

SPECIFICATION

Shenzhen Guandetong Electronic Limited



Shenzhen GuanDeton Electronics Co., Ltd.

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WiFi Antenna (Pole Type) – CDT Antenna + Feeder Cable (Black Feeder Terminal Connection: Female; Antenna Terminal Connection: Male; Cable Length: 1000 mm); WiFi Antenna (2Dh Gain) – T-PEX Connection Port – 1.13 Coaxial Cable – ROHS Compliant

Product Specification Sheet

Client	Shenzhen Qili Technology	Frequency range	2400–2500MHz
Wire product name		Edition	A1
Customer Material Number	A12-01X-0002	Guandetong Material Code	
Guandetong Number			
RFdesign	Xiao Bin	RF Manager	Liu Liang
Architectural design	Wang Dong	Structural Manager	Wang Hua
Technical Director	andy	Date	2023-12-13

Customer Confirmation:

Does the assembly comply with your company's requirements? ☐ OK ☐ NG

Catalogue

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The Company possesses proprietary technical data; such proprietary data shall be kept strictly confidential and shall not be disclosed to any person or entity without the prior written consent of Shenzhen Guandeton Electronics Co., Ltd.

I. Product Images



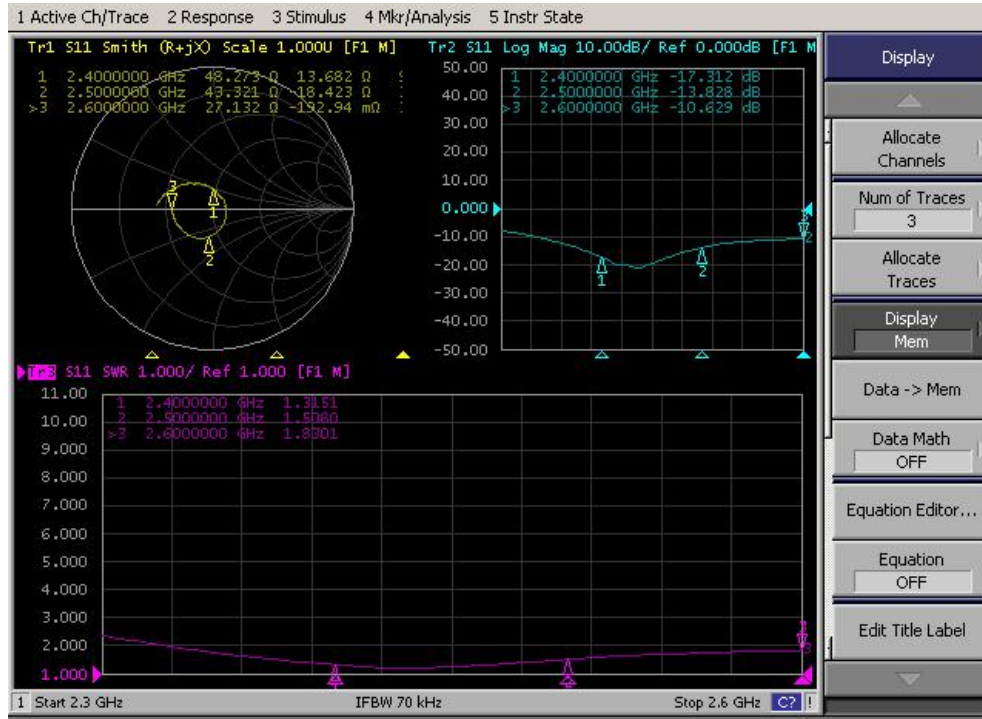
II. Product Specifications

Product Test Parameters			
Product Name (Name)	2DB Rod Antenna	Product Model(Model Type)	GDT-2DB--2.4
Electrical Specifications			
Frequency Range	2400-2500MHz	Polarization Mode	Perpendicular
Input impedance(Impedance)	50 Ω	Radiation direction	Omnidirectional
Voltage Standing Wave Ratio(VSWR)	≤ 2	Power Capacity (Power)	50W
Gain(Gain)	2dBi	Bandwidth	100MHz
Mechanical Specifications			
Antenna Interface (Antenna interface)	SMA Public Pin	Chassis Color	1000MM
Connector Model (Connector)	IPEX (Gen 1)	Connection Interface Mode (Dimensions)	11 Dental Maternal Needle
Chassis Material	1.13 Gray		
Working temperature (Working Temperature)	-40℃-+85℃	Storage temperature (Limit Temperature)	-40℃-+85℃

Privacy Requirements

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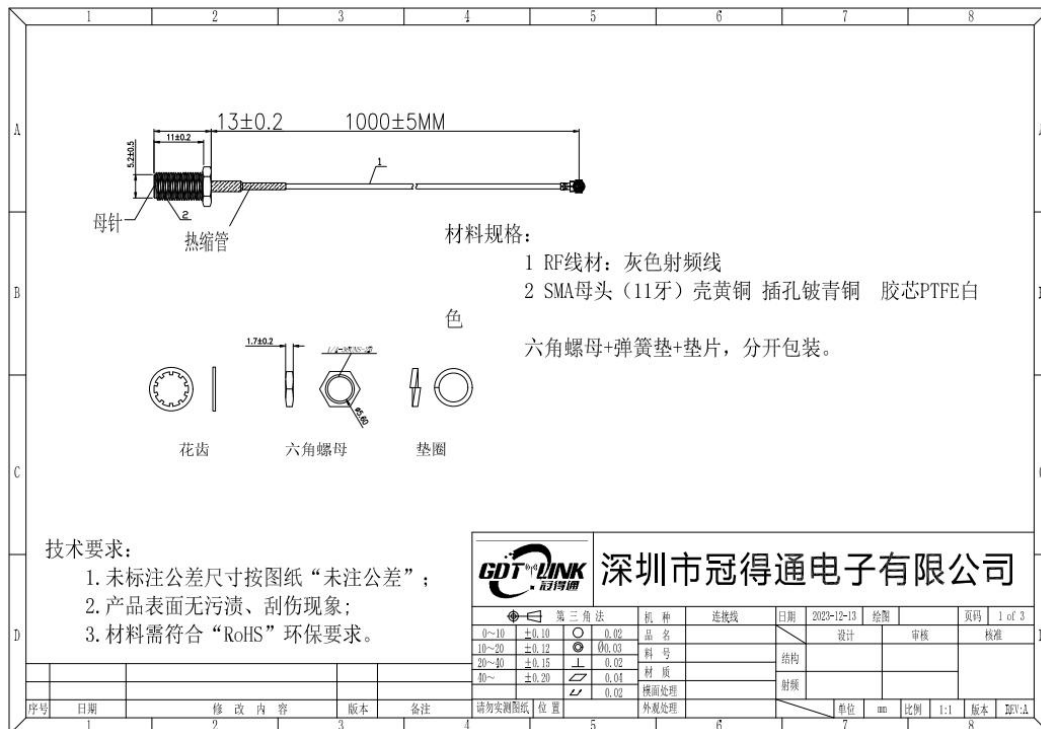
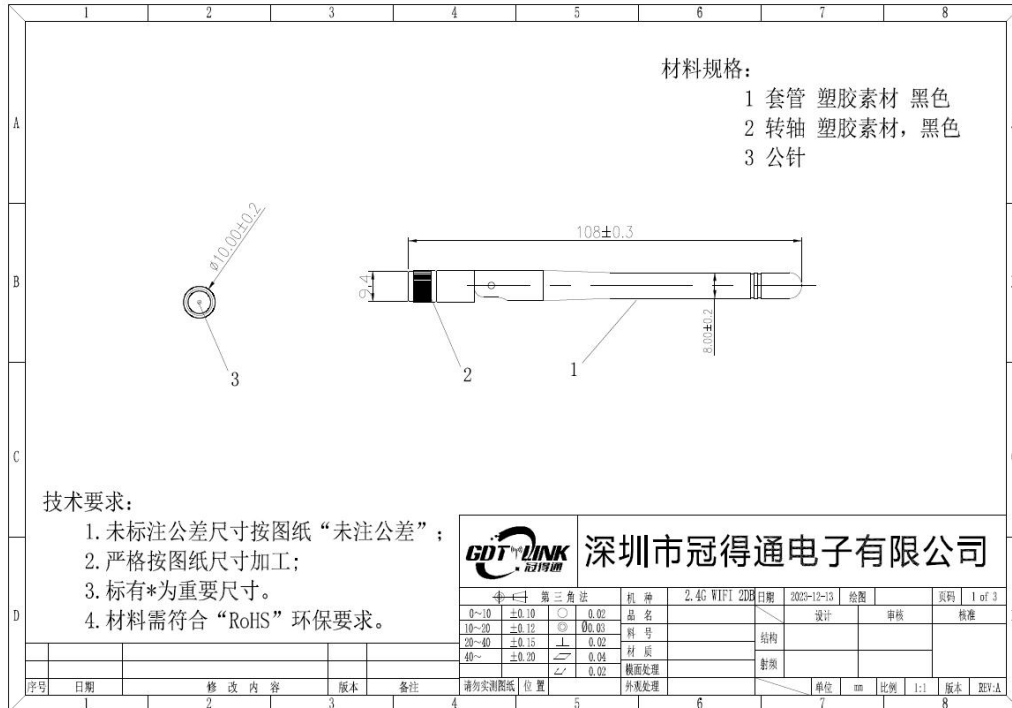
III. S11(VSWR, Return Loss, Smith Chart)Data



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IV. Structural Drawings

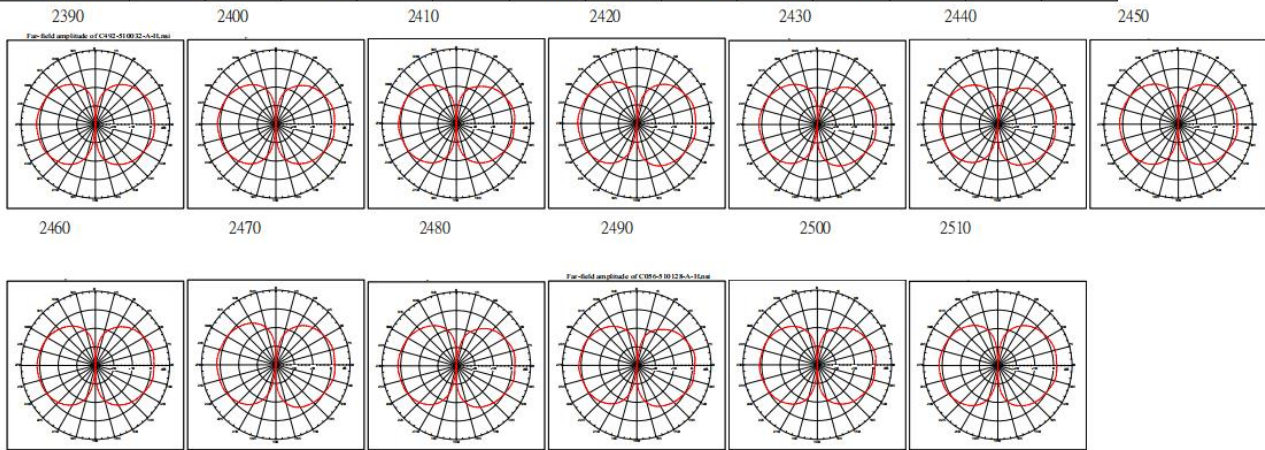


Privacy Requirements

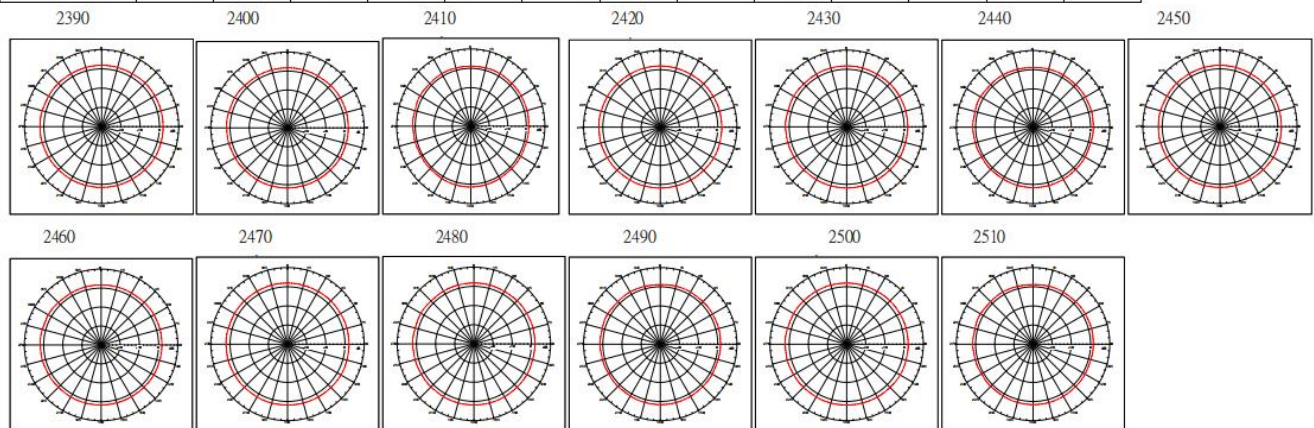
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V. Antenna Gain Pattern**E-Plane/horizontal polaztion**

Freq.(MHz)	2390	2400	2410	2420	2430	2440	2450	2460	2470	2480	2490	2500	2510
Peak gain(dBi)	2.05	1.98	2.01	2.08	2.13	2.1	2.05	2.06	1.98	2.04	1.99	1.97	1.95
Peak degree	78	80	82	100	75	79	88	82	106	75	81	80	85
Avg gain(dBi)	-1.38	-1.29	-1.42	-1.39	-1.32	-1.40	-1.28	-1.33	-1.35	-1.40	-1.42	-1.51	-1.42

**H-Plane/vertical polaztion**

Freq.(MHz)	2390	2400	2410	2420	2430	2440	2450	2460	2470	2480	2490	2500	2510
Peak gain(dBi)	2.01	2.09	1.95	1.99	2.04	2.13	2.07	2.03	2.05	2.02	1.95	1.97	1.98
Peak degree	257	273	30	273	270	275	258	280	97	271	192	95	197
Avg gain(dBi)	1.32	1.27	1.41	1.39	1.33	1.35	1.40	1.29	1.34	1.37	1.41	1.43	1.33



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VI. Environmental Performance Testing

Project	Test condition	Specifications
Storage Environment	When no specific values are specified, the test conditions for temperature, humidity, and air pressure are as follows: 1. Temperature range: -30°C to +80°C 2. Relative humidity: 45%–85% 3. Atmospheric pressure: 86 kPa – 106 kPa	Electrical and mechanical performance is normal.
Thermocycling	Perform five cycles at temperatures between 70°C and 40°C; then, under normal conditions, leave for 1–2 hours and inspect the surface quality.	The dimensions shall comply with the specified requirements and ensure adequate mechanical and electrical performance.
Constant Thermal Stress Test	Relative humidity: $95 \pm 3\%$; Test temperature: 40°C. After 2-hour exposure, the electrical properties shall be measured within 5 minutes following the removal of the specimen; under normal conditions, the specimen shall be inspected for appearance quality for 1–2 hours.	The dimensions shall comply with the specified requirements and ensure adequate mechanical and electrical performance.
Vibration test	Frequency range: 10–55 Hz; Displacement amplitude: 0.35 mm; Acceleration amplitude: 50.0 M/S; sweep frequency cycle count: 30 times	Electrical and mechanical performance is normal.
Fall-down test	A 1M object is dropped freely three times along mutually perpendicular axes.	Electrical and mechanical performance is normal.