120.00	120.00	90.00	90.00	90.00	90.00	90.00	90.00	90.00	90.00	60.00	60.00	60.00	60.00	60.00	45.00	45.00	45.00	45.00	45.00	45.00	45.00	45.00	45.00
水平极化效率 (%)	33.88	36.09	36.06	34.72	34.83	32.90	33.54	33.61	32.75	30.61	29.94	27.74	29.80	29.85	28.55	29.91	30.12	29.75	30.47	29.30	30.10	36.92	33.53	32.70	32.17
垂直极化效率 (%)	25.94	22.23	23.44	26.88	22.18	25.29	27.28	24.55	29.56	27.97	26.86	56.92	53.12	48.48	49.66	55.49	53.17	57.47	56.23	56.33	56.50	51.57	57.60	52.29	47.80
上半球效率 (%)	32.27	31.81	33.31	35.86	33.81	35.73	38.22	36.80	40.41	38.19	36.92	55.38	55.31	52.79	53.20	57.51	55.64	57.58	56.10	53.77	53.22	49.89	55.39	52.29	48.90
下半球效率 (%)	27.55	26.51	26.19	25.74	23.20	22.45	22.60	21.36	21.90	20.39	19.88	29.28	27.61	25.53	25.01	27.90	27.66	29.64	30.60	31.85	33.38	32.60	35.74	32.71	31.06





五、 Structural drawings



六、 Environmental performance test

project	Project test conditions	Specifications
Storage environment	The test temperature, humidity and air pressure are as follows when there is no specific condition: 1. The temperature is $-30^{\circ}\text{C}\sim+80^{\circ}\text{C}$ 2. Relative humidity: 45% - 85% 3. The air pressure is 86kpa-106kpa	Normal electrical and mechanical performance
High and low temperature test	5 cycles between 70°C and 40°C , then under normal conditions 1-2H, check the appearance quality.	The size shall meet the requirements and Mechanical and electrical performance
Constant damp heat resistance test	Relative humidity: $95 \pm 3\%$, test temperature: 40°C. After lasting for 2h, The electrical performance shall be measured within 5 minutes after the test object is taken out, and the test object shall be within the normal range Part 1-2H, check the appearance quality	The size shall meet the requirements and Mechanical and electrical performance
vibration test	Vibration frequency range: 10-55HZ, displacement amplitude: 0.35MM, acceleration amplitude: 50.0M/s, frequency sweep cycles: 30 times	Normal electrical and mechanical performance
Drop test	Free fall for 3times in the direction of mutually perpendicular axes at a height of 1M	Normal electrical and mechanical performance