



MPE Report

Report No.:STS2603361H01

Issued for

Zhuhai Initial Entropy Energy Co.,Ltd.

8th floor, A4 Harbour 7, Jintang Road, High-tech district,
Zhuhai City, Guangdong Province, China

Product Name: Portable Power Station

Brand Name: N/A

Model Name: P2400

Series Model(s): F2400, B2400, E2400, T2400, U2400,
H2400, G2400, S2400, X2400, C2400,
L2400, K2400, M2400, N2400, V2400,
A2400

FCC ID: 2BK4Q-P2400

Test Standard: FCC 47CFR §2.1091

The test results presented in this report relate only to the object tested. This report shall not be reproduced, except in full, without the written approval of the ShenZhen STS Test Services Co., Ltd.

**TEST REPORT**

Applicant's Name: Zhuhai Initial Entropy Energy Co.,Ltd.
Address: 8th floor, A4 Harbour 7, Jintang Road, High-tech district, Zhuhai City, Guangdong Province, China
Manufacturer's Name: Zhuhai Initial Entropy Energy Co.,Ltd.
Address: 8th floor, A4 Harbour 7, Jintang Road, High-tech district, Zhuhai City, Guangdong Province, China

Product Description

Product Name: Portable Power Station
Brand Name: N/A
Model Name: P2400
Series Model(s): F2400, B2400, E2400, T2400, U2400, H2400, G2400, S2400, X2400, C2400, L2400, K2400, M2400, N2400, V2400, A2400
Test Standards: FCC 47CFR §2.1091
447498 D01 Interim General RF Exposure Guidance v06

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Date of Test

Date of receipt of test item: 5 Dec. 2025
Date (s) of performance of tests: 5 Dec. 2025 ~ 30 Mar. 2026
Date of Issue: 30 Mar. 2026
Test Result: **Pass**

Testing Engineer :

Aaron Bu

(Aaron Bu)

Technical Manager :

Skylar Li

(Skylar Li)

Authorized Signatory :

Bovey Yang

(Bovey Yang)





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**Revision History**

Rev.	Issue Date	Report No.	Effect Page	Contents
00	30 Mar. 2026	STS2603361H01	ALL	Initial Issue



1. GENERAL INFORMATION

1.1 GENERAL DESCRIPTION OF THE EUT

Product Name	Portable Power Station	
Brand Name	N/A	
Model Name	P2400	
Series Model(s)	F2400, B2400, E2400, T2400, U2400, H2400, G2400, S2400, X2400, C2400, L2400, K2400, M2400, N2400, V2400, A2400	
Model Difference	All models are identical except for the model name, the test model is P2400.	
Product Description	The EUT is a Portable Power Station	
	Operation Frequency:	2402~2480 MHz 802.11b/g/n20: 2412~2462 MHz 802.11n40:2422~2452MHz
	Modulation Type:	GFSK 802.11b(DSSS):CCK,DQPSK,DBPSK 802.11g(OFDM):BPSK,QPSK,16-QAM,64-QAM 802.11n(OFDM):BPSK,QPSK,16-QAM,64-QAM 802.11b/g Support SISO 802.11n Support SISO
	Antenna gain:	-1 dBi
	Antenna Designation:	Internal Antenna
Power Rating	AC 120V/60Hz/DC 51.2V from battery	
Adapter	N/A	
Battery	DC 51.2V	
Hardware Version	N/A	
Software Version	N/A	

1.2 TEST FACTORY

SHENZHEN STS TEST SERVICES CO., LTD

Add. : 101, Building B, Zhuoke Science Park, No.190 Chongqing Road, ZhanChengShequ, Fuhai Sub-District, Bao'an District, Shenzhen, Guangdong, China

FCC test Firm Registration Number: 625569

IC test Firm Registration Number: 12108A

A2LA Certificate No.: 4338.01



2. FCC 47CFR §2.1091 REQUIREMENT

2.1 TEST STANDARDS

The limit for Maximum Permissible Exposure (MPE) specified in FCC §1.1310 is followed. The gain of the antennas used in the product is extracted from the Antenna data sheets provided and also the maximum total power input to the antenna is measured. Through the Friis transmission formula and the maximum gain of the antenna, we can calculate the distance, away from the product, where the limit of MPE is reached.

Although the Friis Transmission formula is far field assumption, the calculated result of that is an over-prediction for near field power density. It is taken as worst case to specify the safety range.

2.2 LIMIT

According to FCC §1.1310: The criteria listed in the following table shall be used to evaluate the environmental impact of the human exposure to radio-frequency (RF) radiation as specified in 1.1307 (b)

Limits for Maximum Permissible Exposure (MPE)

Frequency Range (MHz)	Electric Field Strength (V/m)	Magnetic Field Strength (A/m)	Power Density (mW/cm ²)
Limits for Occupational / controlled Exposures			
300 - 1500	--	--	F/300
3.0-30	1842/f	4.89/f	*(900/f ²)
1500 – 100000	--	--	5.0
Limits for General population / Uncontrolled Exposure			
300 - 1500	--	--	F/1500
1.34-30	824/f	2.19/f	*(180f ²)
1500 – 100000	--	--	1.0

F= Frequency in MHz

Friis Formula

Friis Transmission Formula: $P_d = (P_{out} * G) / (4 * \pi * r^2)$

Where

P_d = power density in mW/cm²

P_{out} = output power to antenna in mW

G = gain of antenna in linear scale

π = 3.1416

R = Distance between observation point and the center of radiator in cm

If we know the maximum gain of the antenna and the total output power to the antenna, through calculation, we will know MPE value at distance 20cm.



2.3 TEST RESULT

Tune up

Mode	Detector	Tune up Power
BLE	Peak	2±1dBm
2.4G WIFI	Peak	12±1dBm

Protocol	Fre. (GHz)	Separati on distance (cm)	Max Tune up power (dBm)	Max power (mW)	Power Density (mW/cm ²)	Limit (mW/ cm ²)	Ratio	Result
BLE	2.44	20	3	1.995	0.0004	1	0.0004	Pass
2.4G WIFI	2.412	20	13	19.953	0.0040	1	0.0040	Pass

Note: 1. The Maximum power is less than the limit, complies with the exemption requirements.

2. The Bluetooth and WLAN can't simultaneous transmission at the same time.

3. ERP = EIRP - 2.15

※※※※※END OF THE REPORT※※※※※