



广州海关技术中心

GUANGZHOU CUSTOMS DISTRICT TECHNOLOGY CENTER



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检测
TESTING
CNAS L2322

地址：中国广东省广州市天河区珠江新城花城大道66号B座 邮编Postcode: 510623

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电话Tel: 020-22131000 邮箱Email: ppdc@iqtcnet.cn 网址Website: <https://www.iqtcnet.cn>

No: 1126000650Y-1

Date: 2026-02-02

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UN38.3 报告 UN38.3 Test Report

样品名称: 磷酸铁锂电池

Sample Name: Lithium iron phosphate battery

委托单位: 广州菲利斯太阳能科技有限公司

Applicant: Guangzhou Felicity Solar Technology Co., Ltd



提取码: 948245

验证平台:

<https://css.iqtcnet.cn>



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检测证书

TEST REPORT

样品名称 Sample Name	磷酸铁锂电池 Lithium iron phosphate battery		
型号 Model	FLB48230WG1-AU		
内含电池组型号 Batteries Model	FLB-230AH		
委托单位 Applicant	广州菲利斯太阳能科技有限公司 Guangzhou Felicity Solar Technology Co., Ltd		
委托单位地址 Applicant Address	广州市白云区人和镇东华业路2号 No. 2, Donghua Huaye Road, Renhe Town, Baiyun Area, Guangzhou		
生产单位 Manufacturer	广州菲利斯太阳能科技有限公司 Guangzhou Felicity Solar Technology Co., Ltd		
生产单位地址 Manufacturer Address	广州市白云区人和镇东华业路2号 No. 2, Donghua Huaye Road, Renhe Town, Baiyun Area, Guangzhou		
样品外观与性状 Appearance & Odor	白色金属外壳 White metal shell		
测试方法和判定标准 Test method and criterion	联合国《关于危险货物运输的建议书 试验和标准手册》ST/SG/AC.10/11/Rev.8, 38.3 UNITED NATIONS "Recommendations on the TRANSPORT OF DANGEROUS GOODS", Manual of Tests and Criteria ST/SG/AC.10/11/Rev.8, 38.3		
接样时间 Accepted date	2026-01-23	完成日期 Completed date	2026-01-28
测试项目 Test items	过度充电、短路、电池组之间过度放电。 Overcharge, Short circuit, Over discharge between the batteries.		
结论 Conclusion	经测试, 该样品符合联合国《关于危险货物运输的建议书 试验和标准手册》ST/SG/AC.10/11/Rev.8, 38.3 标准要求。 The sample has passed the test items of UNITED NATIONS "Recommendations on the TRANSPORT OF DANGEROUS GOODS", Manual of Test and Criteria ST/SG/AC.10/11/Rev.8, 38.3.		
备注 Remark	1.FLB48230WG1-AU 与 FLB48230WG1 的保护机制一致, 本报告第4页至第5页测试结果为签发于2025-08-20原报告1125002424-1的测试结果, 被测样品型号为FLB48230WG1。 The protective mechanism of FLB48230WG1-AU is consistent with that of FLB48230WG1, the test results on pages 4 to 5 of this report are the original report 1125002424-1 issued on 2025-08-20, and the tested sample model is FLB48230WG1. 2.该集成电池组的额定瓦特-小时数超过6200Wh, 由若干锂离子电池组以电路连接而成, 锂离子电池组已通过UN38.3测试(报告编号: 1125002422-1)。 The assembled batteries were rated a Watt-hour more than 6200Wh and formed by electrically connected modules, the modules are of the types proven to meet the requirements of each applicable test in the UN Manual of Tests and Criteria, Part III, sub-section 38.3. (Test Report No.: 1125002422-1). 3. 随附UN38.3试验概要(编号: 1126000650-2)。 Attached with UN38.3 test summary (No.: 1126000650-2).		



批准

Approver:

邱初唯

审核

Checker:

叶中轩

拟制

Preparer:

张婷婷

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产品信息:

Product information:

电池类型 Battery type	锂离子电池 Lithium ion battery	标称电压 Nominal Voltage	51.2V
额定容量 Rated Capacity	230Ah	总能量 Total Energy	11.7kWh
充电限制电压 Limited Charge Voltage	57.6V	标准充电电流 Standard Charge Current	75A
最大持续充电电流 Maximum Continuous Charge Current	150A	标准放电电流 Standard Discharge Current	75A
最大持续放电电流 Maximum Continuous Discharge Current	150A	放电截止电压 Discharge Cut-off Voltage	44.8V
重量 Weight	91 ± 2kg	物理形状说明 Physical description	长方体 Cuboid
电池组组合方式 Battery Pack Combination	1P 2S	模组数量 Module Quantity	2PCS



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序号 No.	测试项目名称 Name of test	标准要求或标准条款号 Standard requirement or the clause number of standard	测试结果 Test result	本项结论 Test conclusion	备注 Remark
1	过度充电 Overcharge	联合国《关于危险货物运输的建议书 试验和标准手册》UN Manual of Tests and Criteria ST/SG/AC.10/11/Rev.8, 38.3.3.1(g)	见附表 1 See Appendix 1	合格 Passed	/
2	短路 Short circuits	联合国《关于危险货物运输的建议书 试验和标准手册》UN Manual of Tests and Criteria ST/SG/AC.10/11/Rev.8, 38.3.3.1(g)	见附表 1 See Appendix 1	合格 Passed	/
3	电池组之间过度放电 Over discharge between the batteries	联合国《关于危险货物运输的建议书 试验和标准手册》UN Manual of Tests and Criteria ST/SG/AC.10/11/Rev.8, 38.3.3.1(g)	见附表 1 See Appendix 1	合格 Passed	/
测试环境 Test environment condition		环境温度: 20°C-25°C; 环境湿度: 45%-75% Ambient temperature: 20°C-25°C, Ambient humidity: 45%-75%			

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附表 1
Appendix 1

样品状态 Sample status	一个功能正常的集成电池组; One functional assembled battery;	
测试项目名称 Name of test	测试要求 Requirement of test	测试结果 Test result
过度充电 Overcharge	按照制造商规定的充电方法, 验证过度充电保护功能。 Verify overcharge protection according to the manufacturer's charging method.	Pass
短路 Short circuits	按照制造商规定的充电方法充满电, 使电池组经受总外电阻小于 0.1Ω 的短路条件, 验证短路保护功能。 Fully charged according to the charging method specified by the manufacturer. The battery shall be subjected to a short circuit condition with a total external resistance of less than 0.1 ohm. Verify short circuit protection.	Pass
电池组之间过度放电 Over discharge between the batteries	按照制造商规定的放电方法, 验证过度放电保护功能。 Verify over discharge protection according to the manufacturer's discharging method.	Pass

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样品图片

Photo of the sample

集成电池组/Battery Pack

电池正面外观
Battery front appearance



电池侧面外观
Battery side appearance



电池侧面外观
Battery side appearance



电池铭牌(含 Wh)
Battery nameplate (With Wh)

Lithium iron phosphate battery(Li-Ion)	
Model	FLB48230WG1-AU
Nominal Energy	11.7kWh
Nominal Voltage	51.2V
Nominal Capacity	230Ah
Maximum Continuous Charge /Discharge Current	150A
IP Rating of Enclosure	IP65
Working Temperature Range	Charge:0°C~+55°C
	Discharge:-20°C~+55°C
Protective Class	Class I
IFpP57/176/210[1P16S]M/-20+50/95	

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样品图片

Photo of the sample

内含电池模组/Battery module

电池正面外观
Battery front appearance




电池侧面外观
Battery side appearance



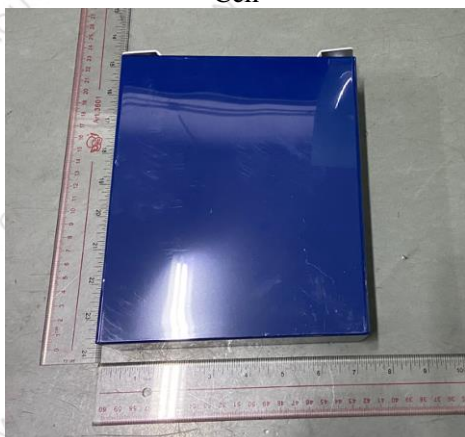
电池侧面外观
Battery side appearance



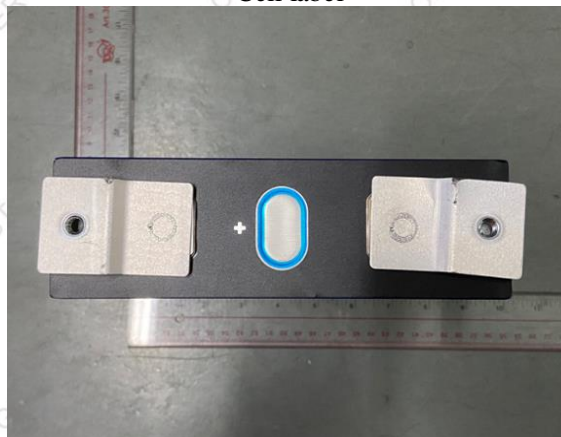
电池铭牌(含 Wh)
Battery nameplate (With Wh)

 Make life full of hope	
25.6V 5850Wh	
Combination Method	FLB-230AH
Nominal Voltage.....	25.6V
Max. Charge Current.....	150A
Max. Discharge Current.....	150A
Discharge Cut-off Voltage.....	22.4V
Charge Cut-off Voltage.....	28.8V

电芯
Cell



电芯标签
Cell label





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声明 Statement

1. 本报告无检验检测专用章无效。

This report is invalid without the special seal for inspection and testing.

2. 本报告无批准人、审核人及拟制人签名无效。

The test report is invalid without the signatures of Approver, Checker and Preparer.

3. 本报告涂改无效。未经本单位书面同意, 不得部分地复制本报告。

The test report is invalid if altered. Nobody is allowed to photocopy or partly photocopy this report without written permission of IQTC

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The client should provide samples and relevant data, at the same time, they should guarantee the consistence of the product's name they declared, the samples they provided and the goods to be transported. Otherwise we will not bear any relevant responsibilities.

5. 对本报告若有异议, 应于收到报告之日起十五天内向本单位提出。

Objection to the test report must be submitted to IQTC within 15 days

6. 本报告仅对所送检样品负责。

The test report is valid for the tested samples only.

7. 检验检测地址: 广东省广州市科学城南翔支路1号C102房(汽车与装备检测研究所科学城)

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* * * * 报告结束 End of report * * * *