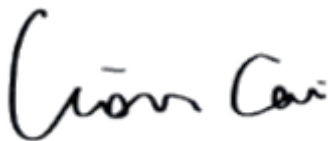


# TEST REPORT

**Application No.:** BTEK241227139A02-T02  
**Applicant:** Huizhou Huada Technology Co.,Ltd  
**Address of Applicant:** 3rd Floor,Building 2, Xinhe Avenue No.18th ,Dayawan West District,  
Huizhou City, Guangdong Province, China  
**Manufacturer:** Huizhou Huada Technology Co.,Ltd  
**Address of Manufacturer:** 3rd Floor,Building 2, Xinhe Avenue No.18th ,Dayawan West District,  
Huizhou City, Guangdong Province, China  
**Equipment Under Test (EUT):**  
**EUT Name:** LiFePO4 Battery Pack  
**Test Model.:** H51100-5KW  
**Adding Model(s):** HD-51.2-100  
**Trade Mark:** HUADA  
**FCC ID:** 2BNG LH51100-5KW  
**Standard(s) :** 47 CFR Part 2 Subpart J Section 2.1091  
447498 D01 General RF Exposure Guidance v06  
**Date of Receipt Sample(s):** 2025-01-03  
**Date of Test:** 2025-01-06 to 2025-02-13  
**Date of Issue:** 2025-02-14

<b>Test Result:</b>	<b>Pass*</b>
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\* In the configuration tested, the EUT complied with the standards specified above.



Lion Cai/ Approved & Authorized  
EMC Laboratory Manager



Revision Record			
Version	Issue Date	Revisions	Remarks
V0	2025-02-14	Initial	Valid

Authorized for issue by:			
			
		<hr/>	
		Karl Liu / File Editor	
			
		<hr/>	
		June Li/Reviewer	

## Remarks:

The results shown in this test report refer only to the sample(s) tested, this test report cannot be reproduced, except in full without prior written permission of the company. The report would be invalid without specific stamp of test institute and the signatures of compiler and approver.



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### 3 General Information

#### 3.1 Details of E.U.T.

Power supply:	MODEL:1100W4820T INPUT:100-240VAC~ 50-60HZ OUTPUT:58.4V20A LiFePO4 Battery Pack Battery Model: H51100-5KW Battery Type: LiFeP04 Nominal Voltage : 51.2V Nominal Capacity: 105AH Charge Voltage: 58.4V Nominal energy 5376Wh Continuous Discharge Current 200A
Frequency Range:	2402MHz to 2480MHz
Bluetooth Version:	V5.2 BLE
Modulation Type:	GFSK
Number of Channels:	40
Antenna Type:	PCB Antenna
Antenna Gain:	0dBi
Sample No.:	BTEK241227139A02-1-1/2
Model(s) Difference Statement	<input type="checkbox"/> Single Model. <input checked="" type="checkbox"/> Multi-Models:H51100-5KW, HD-51.2-100 Only the model H51100-5KW was tested. According to the declaration from the applicant, the electrical circuit design, layout, components used, internal wiring and functions of other models are identical for the above models, with only difference on Model No

#### 3.2 Description of Support Units

Description	Manufacturer	Model No.	Serial No.
/	/	/	/

#### 3.3 Test Location

All tests were performed at:  
Shenzhen BANTEK Testing Co., Ltd.,  
A5&A6, Building B1&B2, No.45 Gangtuo Road, Bogang Community, Shajing Street, Bao'an District,  
Shenzhen, Guangdong, China 518103  
Tel:0755-2334 4200 Fax: 0755-2334 4200  
FCC Registration Number: 264293  
Designation Number: CN1356  
No tests were sub-contracted.

#### 3.4 Deviation from Standards

None

#### 3.5 Abnormalities from Standard Conditions

None





## 4 Test Requirement

According to §1.1307(b)(1) and KDB 447498 D01 General RF Exposure Guidance v06, system operating under the provisions of this section shall be operating in a manner that the public is not exposed to radio frequency energy level in excess limit for maximum permissible exposure.

### Limits for Maximum Permissible Exposure (MPE)

Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm <sup>2</sup> )	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 <sup>2</sup> )	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 <sup>2</sup> )	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

Friis transmission formula:  $Pd = (Pout \cdot G) / (4 \cdot \pi \cdot r^2)$

Where

**Pd** = power density in mW/cm<sup>2</sup>, **Pout** = output power to antenna in mW;

**G** = gain of antenna in linear scale, **Pi** = 3.1416;

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

Pd is the limit of MPE, 1 mW/cm<sup>2</sup>. If we know the maximum gain of the antenna and the total power input to the antenna, through the calculation, we will know the distance r where the MPE limit is reached.

### 4.1 Assessment Result

☒ Passed ☐ Not Applicable

Frequency (MHz)	Type	Conducted Power (dBm)	Maximum Tune-up (dBm)	Power Density (mW/cm <sup>2</sup> )	Limit (mW/cm <sup>2</sup> )	Result
2402	BLE-S8	4.76	5	0.0008	1.0000	Pass

Note: 1.The exposure evaluation safety distance is 20cm.

2.Only show the worst case in the test report.

- End of the Report -

