FCC Test Report

Applicant	:	**Wattbricks Products Inc**
Address	:	**337 N Veniyard,Ontario CA 91764**
Product Name	:	**PORTABLE POWER STATION**
Report Date	:	**Oct. 16, 2023**

Shenzhen Anbotek Compliance Laboratory Limited

Contents

TEST REPORT

Applicant	:	Wattbricks Products Inc
Manufacturer	:	Huizhou Intelligent Energy Co., Ltd.
Product Name	:	PORTABLE POWER STATION
Test Model No.	:	H2500Pro
Reference Model No.	:	N/A
Trade Mark	:	N/A
Rating(s)	:	Please refer to page 6

Test Standard(s)	**:**	**FCC Part 1.1310, 1.1307(b)**
Test Method(s)	**:**	**KDB680106 D01 RF Exposure Wireless Charging Apps v03**

The device described above is tested by Shenzhen Anbotek Compliance Laboratory Limited to determine the maximum emission levels emanating from the device and the severe levels of the device can endure and its performance criterion. The measurement results are contained in this test report and Shenzhen Anbotek Compliance Laboratory Limited is assumed full of responsibility for the accuracy and completeness of these measurements. Also, this report shows that the EUT (Equipment Under Test) is technically compliant with the FCC Part 1.1307 & KDB680106 D01 requirements.

This report applies to above tested sample only and shall not be reproduced in part without written approval of Shenzhen Anbotek Compliance Laboratory Limited.

Date of Receipt	Sept. 23, 2023
Date of Test	Sept. 23, 2023 to Oct. 11, 2023
Prepared By	Stella Zhu (Stella Zhu)
Approved & Authorized Signer	Edward pan (Edward Pan)

Revision History

Report Version	Description	Issued Date
R00	Original Issue.	Oct. 16, 2023

1. General Information

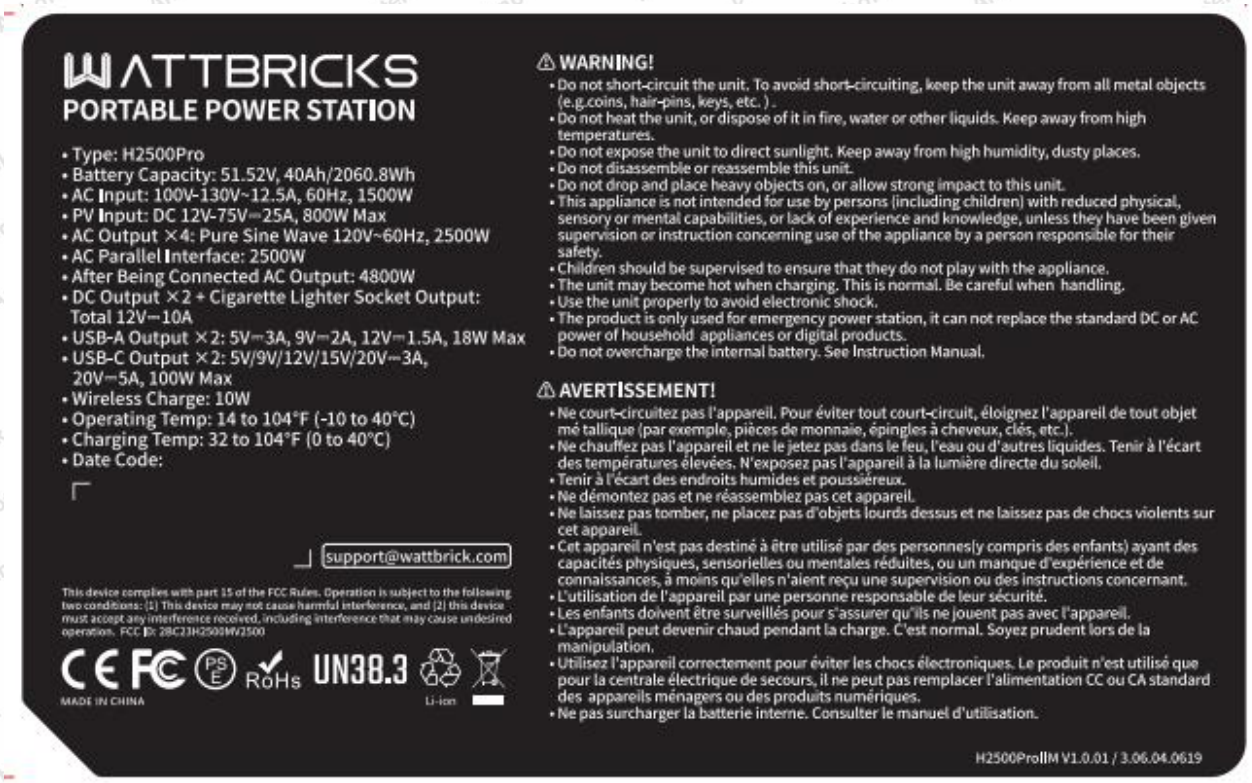
1.1. Client Information

Applicant	:	Wattbricks Products Inc
Address	:	337 N Veniyard,Ontario CA 91764
Manufacturer	:	Huizhou Intelligent Energy Co., Ltd.
Address	:	8-9/F, Bldg.E2, Qunyi Industrial Park, Sanhe Avenue, Tonghu Town, Zhongkai High-tech Zone, HuiZhou , China
Factory	:	Huizhou Intelligent Energy Co., Ltd.
Address	:	8-9/F, Bldg.E2, Qunyi Industrial Park, Sanhe Avenue, Tonghu Town, Zhongkai High-tech Zone, HuiZhou , China

1.2. Description of Device (EUT)

Product Name	:	PORTABLE POWER STATION
Test Model No.	:	H2500Pro
Reference Model No.	:	N/A
Trade Mark	:	N/A
Test Power Supply	:	DC 51.52V Battery inside
Test Sample No.	:	1-2-1(Normal Sample), 1-2-2(Engineering Sample)
Adapter	:	N/A
RF Specification		
Operation Frequency	:	110.1-205kHz
Modulation Type	:	ASK
Antenna Type	:	Loop antenna
Antenna Gain(Peak)	:	0 dBi
Remark: (1) All of the RF specification are provided by customer. (2)For a more detailed features description, please refer to the manufacturer's specifications or the User's Manual.		

Rating(s):


WATTBRICKS
PORTABLE POWER STATION
• Type: H2500Pro
• Battery Capacity: 51.52V, 40Ah/2060.8Wh
• AC Input: 100V-130V~12.5A, 60Hz, 1500W
• PV Input: DC 12V-75V⎓25A, 800W Max
• AC Output ×4: Pure Sine Wave 120V~60Hz, 2500W
• AC Parallel Interface: 2500W
• After Being Connected AC Output: 4800W
• DC Output ×2 + Cigarette Lighter Socket Output: Total 12V⎓10A
• USB-A Output ×2: 5V⎓3A, 9V⎓2A, 12V⎓1.5A, 18W Max
• USB-C Output ×2: 5V/9V/12V/15V/20V⎓3A, 20V⎓5A, 100W Max
• Wireless Charge: 10W
• Operating Temp: 14 to 104°F (-10 to 40°C)
• Charging Temp: 32 to 104°F (0 to 40°C)
• Date Code:
support@wattbrick.com
This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation. FCC ID: 2BC23H2500MV2500
MADE IN CHINA
UN38.3
Li-ion
WARNING!
• Do not short-circuit the unit. To avoid short-circuiting, keep the unit away from all metal objects (e.g.coins, hair-pins, keys, etc.) .
• Do not heat the unit, or dispose of it in fire, water or other liquids. Keep away from high temperatures.
• Do not expose the unit to direct sunlight. Keep away from high humidity, dusty places.
• Do not disassemble or reassemble this unit.
• Do not drop and place heavy objects on, or allow strong impact to this unit.
• This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.
• Children should be supervised to ensure that they do not play with the appliance.
• The unit may become hot when charging. This is normal. Be careful when handling.
• Use the unit properly to avoid electronic shock.
• The product is only used for emergency power station, it can not replace the standard DC or AC power of household appliances or digital products.
• Do not overcharge the internal battery. See Instruction Manual.
AVERTISSEMENT!
• Ne court-circuitez pas l'appareil. Pour éviter tout court-circuit, éloignez l'appareil de tout objet mé tallique (par exemple, pièces de monnaie, épingles à cheveux, clés, etc.).
• Ne chauffez pas l'appareil et ne le jetez pas dans le feu, l'eau ou d'autres liquides. Tenir à l'écart des températures élevées. N'exposez pas l'appareil à la lumière directe du soleil.
• Tenir à l'écart des endroits humides et poussiéreux.
• Ne démontez pas et ne réassemblez pas cet appareil.
• Ne laissez pas tomber, ne placez pas d'objets lourds dessus et ne laissez pas de chocs violents sur cet appareil.
• Cet appareil n'est pas destiné à être utilisé par des personnes(y compris des enfants) ayant des capacités physiques, sensorielles ou mentales réduites, ou un manque d'expérience et de connaissances, à moins qu'elles n'aient reçu une supervision ou des instructions concernant.
• L'utilisation de l'appareil par une personne responsable de leur sécurité.
• Les enfants doivent être surveillés pour s'assurer qu'ils ne jouent pas avec l'appareil.
• L'appareil peut devenir chaud pendant la charge. C'est normal. Soyez prudent lors de la manipulation.
• Utilisez l'appareil correctement pour éviter les chocs électroniques. Le produit n'est utilisé que pour la centrale électrique de secours, il ne peut pas remplacer l'alimentation CC ou CA standard des appareils ménagers ou des produits numériques.
• Ne pas surcharger la batterie interne. Consulter le manuel d'utilisation.
H2500ProIIM V1.0.01 / 3.06.04.0619

1.3. Auxiliary Equipment Used During Test

Title	Manufacturer	Model No.	Serial No.
Wireless load	BAECOAR	15W Smart wireless charger fixture wireless charging	/

1.4. Test Equipment List

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1	Electric and Magnetic field Analyzer	NARDA	EHP-200A	180ZX10202	Oct. 17, 2022	1 Year

1.5. Measurement Uncertainty

Magnetic Field Reading(A/m)	:	+/-0.04282(A/m)
Electric Field Reading(V/m)	:	+/-0.03679(V/m)
The measurement uncertainty and decision risk evaluated according to AB/WI-RF-F-032. This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.		

1.6. Description of Test Facility

The test facility is recognized, certified, or accredited by the following organizations:

FCC-Registration No.: 184111

Shenzhen Anbotek Compliance Laboratory Limited, EMC Laboratory has been registered and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files. Registration No. 184111.

ISED-Registration No.: 8058A

Shenzhen Anbotek Compliance Laboratory Limited, EMC Laboratory has been registered and fully described in a report filed with the (ISED) Innovation, Science and Economic Development Canada. The acceptance letter from the ISED is maintained in our files. Registration 8058A.

Test Location

Shenzhen Anbotek Compliance Laboratory Limited.
1/F, Building D, Sogood Science and Technology Park, Sanwei community, Hangcheng Street, Bao'an District, Shenzhen, Guangdong, China. 518102

1.7. Disclaimer

1. The test report is invalid if not marked with the signatures of the persons responsible for preparing and approving the test report.
2. The test report is invalid if there is any evidence and/or falsification.
3. The results documented in this report apply only to the tested sample, under the conditions and modes of operation as described herein.
4. This document may not be altered or revised in any way unless done so by Anbotek and all revisions are duly noted in the revisions section.
5. Content of the test report, in part or in full, cannot be used for publicity and/or promotional purposes without prior written approval from the laboratory.
6. The authenticity of the information provided by the customer is the responsibility of the customer and the laboratory is not responsible for its authenticity.

The laboratory is only responsible for the data released by the laboratory, except for the part provided by the applicant.

2. Measurement and Result

2.1. Requirements

According to the item 5.b) of KDB 680106 D01v03:

Inductive wireless power transfer applications that meet all of the following requirements are excluded from submitting an RF exposure evaluation.

1) Power transfer frequency is less that 1 MHz

2) Output power from each primary coil is less than or equal to 15 watts.

3) The transfer system includes only single primary and secondary coils. This includes charging systems that may have multiple primary coils and clients that are able to detect and allow coupling only between individual pairs of coils

4) Client device is inserted in or placed directly in contact with the transmitter

5) Mobile exposure conditions only (portable exposure conditions are not covered by this exclusion)

6) The aggregate H-field strengths at 15 cm surrounding the device and 20 cm above the top surface from all simultaneous transmitting coils are demonstrated to be less than 50% of the MPE limit.

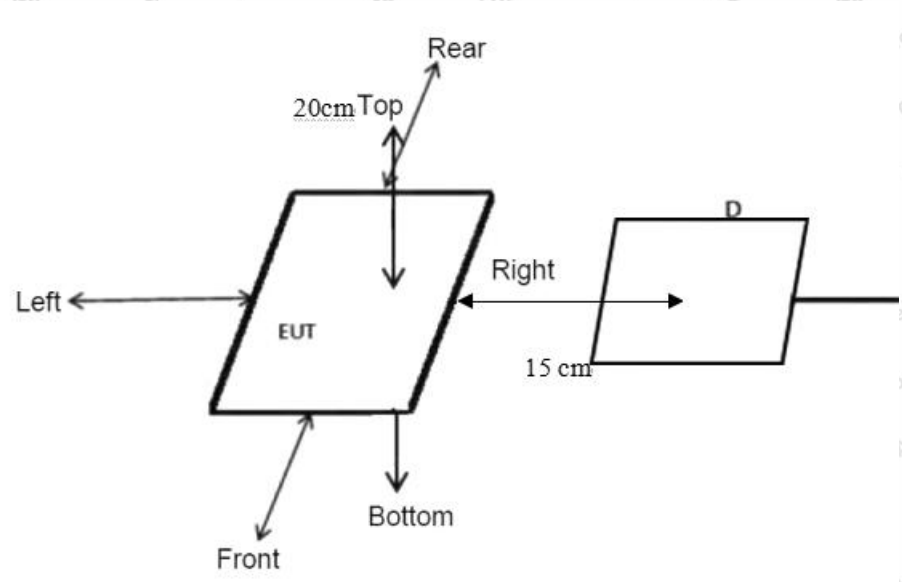
Limits For Maximum Permissible Exposure (MPE)

Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm^2)	Averaging time (minutes)
(A) Limits for Occupational/Controlled Exposures				
0.3-3.0	614	1.63	*(100)	6
3.0-30	1842/f	4.89/f	*($900/f^2$)	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				
0.3-1.34	614	1.63	*(100)	30
1.34-30	824/f	2.19/f	*($180/f^2$)	30
30-300	27.5	0.073	0.2	30
300-1500	/	/	f/1500	30
1500-100,000	/	/	1.0	30

F=frequency in MHz
*=Plane-wave equivalent power density
RF exposure compliance will need to be determined with respect to 1.1307(c) and (d) of the FCC rules. The emissions should be within the limits at 300kHz in Table 1 of 1.1310(use the 300kHz limits for 150kHz:614V/m,1.63A/m).

Address:1/F.,Building D,Sogood Science and Technology Park, Sanwei Community, Hangcheng Street, Bao'an District, Shenzhen, Guangdong, China.
Tel:(86) 0755-26066440 Fax:(86) 0755-26014772 Email:service@anbotek.com
Hotline 400-003-0500 www.anbotek.com.cn

2.2. Test Setup



Note: Measurements should be made at 15 cm surrounding the EUT and 20cm above the top surface of the EUT.

2.3. Test Procedure

1) The RF exposure test was performed in anechoic chamber.

2) The measurement probe was placed at required test distance which is between the edge of the charger and the geometric center of probe.

3) The highest emission level was recorded and compared with limit as soon as measurement of each points

(A, B, C, D, E) were completed.(A is the right, B is the back, C is the left, D is the front, and E is the top.)

4) The EUT was measured according to the dictates of KDB 680106 D01 v03.

Remark; The EUT's test position A, B, C, D and E is valid for the E and H field measurements.

2.4. Test Result

2.4.1. Equipment Approval Considerations item 5.b of KDB 680106 D01 v03.

1) Power transfer frequency is less that 1 MHz

- The device operate in the frequency range 110.1-205kHz.

2) Output power from each primary coil is less than 15 watts

- The maximum output power of the primary coil is 10W.

3) The transfer system includes only single primary and secondary coils. This includes charging systems that may have multiple primary coils and clients that are able to detect and allow coupling

only between individual pairs of coils

- The transfer system including a charging system with only single primary coils is to detect and allow only between individual pairs of coils.

4) Client device is inserted in or placed directly in contact with the transmitter

- Client device is placed directly in contact with the transmitter.

5) Mobile exposure conditions only (portable exposure conditions are not covered by this exclusion)

- The EUT is a Mobile exposure conditions

6) The aggregate H-field strengths at 15 cm surrounding the device and 20 cm above the top surface from all simultaneous transmitting coils are demonstrated to be less than 50% of the MPE limit.

- Conducted the measurement with the required distance and the test results please refer to the section 2.4.

2.4.2. Environmental evaluation and exposure limit according to FCC CFR 47 part 1, 1.1307(b), 1.1310

Temperature:	22.5°C	Relative Humidity:	49 %
Pressure:	1012 hPa	Test Voltage:	DC 51.52V Battery inside

E-Field Strength at 15 cm surrounding the EUT and 20cm above the top surface of the EUT

Battery power	Frequency Range (kHz)	Test Position A	Test Position B	Test Position C	Test Position D	Test Position E	Reference Limit (V/m)	Limits Test (V/m)
1%	110.1-205	0.278	0.368	0.318	0.328	0.448	307	614
50%	110.1-205	1.444	1.884	1.374	1.504	1.674	307	614
99%	110.1-205	2.426	2.826	2.436	2.386	2.846	307	614
Stand-by	110.1-205	0.428	0.578	0.418	0.408	0.548	307	614

H-Field Strength at 15 cm surrounding the EUT and 20cm above the top surface of the EUT

Battery power	Frequency Range (kHz)	Test Position A	Test Position B	Test Position C	Test Position D	Test Position E	Reference Limit (A/m)	Limits Test (A/m)
1%	110.1-205	0.032	0.054	0.060	0.044	0.054	0.815	1.63
50%	110.1-205	0.373	0.463	0.363	0.363	0.533	0.815	1.63
99%	110.1-205	0.461	0.641	0.531	0.351	0.341	0.815	1.63
Stand-by	110.1-205	0.509	0.329	0.429	0.549	0.409	0.815	1.63

Note: All the situation(full load, half load and empty load) has been tested,only the worst situation (full load 10W) was recorded in the report.

APPENDIX I -- TEST SETUP PHOTOGRAPH

Please refer to separated files Appendix I -- Test Setup Photograph_MPE

APPENDIX II -- EXTERNAL PHOTOGRAPH

Please refer to separated files Appendix II -- External Photograph

APPENDIX III -- INTERNAL PHOTOGRAPH

Please refer to separated files Appendix III -- Internal Photograph

---------- End of Report ----------