



FCC TEST REPORT

FCC ID: 2AWT7-RBX-S30-WIFI

Product	:	WIFI SOLAR CAMERA
Model Name	:	RBX-S30-WIFI, RBX-S10-WIFI, RBX-S20-WIFI, RBX-S22-WIFI, RBX-S40-WIFI, RBX-S50-WIFI, RBX-S60-WIFI, RBX-B10-WIFI, RBX-B10-WIFI, RBX-B20-WIFI, RBX-B30-WIFI, RBX-F10-WIFI, RBX-F20-WIFI, RBX-F30-WIFI
Brand	:	RUIBOXY
Report No.	:	PTC22020802201E-FC02
Sample ID	:	PTC22020802201E-01#
Prepared for		
SHENZHEN RUIBOSI ELECTRONIC CO., LTD.		
Room 5F, Block B, Shabian Industrial Park, Sanwei, Xixiang, Bao'an, Shenzhen, China		
Prepared by		
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TEST RESULT CERTIFICATION

Applicant's name : SHENZHEN RUIBOSI ELECTRONIC CO., LTD.
Address : 5F, Block B, Shabian Industrial Park, Sanwei, Xixiang, Bao'an, Shenzhen, China
Manufacture's name : SHENZHEN RUIBOSI ELECTRONIC CO., LTD.
Address : 5F, Block B, Shabian Industrial Park, Sanwei, Xixiang, Bao'an, Shenzhen, China
Product name : WIFI SOLAR CAMERA
Model name : RBX-S30-WIFI, RBX-S10-WIFI, RBX-S20-WIFI, RBX-S22-WIFI, RBX-S40-WIFI, RBX-S50-WIFI, RBX-S60-WIFI, RBX-B10-WIFI, RBX-B10-WIFI, RBX-B20-WIFI, RBX-B30-WIFI, RBX-F10-WIFI, RBX-F20-WIFI, RBX-F30-WIFI
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.

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Test Engineer:

Leo Yang / Engineer

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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	:	WIFI SOLAR CAMERA
Model Name	:	RBX-S30-WIFI, RBX-S10-WIFI, RBX-S20-WIFI, RBX-S22-WIFI, RBX-S40-WIFI, RBX-S50-WIFI, RBX-S60-WIFI, RBX-B10-WIFI, RBX-B10-WIFI, RBX-B20-WIFI, RBX-B30-WIFI, RBX-F10-WIFI, RBX-F20-WIFI, RBX-F30-WIFI
Additional model	:	Note : The appearance and color of the product are different, and the electrical principle is the same. The main test model is RBX-S30-WIFI
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	:	FPC 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*******