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

No: 1125002414Y-1R1

Date: 2025-09-15

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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: 380105

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	FLA48230-EU		
内含电池包型号 Batteries Pack Model	25.6V 230Ah 5.9kWh		
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 Manufacture	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 Manufacture 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 Appearance	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	2025-06-16	样品数量 Quantity of sample	1PC
完成日期 Completed date	2025-06-17		
结论 Conclusion	<p>申请人送检的样品, 与原报告 1125001529-1R1 的样品差异符合联合国《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, 节相关规定。</p> <p>The sample's differences submitted by Applicant between this report and original report 1125001529-1R1 comply with the requirement of UNITED NATIONS "Recommendations on the TRANSPORT OF DANGEROUS GOODS", Manual of Tests and Criteria ST/SG/AC.10/11/Rev.8, 38.3.</p>		



批准

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审核

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张婷婷



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<p>差异说明 The differences</p>	<p>1.本报告变更了样品型号，电池铭牌，该变更未改变原报告中样品的关键材料，产品设计和生产工艺，生产厂也未改变。 The model, battery nameplate of sample are changed in this report, the modified item(s) did not be changed the key materials, design and production process of the sample of original report, the production factory has no change.</p>
<p>备注 Remark</p>	<p>1.本报告第 5 页测试结果为签发于 2025 年 9 月 15 日原报告 1125001529-1R1 的测试结果，被测样品型号为 HP-L305A。 The test results on page 5 of this report are the original report 1125001529-1R1 issued on September 15, 2025, and the tested sample model is HP-L305A.</p> <p>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：01112400001349-1(E)）。 The assembled batteries was 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.: 01112400001349-1(E)).</p> <p>3. 本报告（证书）系 2025 年 06 月 20 日所发第 1125002414Y-1 报告重本，原报告（证书）作废。 This report (certificate) is a duplicate of report No. 1125002414Y-1 issued on June 20, 2025, and the original report (certificate) is invalid.</p> <p>4. 随附 UN38.3 试验概要（编号：1125002414-2R1）。 Attached with UN38.3 test summary (No.: 1125002414-2R1).</p>



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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	100A
最大持续充电电流 Maximum Continuous Charge Current	150A	标准放电电流 Standard Discharge Current	100A
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	95.3kg	物理形状说明 Physical description	长方体 Cuboid
内含电池包型号 Batteries Pack Model	25.6V 230Ah 5.9kWh	电池组合方式 Battery module Combination	1P2S
电芯型号 Cell Model	CB54173204EB-230Ah	电芯容量 Cell Capacity	230Ah



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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℃-25℃；环境湿度：45%-75% Ambient temperature: 20℃-25℃, 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

产品正面外观

Product front appearance



产品侧面外观

Product side appearance



产品侧面外观

Product side appearance



电池铭牌(含 Wh)

Battery nameplate (With Wh)

Felicitysolar®

Make life full of hope

Lithium iron phosphate battery

Model	FLA48230-EU
Nominal Voltage	51.2V
Energy	11.7kWh
Operating Voltage	44.8-57.6V
Recommend Charge/ Discharge Current	≤150A
Recommend Charge/ Discharge Power	≤7500W
Scalability	Up to 15 units in parallel
Communication	RS485 / CAN
Cycle Life	≥6000@25°C,80%DOD
Charging Temperature Range	0-55°C
Discharging Temperature Range	-20-55°C



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电池组图片 Photo of the module

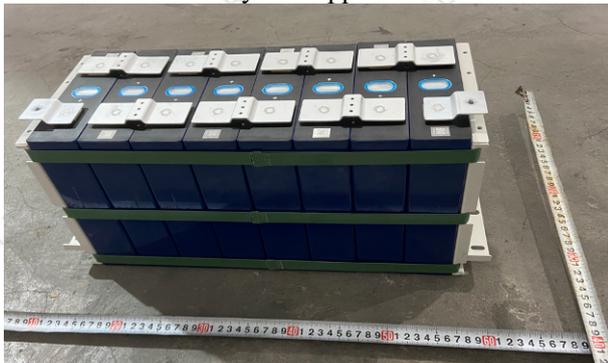
电池正面外观
Battery front appearance



电池侧面外观
Battery side appearance



电池侧面外观
Battery side appearance



电池侧面外观
Battery side appearance





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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

4. 客户必须如实提供样品及资料, 并保证申报品名和样品以及运输货物相同, 否则本单位不承担任何相关责任。

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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电话(Tel): 020-38669019-811

电子邮箱(E-mail): battery@iqtcnet.cn

* * * * 报告结束 End of report * * * *