



FCC TEST REPORT

FCC ID: 2A396-FWS-S30

Product	:	Solar battery camera
Model Name	:	FWS-S30 FWS-S10 FWS-S20 FWS-S21 FWS-S210 FWS-SL100 FWS-S23 FWS-S24 FWS-S25 FWS-S26 FWS-S27 FWS-S28 FWS-S29 FWS-S31 FWS-S32 FWS-S33 FWS-S34 FWS-S35 FWS-S36 FWS-S37 FWS-S38 FWS-S39 FWS-S40 FWS-B10 FWS-B11 FWS-B12 FWS-B13 FWS-B14 FWS-B15 FWS-X8 FWS-X9 FWS-X10 FWS-X11 FWS-X12
Brand	:	N/A
Report No.	:	PTC21120802201E-FC02
Sample ID	:	PTC21120802201E-01#
Prepared for		
Shenzhen Fuvision Electronics Company Limited 101 No. 41, Xinyuan Industrial Zone, Guxing Community, Xixiang Street, Bao' an District, Shenzhen, Guangdong, China 518100		
Prepared by		
Precise Testing & Certification Co., Ltd. Building 1, No. 6, Tongxin Road, Dongcheng Street, Dongguan, Guangdong, China.		



TEST RESULT CERTIFICATION

Applicant's name : Shenzhen Fuvision Electronics Company Limited
Address : 101 No. 41, Xinyuan Industrial Zone, Guxing Community, Xixiang Street, Bao' an District, Shenzhen, Guangdong, China 518100
Manufacture's name : Shenzhen Fuvision Electronics Company Limited
Address : 101 No. 41, Xinyuan Industrial Zone, Guxing Community, Xixiang Street, Bao' an District, Shenzhen, Guangdong, China 518100
Product name : Solar battery camera
Model name : FWS-S30 FWS-S10 FWS-S20 FWS-S21 FWS-S210 FWS-SL100 FWS-S23 FWS-S24 FWS-S25 FWS-S26 FWS-S27 FWS-S28 FWS-S29 FWS-S31 FWS-S32 FWS-S33 FWS-S34 FWS-S35 FWS-S36 FWS-S37 FWS-S38 FWS-S39 FWS-S40 FWS-B10 FWS-B11 FWS-B12 FWS-B13 FWS-B14 FWS-B15 FWS-X8 FWS-X9 FWS-X10 FWS-X11 FWS-X12
Test procedure : KDB 447498 D01 General RF Exposure Guidance v06
Test Date : Jan. 08, 2022 to Jan. 14, 2022
Date of Issue : Jan. 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.

This report shall not be reproduced except in full, without the written approval of PTC, this document may be altered or revised by PTC, personal only, and shall be noted in the revision of the document.

Test Engineer:

Leo Yang / Engineer

Technical Manager:

Chris Du / Manager



Contents

	Page
2 TEST SUMMARY.....	
3 GENERAL INFORMATION.....	
3.1 GENERAL DESCRIPTION OF E.U.T.....	5
4 RF EXPOSURE.....	
4.1 REQUIREMENTS.....	6
4.2 THE PROCEDURES / LIMIT.....	6
4.3 MPE CALCULATION METHOD.....	7
4.4 TEST RESULT.....	7



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	:	Solar battery camera
Model Name	:	FWS-S30 FWS-S10 FWS-S20 FWS-S21 FWS-S210 FWS-SL100 FWS-S23 FWS-S24 FWS-S25 FWS-S26 FWS-S27 FWS-S28 FWS-S29 FWS-S31 FWS-S32 FWS-S33 FWS-S34 FWS-S35 FWS-S36 FWS-S37 FWS-S38 FWS-S39 FWS-S40 FWS-B10 FWS-B11 FWS-B12 FWS-B13 FWS-B14 FWS-B15 FWS-X8 FWS-X9 FWS-X10 FWS-X11 FWS-X12
Additional model		Note : The appearance and color of the product are different, and the electrical principle is the same. The main test model is FWS-S30
Specification	:	802.11b/g/n HT20/HT40
Operation Frequency	:	2412-2462MHz for 802.11b/g/ n(HT20) 2422-2452MHz for 802.11n(HT40)
Number of Channel	:	11 channels for 802.11b/g/ n(HT20) 7 channels for 802.11 n(HT40)
Type of Modulation	:	DSSS with DBPSK/DQPSK/CCK for 802.11b; OFDM with BPSK/QPSK/16QAM/64QAM for 802.11g/n;
Antenna installation	:	Pcb antenna
Antenna Gain	:	3 dBi
Power supply	:	Input: DC5V Battery: 3.7V 14400mAh
Hardware Version	:	VER04 20210904
Software Version	:	224.0.7.60



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

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

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

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

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)	Peak Output Power (mw)	Power Density (mW/cm2)	Limit of Power Density (mW/cm2)	Result
2412	2	14.62	29	0.0115	1	Pass

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