

Human Exposure Report

Application No.:	KSCR2410002017BA
FCC ID:	2BOBA-AR2000
Applicant:	Shanghai Voltdeer Technology Co.,Ltd.
Address of Applicant:	Room 407, Building 25, No.111, Kangqiao East Road, China (Shanghai) Pilot Free Trade Zone.
Manufacturer:	Shanghai Voltdeer Technology Co.,Ltd.
Address of Manufacturer:	Room 407, Building 25, No.111, Kangqiao East Road, China (Shanghai) Pilot Free Trade Zone.
Factory:	Jiangsu Voltdeer Technology Co.,Ltd.
Address of Factory:	2nd Floor, Building 2, No. 168, Qianjin East Road, Development Zone, Kunshan, Jiangsu Province, P.R. China
EUT Name:	Power Supply(Portable Power Station)
Model No.:	AR2000
Standards:	47 CFR PART 1, Subpart I, Section 1.1310 KDB 680106 D01 v04
Date of Receipt:	2024-10-15
Date of Test:	2025-02-10 to 2025-02-24
Date of Issue:	2025-02-25

Test Result :	Pass*
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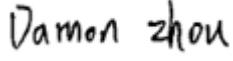
* In the configuration tested, the EUT complied with the standards specified above.

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Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Revision Record			
Version	Description	Date	Remark
00	Original	2025-02-25	/

Authorized for issue by:			
Tested By	 Damon Zhou		
	<u>Damon_Zhou/Project Engineer</u>		
Approved By	 Terry Hou		
	<u>Terry Hou /Reviewer</u>		

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3 General Information

3.1 Details of E.U.T.

WPC

Power supply:	AC Input: AC120V,15A,1800W Max, 60Hz PV Input: DC12-60V,25A Max Expansion Port Output: DC 54V,30A Max AC Output*4: AC120V,18A 2200W Max,60Hz Expansion Port Output: DC48V,40A USB-C Output*4: DC20V,5A/20V,3A/15V,3A/12V,3A/9V,3A/5V,3A,100W Max (per port) USB-A Output*2: DC12V,2A/9V,2.5A/5V,3A,24W Max (per port) Wireless Output: DC5-12V,1.25A,15W Max Cigar Lighter Output: DC12V,10A Max Multiport Output: USB-A+USB-C+Cigar lighter+Wireless Max 400W Bypass Mode AC Input: AC120V,15A,60Hz,1800W Max
Test Voltage:	AC 120V/60Hz
Operation Frequency:	111-148kHz
Test Frequency:	127.7kHz
Wireless Output:	5W,7.5W,10W,15W
Modulation Type:	FSK
Antenna Type:	Inductive Loop Coil Antenna

3.2 Description of Support Units

Description	Manufacturer	Model No.	Serial No.
Load	--	--	--

3.3 Description of Product installation location

The device typical is desktop applications. We test all four sides and the top of the device at a test distance of 15cm.

3.4 Test Location

All tests were performed at:

Compliance Certification Services (Kunshan) Inc.

No.10 Weiye Rd, Innovation park, Eco&Tec, Development Zone, Kunshan City, Jiangsu, China.

Tel: +86 512 5735 5888 Fax: +86 512 5737 0818

No tests were sub-contracted.

Note:

- 1.SGS is not responsible for wrong test results due to incorrect information (e.g. max. clock frequency, highest internal frequency, antenna gain, cable loss, etc) is provided by the applicant. (if applicable).
- 2.SGS is not responsible for the authenticity, integrity and the validity of the conclusion based on results of the data provided by applicant. (if applicable).
3. Sample source: sent by customer.

3.5 Test Facility

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

- **A2LA**

Compliance Certification Services (Kunshan) Inc. is accredited by the American Association for Laboratory Accreditation (A2LA). Certificate No. 2541.01.

- **FCC**

Compliance Certification Services (Kunshan) Inc. has been recognized as an accredited testing laboratory. Designation Number: CN1172.

- **ISED**

Compliance Certification Services (Kunshan) Inc. has been recognized by Innovation, Science and Economic Development Canada (ISED) as an accredited testing laboratory. Company Number: 2324E

- **VCCI**

The 3m and 10m Semi-anechoic chamber and Shielded Room of Compliance Certification Services (Kunshan) Inc. has been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: R-20134, R-11600, C-11707, T-11499, G-10216 respectively.

3.6 Deviation from Standards

None

3.7 Abnormalities from Standard Conditions

None

4 Equipments Used during Test

Item	Test Equipment	Manufacturer	Model No.	Inventory No.	Cal. Due date
1	MAGPy-8H3D+E3D V2	SPEAG	MAGPy	KSEM064	2026/02/04
2	MAGPy-DAS V2	SPEAG	MAGPy	KSEM065	2026/02/04
3	Test Software	SPEAG	MAGPy V2.6.0	N/A	N/A

5 RF Exposure Test Results

Test Requirement: 47 CFR PART 1, Subpart I, Section 1.1310

Measurement Distance: 15cm

Limit:

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
Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm ²)	Averaging time (minutes)
(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).

5.1 Operating Environment

Temperature: 24.0 °C Humidity: 52 % RH Atmospheric Pressure: 1015 mbar

5.2 EUT Operation

This device has been charge at zero charge, intermediate charge, and full charge. The Maximum value has been recorded in the below table

5.3 Test Data and Field Estimated

5.3.1 Test Data using Dummy Load

M1	Transfer Zones Charging_ The load shall be set at full load 15W respectively.
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Magnetic Field:

Test Distance	Test Position	Measure Result (A/m)	Limit (A/m)	50% Limit (A/m)	Verdict
15cm	Side1	0.12	1.63	0.815	PASS
	Side2	0.13	1.63	0.815	PASS
	Side3	0.07	1.63	0.815	PASS
	Side4	0.08	1.63	0.815	PASS
	Top	0.61	1.63	0.815	PASS

Electric Field:

Test Distance	Test Position	Measure Result (V/m)	Limit (V/m)	50% Limit (V/m)	Verdict
15cm	Side1	0.81	614	307	PASS
	Side2	0.75	614	307	PASS
	Side3	0.35	614	307	PASS
	Side4	0.41	614	307	PASS
	Top	2.27	614	307	PASS

6 Test photos



- End of the Report -