

SPECIFICATION

Shenzhen Guandetong Electronic Limited



Shenzhen Guandetong Electronics Co., Ltd.

2.4G Rectangular Ultrasonic Antenna 1.13 Gray Outlet Cable 180 with Terminals

Product Specifications

Customer Client	Aijia IoT	Frequency Band	2400-2500MHZ 5000-5800MHZ
Cable Name		Version Edition	A1
Customer Part Number		Guandetong Part Number	
Guandetong Number			
RF Design	Xiao Bin	RF Manager	Liu Liang
Structural Design	Wang Dong	Structural Manager	Wang Hua
Technical Director	andy	Date Issue	2025/05/16

Customer

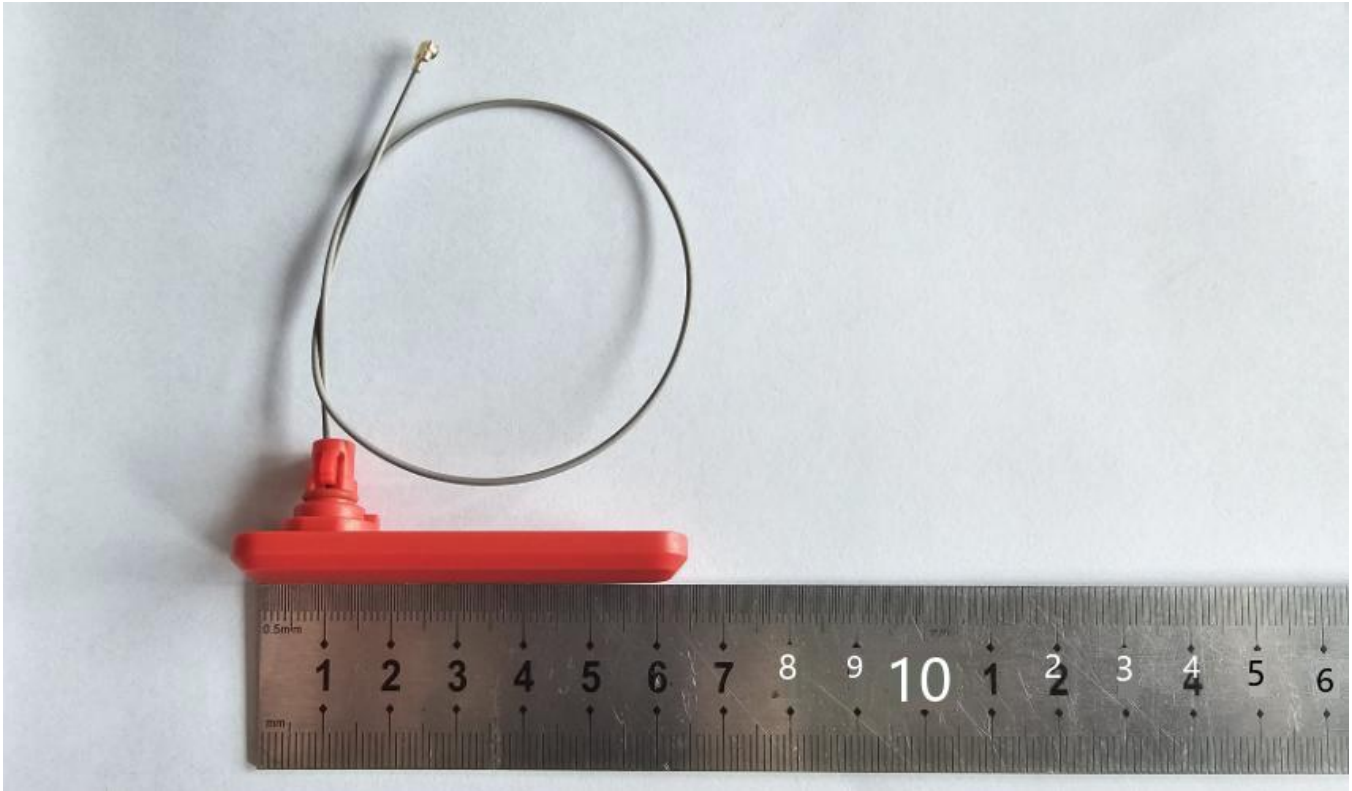
Does the assembly meet your

☐ NG

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I. Product Images



II. Product Parameters

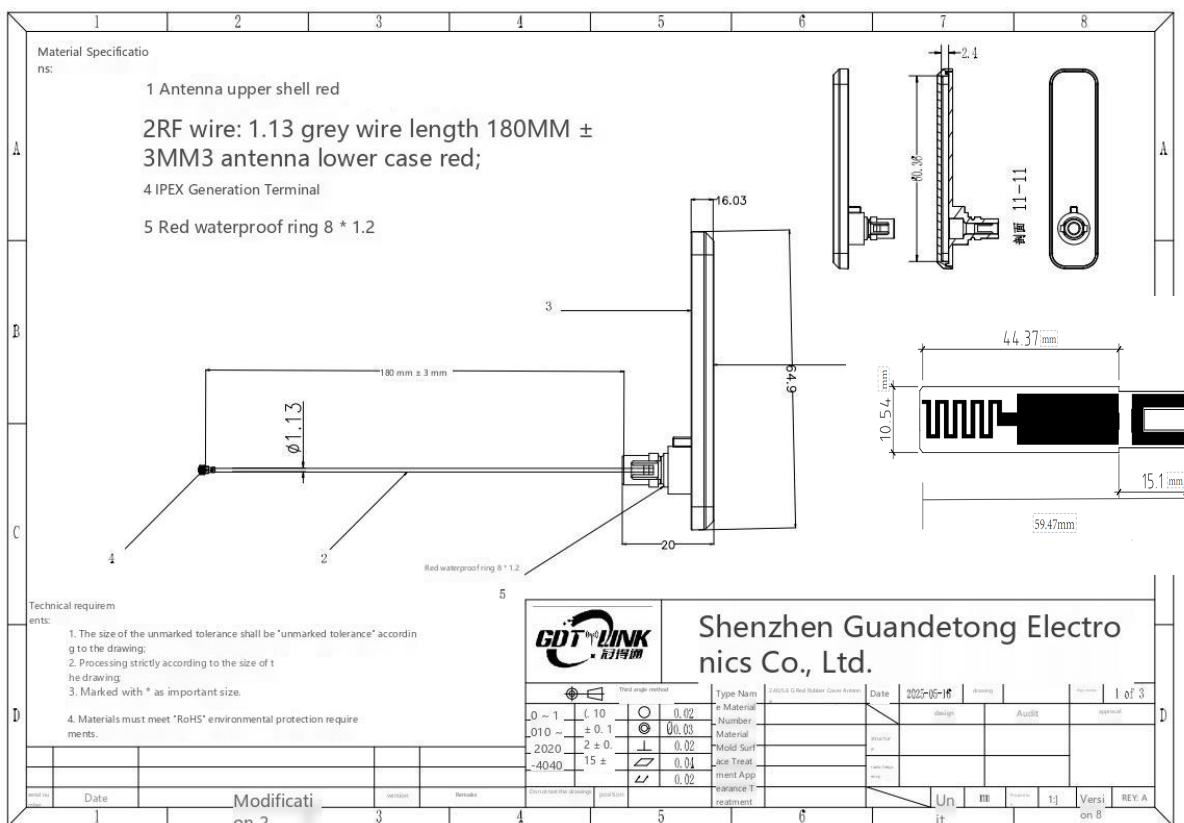
Product Test Parameters			
Product Name	2.4G/5.8G Antenna	Product Model (Model Type)	
Electrical Specifications			
Frequency Range	2400MHz-2500MHz	Polarization	Vertical
Input impedance	50 Ω	Radiation Direction	Omnidirectional
VSWR	≤ 2.0	Power	50W
Gain	1.51-4.93dBi	Bandwidth	100MHz
Mechanical Specifications			
Dimensions	64.9*16.03-+0.5mm	Radome Color	Red
Connector Type	IPEX Generation 1 Terminals	Cable Length	180-+3mm
Radome Material	ABS		
Operating Temperature (Working Temperature)	-40℃-+85℃	Storage Temperature (Limit Temperature)	-40℃-+85℃

Our company already possesses proprietary technology and the information provided should be strictly kept confidential. Without the prior written consent of Shenzhen Guandetong Electronics Co., Ltd., it is not allowed to disclose to anyone or company.

III. VSWR, Return Loss, and Smith Data



IV. Product Structure Diagram



五、Antenna Gain and Efficiency

Test Point ID	Freq. (MHz)	TRP (dBm)	Gain (dBi)	Directivity (dBi)	Efficiency y (%)	Efficiency y (dB)	Max (dBm)	Theta of Max	Phi of Max	Min (dBm)	Theta of Min	Phi of Min	AVG (dBm)	Max/Min (dB)	Max/AVG (dB)	Min/AVG (dB)
1	2400.0	2400.00	1.53	4.45	51.1%	-2.92	1.53	75	195	-95.99	0	0	-3.53	97.52	5.07	-92.46
2	2410.0	2410.00	1.71	4.51	52.5%	-2.80	1.71	75	195	-95.99	0	0	-3.42	97.70	5.13	-92.57
3	2420.0	2420.00	2.07	4.51	57.0%	-2.44	2.07	75	195	-95.99	0	0	-3.08	98.06	5.14	-92.91
4	2430.0	2430.00	2.28	4.60	58.5%	-2.33	2.28	90	180	-95.99	0	0	-2.96	98.27	5.24	-93.03
5	2440.0	2440.00	2.01	4.69	54.0%	-2.67	2.01	90	180	-95.99	0	0	-3.30	98.00	5.31	-92.69
6	2450.0	2450.00	2.29	4.73	56.9%	-2.45	2.29	90	180	-95.99	0	0	-3.06	98.28	5.34	-92.93
7	2460.0	2460.00	2.69	4.75	62.1%	-2.07	2.69	75	195	-95.99	0	0	-2.66	98.68	5.35	-93.33
8	2470.0	2470.00	2.77	4.81	62.5%	-2.04	2.77	75	195	-95.99	0	0	-2.62	98.76	5.39	-93.37
9	2480.0	2480.00	3.06	4.77	67.4%	-1.71	3.06	75	195	-95.99	0	0	-2.28	99.05	5.34	-93.71
10	2490.0	2490.00	2.72	4.68	63.7%	-1.96	2.72	75	210	-95.99	0	0	-2.52	98.71	5.24	-93.47
11	2500.0	2500.00	2.76	4.55	66.4%	-1.78	2.76	90	180	-95.99	0	0	-2.33	98.75	5.09	-93.66

六、2D&3D

