



SPECIFICATION

Shenzhen DreamLNK Technology Co.,Ltd.

Shenzhen DreamLNK Technology Co., Ltd.

Antenna 2400-2500MHz(FPC)

Product Specification

Customer		frequency band	2400MHz ~ 2500MHz
Wire name		Version	A1
Customer item number		Jun Ye Item No.	F5-2.4G
Jun Ye No.			
R F Design	James wang	RF Manager	Knight Ai
Structural Design		Structure Manager	
Technical Director		Date	2016-03-12

Customer

Whether the assembly meets

☐ NG

Directory

Cover **1**

Directory **2**

1. Product Picture**3**

2. product parameters**3**

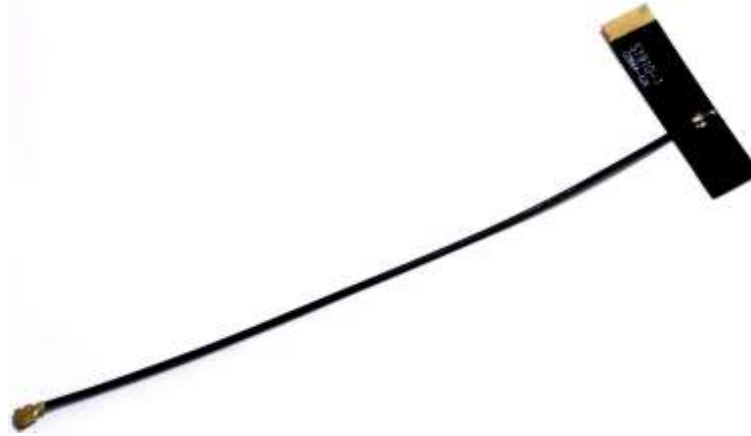
3. **S11** Data **4**

4. product structure diagram **6**

5. Experimental Report on Reliability of Environment **7**

6. Contact **7**

1. Product Picture



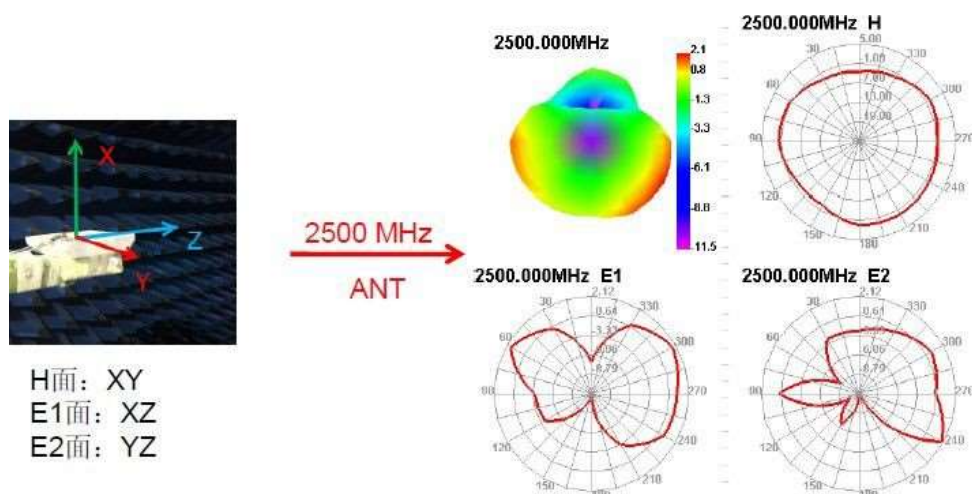
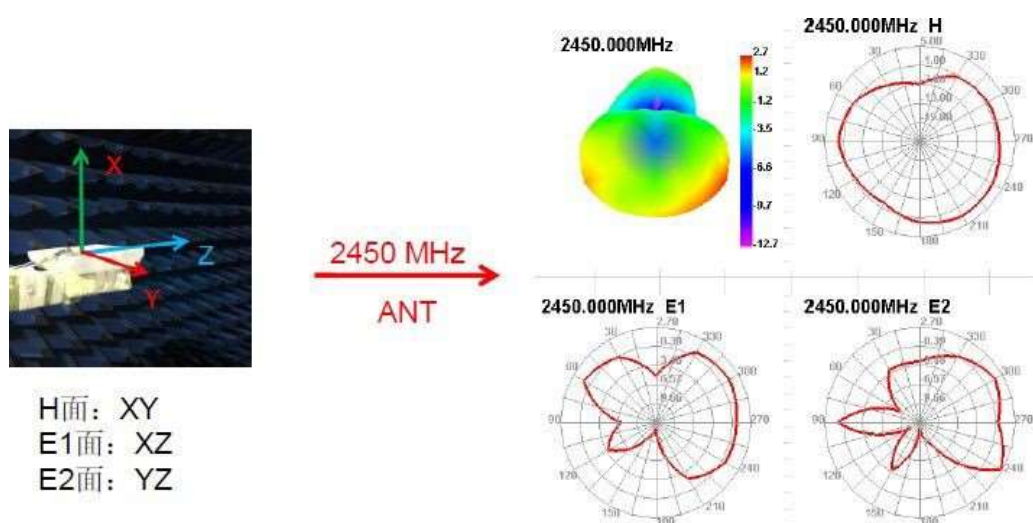
2. product parameters

Product Test Parameters			
Name of Product (Name)	FPC built-in antenna	Type of product (Model Type)	F5-2.4G
Index of electrical performance (Electrical Specifications)			
Range of Frequency (Frequency Range)	2400-2500 MHz	Polarization mode (Polarization)	Vertical
Impedance input (Impedance)	50Ω	radiation direction	omni-directional
Standing wave ratio (VSWR)	≤ 1.3	Maximum power (Admitted Power)	1W
Gain	3dBi ± 0.5	(Bandwidth) Bandwidth	135/46MHz
Method of connection (Connector Type)	Cable+IPEX		
Mechanical (Mechanical Specifications)			
(Dimensions)	34.3*9.5mm	(Antenna cover) material	FR-4
Type of connector (Connector)	IPEX I	Cable Length	130±3mm
Working temperature (Working Temperature)	-20℃-+70℃	Storage temperature (Limit Temperature)	-40℃-+85℃

Address: Room 602, Block C, Block A, Huameiju,
Xinhu Road, Baoan District, Shenzhen

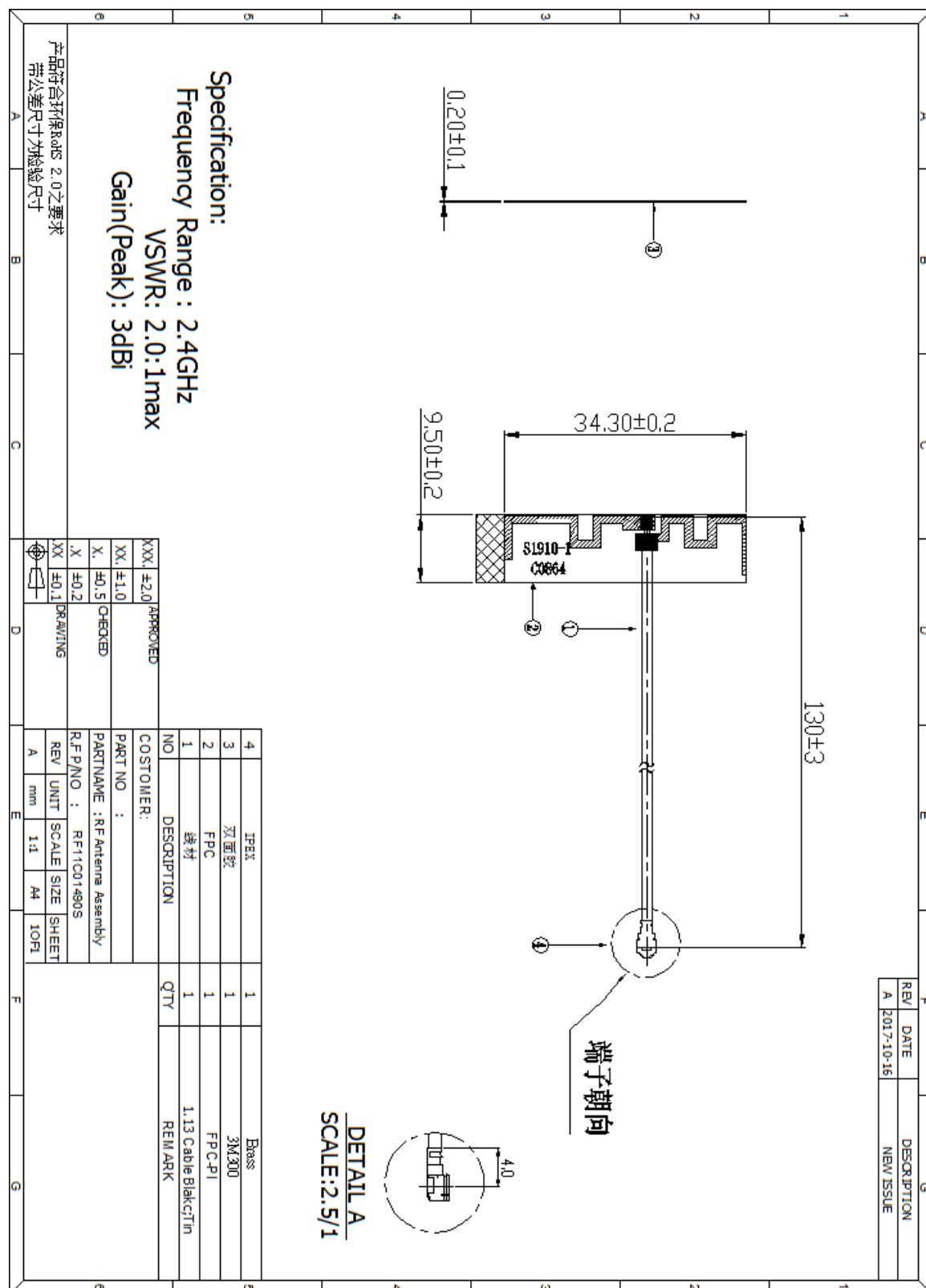
Telephone: 0755-29369047

FAX No: 0755-27844601



Frequency (MHz)	ANT	
	Efficiency (%)	Peak Gain (dBi)
2400	78.85	2.87
2410	81.9	3.15
2420	80.32	3.13
2430	78.25	2.98
2440	78.23	2.88
2450	77.33	2.7
2460	76.85	2.53
2470	78.23	2.47
2480	77.21	2.39
2490	77.45	2.37
2500	74.34	2.12

4. structure drawing



(Antenna design process needs to combine the product shape structure, RF module signal input and output interface location, and the location of the source of interference within the product to determine the spring antenna placement, angle, from the floor spacing, from the PCB substrate height.). The π - type network is reserved to match the antenna. When debugging the antenna, please be sure to provide a complete set of product shell and internal PCBA function board, and calculate the external interference source and parasitic capacitance to match, so that the antenna can achieve the best performance index and working efficiency. The left picture is a side view, and the right picture is a top view. The PCB wiring of the matching network refers to the line width of 0.5mm, and the ground on both sides of the network refers to the spacing of 0.35mm to maintain good impedance characteristics. [If you have any questions, please Email to support@dreamlnk.com](mailto:support@dreamlnk.com). Send PCB files to this mailbox or contact FAE.

5. environmental performance test

Project	Test conditions	Specifications
Storage environment	The test temperature, humidity and air pressure are as follows: 1. The temperature is -30 °C ~ +80 °C 2. The relative humidity is 45%-85% 3. The air pressure is 86kpa-106kpa	Electrical and mechanical performance is normal
High and low temperature test	5 cycles were performed between 70° C and 40° C, and then 1-2H under normal conditions, and the appearance quality was checked.	The dimensions shall meet the requirements and shall meet the requirements. Mechanical and electrical performance
Constant damp heat resistance test	Relative humidity $95 \pm 3\%$, test temperature: 40 °C. After continuous action for 2H, the electrical properties of the test article shall be measured within 5min after it is taken out, and the test article shall be in the normal strip. 1-2H under the part, check the appearance quality	The size shall meet the requirements and shall meet the requirements. Mechanical and electrical performance
Vibration test	Vibration frequency range 10-55HZ, displacement amplitude: 0.35MM, acceleration amplitude: 50.0 M/S, frequency sweep cycle times: 30 times	Electrical and mechanical performance is normal
Drop test	1M high altitude according to the axis direction perpendicular to each other free fall 3 times	Electrical and mechanical performance is normal

6. Contact Information

Shenzhen Junye Technology Co., Ltd. Shenzhen DreamLnk Technology Co., Ltd

★Data acquisition, smart home, Internet of Things applications, wireless remote control technology, long-distance active RFID, antenna research and development★

[Business Cooperation] sales@dreamlnk.com [Tel] 0755-29369047

[Technical Support] support@dreamlnk.com [Website] www.dreamlnk.com

[Company Address] 602, Block C, Huaimiju District A, Xinhua Road, Bao'an District, Shenzhen City, Guangdong Province

[Factory Address] 5th Floor, Building B, Huazhi Innovation Valley, 7 Yuhua Street, 138 Industrial Zone, Tangxia Town, Dongguan City, Guangdong Province