

天线规格书

Antenna Specification

Product Name: FPC Antenna

Model Number: AN0827-FPC71GX

Product Spec.:4G FPC antenna 1.13mm
gray line L=150mm+IPEX

Product Version: A0

Manufacturer Information

Company Name: Guangzhou Xaircraft Technology CO.,LTD

Address: Block C, No.115, Gaopu Road, Tianhe District,
GuangzhouCity, Guangdong, P.R.China

Product Number: AN0827-FPC71GX
Product Name: Antenna

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Revision History (变更履历)

Revision	Date	Change Notification	Description
1.0	2023.9.13	初版	

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1. Specification

Sample Photo



A. Electrical Characteristics

Frequency 频率	824-960 MHz/1710-2700MHz/
S.W.R. 驻波比	≤ 4.0 / ≤ 3.0
Antenna Gain 增益	2.38dBi / 4.58dBi
Polarization 极化方式	Linear
Impedance 阻抗	50 Ohm

B. Material & Mechanical Characteristics

Cable Type 线材规格	OD1.13mm, gray
Connector Type 连接器规格	I-PEX

C. Environmental

Storage Temperature 存储温度	- 30 °C ~ +80 °C
Operation Temperature 工作温度	- 30 °C ~ +80 °C

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2. Characteristics and Reliability Test

Test Items 测试项目	Test Condition and Procedure 测试方法	Requirements 要求	Result 结果
1 V.S.W.R. 电压驻波比	Set DUT on Network Analyzer; make individual calibration to test 设置网络分析仪参数进行测试	Directive DUT specification 符合待测物规范	PASS
2 Insertion Loss 插入损失	Set DUT on Network Analyzer; make individual calibration to test 设置网络分析仪参数进行测试	Directive DUT specification 符合待测物规范	PASS
3 Antenna Gain 天线增益	Set DUT on Antenna Chamber; make individual calibration to test 设置天线暗室参数进行测试	Directive DUT specification 符合待测物规范	PASS
4 Vibration 震动	GB / T2423.48-2008 Freq: 50to 80 to 50 Hz 10g acceleration, 12 cycles in each direction 振动: 55-80Hz, 10g 加速度, 各方向 12 次循环	1. No Visual Damage 2. Frequency Tol.≤5% 无明显外观不良;频率偏移≤5%	PASS
5 Dimension 尺寸	Inspection of dimension, color, material, package, surface process.检查尺寸,颜色,材料,包装,表面处理	Directive DUT specification 符合待测物规范	PASS
6 Salt Spray 盐雾	GB / T 2423.17-2008 Temp: 35°C; RH: ≥ 95%; NaCl solution: ≥ 5%;Time: 72H 温度 35°C; 湿度≥95%;盐水浓度≥5%; 测试 72H	1. No Visual Damage 2. Frequency Tol.≤5% 无明显外观不良;频率偏移≤5%	PASS
7 Temperature and Humidity Chamber 恒温恒湿	GB / T 2423.3-2006 Temp: 40°C / 12 H; -RH: ≥ 93%; Time: 48H 温度 40°C 湿度≥ 93%; 时间 48H	After 2 Hours Recovery 1. No Visual Damage 2. Frequency Tol.≤5% 恢复 2H 后, 无明显外观不良;频率偏移≤5%	PASS
8 Thermal Shock 冷热冲击	GB / T 2423.22 - 2008 - 30° C (30 minutes) to + 80° C (30 minutes); Cycles: 25 - 30° C 测试 30 分转 80° C 测试 30 分为一个周期; 共 25 周期	After 2 Hours Recovery 1. No Visual Damage 2. Frequency Tol.≤5% 恢复 2H 后, 无明显外观不良;频率偏移≤5%	PASS
9 RoHS	With Reference to IEC 62321:2008 with flow chart 参考 IEC 62321 测试流程	Directive RoHS 2015/863/EU 符合 RoHS 2015/863/EU 标准	PASS

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3. Antenna - S Parameter Test Data



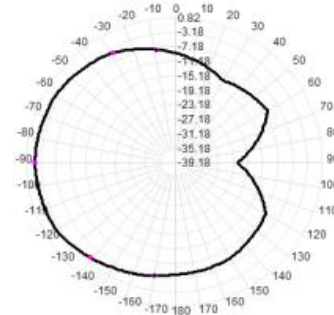
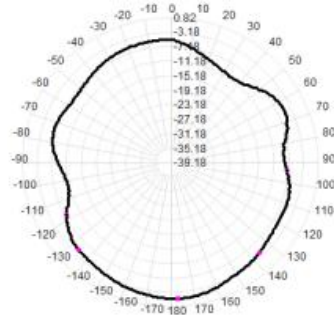
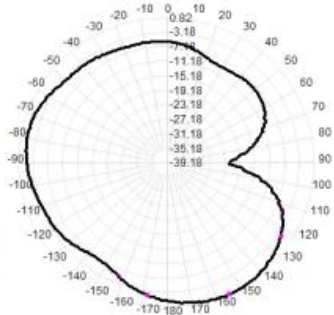
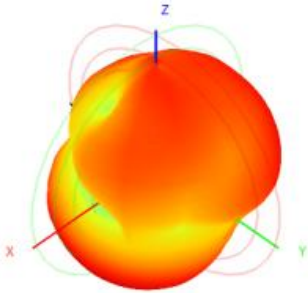
4. Antenna - Radiation Pattern Test Data

Frequency ID	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
Frequency (MHz)	824.0	858.0	892.0	926.0	960.0	1710.0	1756.0	1802.0	1848.0	1894.0	1940.0	1986.0	2032.0	2078.0	2124.0	2170.0	2300.0	2400.0	2500.0	2600.0	2700.0
Gain (dBi)	1.62	1.78	1.86	2.38	2.21	2.04	2.44	1.91	1.99	2.14	2.10	1.84	2.72	3.43	4.31	4.58	3.36	1.97	3.21	1.84	2.78
Efficiency (%)	41.63	42.57	43.61	43.38	43.92	47.83	49.76	50.25	51.02	51.23	52.87	52.22	51.92	55.36	54.48	53.69	53.30	52.36	53.60	52.10	52.19

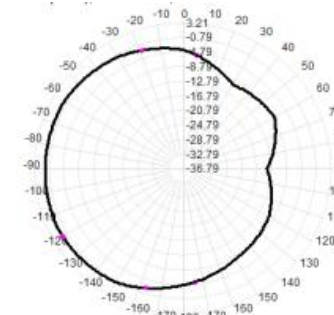
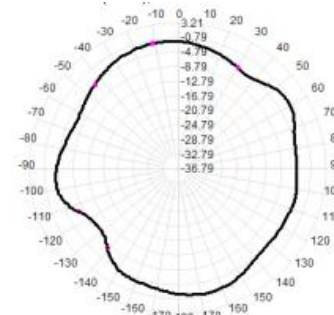
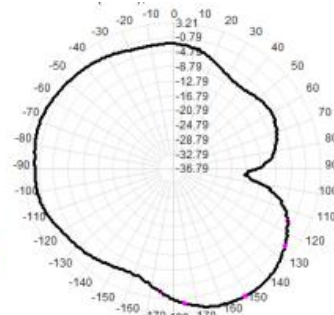
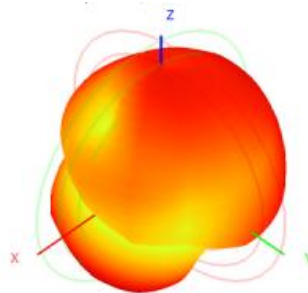
Product Number: AN0827-FPC71GX

Product Name: Antenna

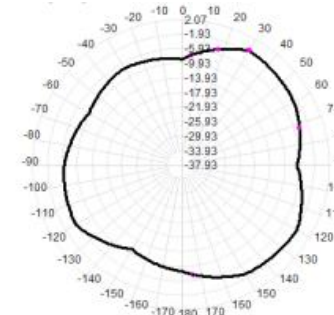
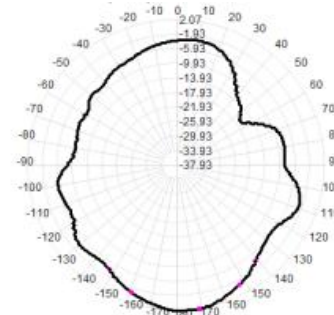
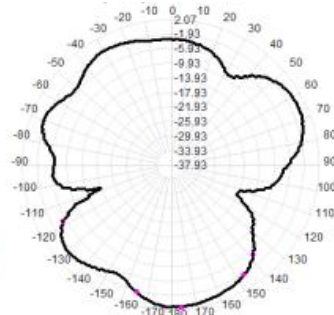
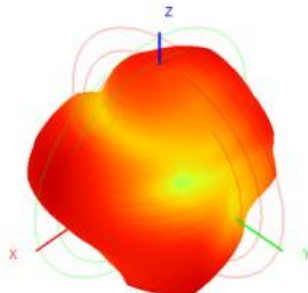
824MHz



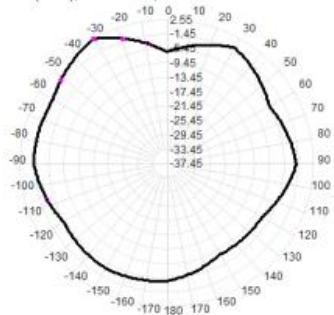
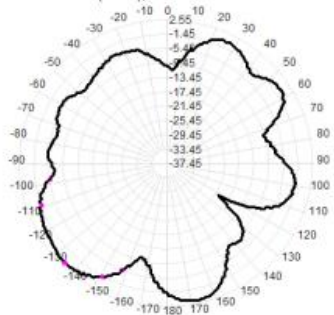
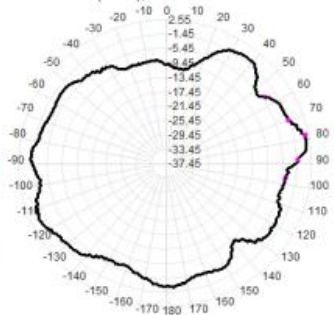
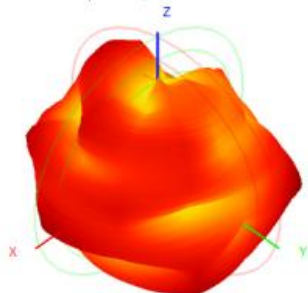
960MHz



1710MHz



2700MHz



5. Mechanical and Packing Drawing

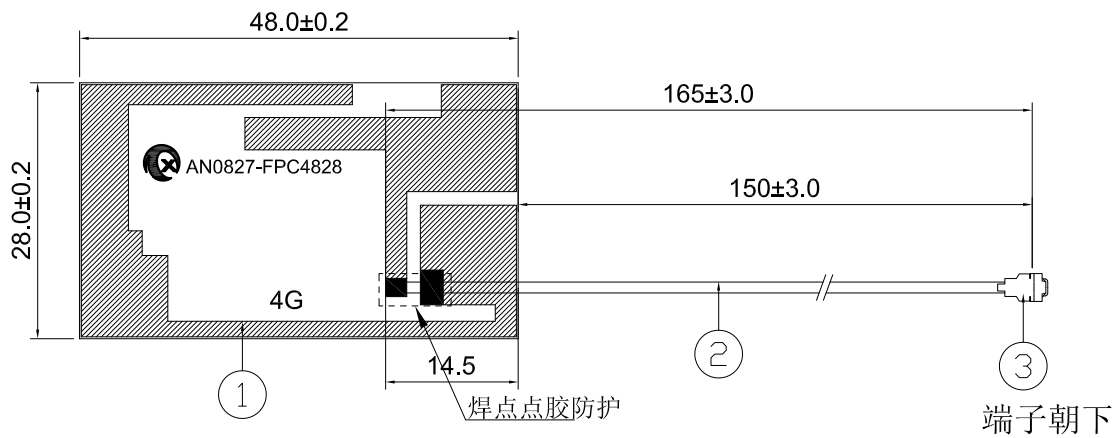
HF

RoHS2.0

REACH

CONFIDENTIAL

SIGN	DATE	DESCRIPTION	APPROVER



Note:

1. Mark * is important dimension; "Cpk "Identify for process control(CpK ≥ 1.33).
2. Tolerance: Unmarked tolerance refer to the standard tolerance please.
3. Pay attention to the direction of the connector.

东莞市海恒电子科技有限公司

3	CR-113-ZP-A	I-PEX		Au Plated	1
2	CB-113GS	Coaxial Cable	OD1.13	GRAY	1
1	AN0827-FPC4828	FPC		Black	1
No.	Part Number	Name	Material	Finish	Q'ty

TITLE: FPC天线					
PART NO.: AN0827-FPC71GX			CUSTOMER P/N: /		
APP BY	CHK BY	RF BY	DES BY		Tolerance
YCX	WJ	HC	SY	UNITS: mm SCALE: 1/1 REVISION: A	X.X ±0.5
2023.09.12	2023.09.12	2023.09.12	2023.09.12		X.XX ±0.2
					X° ±1

产品包装规范

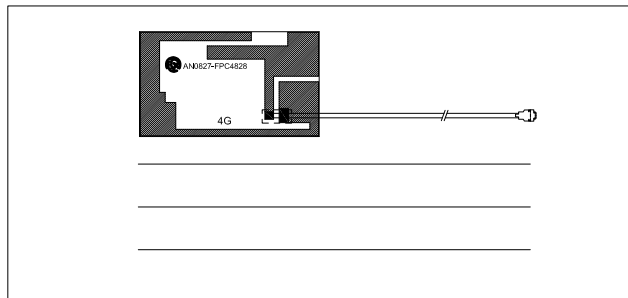
PACKING CRITERION

Date: 2023.09.12

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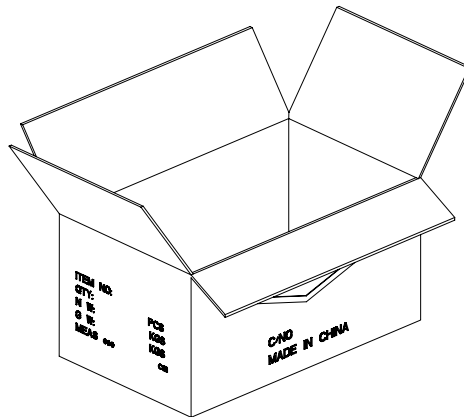
Part Number : AN0827-FPC71GX	Revision : A
Name: Antenna	Customer : ALL

1 . Enter PE bag。



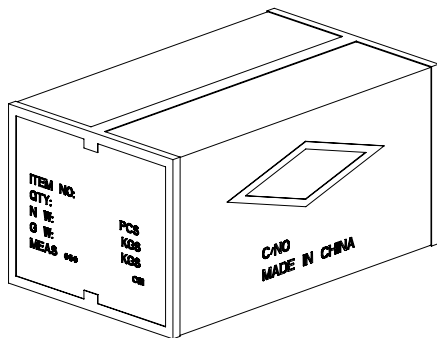
100pcs/ PE bag

2.PACKING。

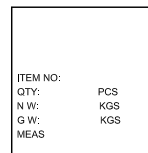


8000pcs/Carton

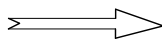
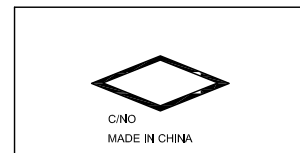
3. SEALING。



SIDE



FRONT



APPROVED BY: YCX

CHECKED BY: HC

DESIGNED BY: SY Y