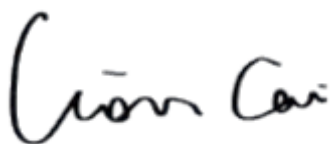


# TEST REPORT

**Application No.:** BTEK240509014AE  
**Applicant:** Shenzhen Maicheng Technology Innovation Co., Ltd.  
**Address of Applicant:** 16B,Block B,Building 1,Haoting Jixiangli Huanggekeng Community,  
Longcheng Street Longgang District,Shenzhen ,China  
**Manufacturer:** Shenzhen Maicheng Technology Innovation Co., Ltd.  
**Address of Manufacturer:** 16B,Block B,Building 1,Haoting Jixiangli Huanggekeng Community,  
Longcheng Street Longgang District,Shenzhen ,China  
**Equipment Under Test (EUT):**  
**EUT Name:** Redodo 12.8V 100Ah LiFePO4 Battery  
**Test Model.:** 12.8V 100Ah  
**Adding Model(s):** 12.8V100Ah Plus, 12.8V100Ah Mini, 12.8V100Ah H190, 12.8V100Ah LTCP,  
12.8V100Ah TM, 12.8V100Ah Self-Heating, 12.8V100Ah Pro, 12.8V100Ah  
Smart, 12.8V 100Ah Max,12.8V 100Ah Group 31, 12.8V 100Ah Group  
22NF, 12.8V 100Ah BT, 12.8V 100Ah Self-Heating, 12.8V 100Ah Smart TM,  
12.8V 100Ah Smart Group 31, 12.8V 100Ah Smart OM  
**Trade Mark:** Redodo  
**FCC ID:** 2BE5H-12V100  
**Standard(s) :** 47 CFR Part 2 Subpart J Section 2.1091  
447498 D01 General RF Exposure Guidance v06  
**Date of Receipt:** 2024-05-24  
**Date of Test:** 2024-05-24 to 2024-06-18  
**Date of Issue:** 2024-06-19

<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

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Revision Record				
Version	Chapter	Date	Modifier	Remark
V0		2024-06-19		Original

Authorized for issue by			
		<i>Zora . Huang</i>	
		<b>Zora Huang/Project Engineer</b>	
		<i>June Li</i>	
		<b>June Li/Reviewer</b>	

## 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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## General Information

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

Power supply:	DC 12.8V 100A
Frequency Range:	2402MHz to 2480MHz
Bluetooth Version:	V5.0 BLE
Modulation Type:	GFSK
Number of Channels:	40
Antenna Type:	PCB Antenna
Antenna Gain:	1.2dBi
Sample No.:	BTEK240509014AE-01

Remark: The information in this section is provided by the applicant or manufacturer, BANTEK is not liable to the accuracy, suitability, reliability or/and integrity of the information.

Model No.: 12.8V 50Ah Smart TM, 12.8V 50Ah, 12.8V 50Ah TM, 12.8V 50Ah Plus, 12.8V 50Ah Pro, 12.8V 50Ah Smart, 12.8V 50Ah Mini, 12.8V 50Ah Max, 12.8V 50Ah LTCP, 12.8V 50Ah H190, 12.8V 50Ah Group 24, 12.8V 50Ah Group 31, 12.8V 50Ah, Group 22NF, 12.8V 50Ah Smart Group 31, 12.8V 50Ah GC Smart

Only the model 12.8V 50Ah Smart TMI 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 Gangtou 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)	Conducted Power (dBm)	Maximum Tune-up (dBm)	Power Density (mW/cm <sup>2</sup> )	Limit (mW/cm <sup>2</sup> )	Result
2402	2.23	2.50	0.0006	1.0000	Pass

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

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

- End of the Report -

