



Report No.: PTC22053103902E-FC02

FCC TEST REPORT

FCC ID:2A78Q-FG01

Product	:	Retro Bluetooth Door Lock
Model Name	:	FG01
Brand	:	Hhuintell
Report No.	:	PTC22053103902E-FC02
Prepared for		
Jiaxing Dongxin Trading Co., Ltd.		
Room 401, Building 1, Kangxinju, Wuyuan Street, Haiyan County, Jiaxing City, Zhejiang Province		
Prepared by		
Precise Testing & Certification Co., Ltd		
Building 1, No. 6, Tongxin Road, Dongcheng Street, Dongguan, Guangdong, China		



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TEST RESULT CERTIFICATION

Applicant's name : Jiaxing Dongxin Trading Co., Ltd.
Address : Room 401, Building 1, Kangxinju, Wuyuan Street, Haiyan County, Jiaxing City, Zhejiang Province
Manufacture's name : Shenzhen kaidilos Intelligent Technology Co., Ltd
Address : No. 29-1, xintangkeng Road, Henggang street, Longgang District, Shenzhen
Product name : Retro Bluetooth Door Lock
Model name : FG01
Test procedure : KDB 447498 D01 General RF Exposure Guidance v06
Test Date : Jul. 22, 2022 to Aug. 4, 2022
Date of Issue : Sep. 16, 2022
Test Result : PASS

This device described above has been tested by PTC, and the test results show that the equipment under test (EUT) is in compliance with the FCC requirements. And it is applicable only to the tested sample identified in the report.

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Test Engineer:

A handwritten signature in black ink, appearing to read 'Simon Pu'.

Simon Pu / Engineer

Technical Manager:

A handwritten signature in black ink, appearing to read 'Ronnie Liu'.

Ronnie Liu / Manager



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2 Test Summary

Test Items	Test Requirement	Result
Maximum Permissible Exposure (Exposure of Humans to RF Fields)	1.1307(b)(1)	PASS
Remark:		
N/A: Not Applicable		



3 General Information

3.1 General Description of E.U.T.

Product Name	:	Retro Bluetooth Door Lock
Model Name	:	FG01
Additional model	:	N/A
Specification	:	Bluetooth LE
Operation Frequency	:	2402-2480MHz
Number of Channel	:	40 channels For DTS
Type of Modulation	:	GFSK, For DTS
Antenna installation	:	PCB antenna
Antenna Gain	:	1.68 dBi
Rated Power Supply	:	6V DC,<250mA
Test Power Supply	:	AC 120V/60Hz
Hardware Version	:	V1.0
Software Version	:	V1.0.2



4 RF Exposure

Test Requirement : FCC Part 1.1307(b)(1)

Evaluation Method : FCC Part 2.1091

4.1 Requirements

Systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy levels in excess limit for maximum permissible exposure. In accordance with 47 CFR FCC Part 2 Subpart J, section 2.1091 this device has been defined as a mobile device whereby a distance of 0.2 m normally can be maintained between the user and the device.

4.2 The procedures / limit

(A) Limits for Occupational / Controlled Exposure

Frequency Range	Electric Field	Magnetic Field	Power Density (S)	Averaging Time
0.3-3.0	614	1.63	(100)*	6
3.0-30	1842 / f	4.89 / f	(900 / f)*	6
30-300	61.4	0.163	1.0	6
300-1500			F/300	6
1500-100,000			5	6

(B) Limits for General Population / Uncontrolled Exposure

Frequency Range	Electric Field	Magnetic Field	Power Density (S)	Averaging Time
0.3-1.34	614	1.63	(100)*	30
1.34-30	824/f	2.19/f	(180/f)*	30
30-300	27.5	0.073	0.2	30
300-1500			F/1500	30
1500-100,000			1.0	30

Note: f = frequency in MHz ; *Plane-wave equivalent power density



4.3 MPE Calculation Method

$$E \text{ (V/m)} = \frac{\sqrt{30 \times P \times G}}{d} \quad \text{Power Density: } P_d \text{ (W/m}^2\text{)} = \frac{E^2}{377}$$

E = Electric field (V/m)

P = Peak RF output power (W)

G = EUT Antenna numeric gain (numeric)

d = Separation distance between radiator and human body (m)

The formula can be changed to

$$P_d = \frac{30 \times P \times G}{377 \times d^2}$$

From the peak EUT RF output power, the minimum mobile separation distance, d=0.2m, as well as the gain of the used antenna, the RF power density can be obtained

4.4 Test Result

Item	Antenna Gain (numeric)	Max. Peak Output Power (dBm)	Tune up tolerance (dBm)	Max Tune Up Power (mW)	Power Density (mW/cm ²)	Limit of Power Density (mW/cm ²)	Result
BLE	1.47	-4.28	-4.28 ± 1	0.469894	0.000138	1	Pass

*****THE END REPORT*****