



广州海关技术中心

GUANGZHOU CUSTOMS DISTRICT TECHNOLOGY CENTER



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TESTING
CNAS L2322

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

No: 01112300002623-1(E)R
Date: 2025-01-23
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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.



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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	LPBF48350		
内含电池组型号 Batteries Model	1P4S-350		
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	广东省广州市白云区人和镇东华工业区东华兴富街 23 号 No.23, xingfu street, renhe town, baiyun district, guangzhou, Guangdong		
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	广东省广州市白云区人和镇东华工业区东华兴富街 23 号 No.23, xingfu street, renhe town, baiyun district, guangzhou, Guangdong		
样品外观与性状 Appearance & Odor	灰色金属外壳 Gray 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.7/Amend.1, 38.3 UNITED NATIONS "Recommendations on the TRANSPORT OF DANGEROUS GOODS", Manual of Tests and Criteria ST/SG/AC.10/11/Rev.7/Amend.1, 38.3		
接样时间 Accepted date	2023-06-28	测试日期 Test date	2023-06-28~2023-07-14
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.7/Amend.1, 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.7/Amend.1, 38.3.		
备注 Remark	1. 该磷酸铁锂电池包(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: 01112300002622-1(E))。 The lithium iron phosphate battery pack (the assembled batteries) was rated a Watt-hour more than 6200W 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.: 01112300002622-1(E)). 2. 随附 UN38.3 试验概要(编号: 01112300002623-2(E)R)。 Attached with UN38.3 test summary (No.: 01112300002623-2(E)R). 3. 本报告替换 2023-07-24 所发 01112300002623-1(E)报告, 原报告作废。 This report replaces the report 01112300002623-1(E) issued on 2023-07-24, and the original report is invalid.		

批准

Approver:

陆玲强

审核

Checker:

叶中轩

主检

Appraiser:

周伟光



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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	350Ah	总能量 Total Energy	17.5kWh
充电限制电压 Limited Charge Voltage	57.6V	标准充电电流 Standard Charge Current	200A
最大充电电流 Maximum Charge Current	250A(120S)	标准放电电流 Standard Discharge Current	200A
最大放电电流 Maximum Discharge Current	250A(120S)	放电截止电压 Discharge Cut-off Voltage	48V
重量 Mass	159KG	物理形状说明 Physical description	长方体 Cuboid
内含模组数量 Contain Module Quantity	4PCS	电池组组合方式 Battery Pack Combination	1P4S

1. 本报告结果仅对测试样品负责。The results in this report are relevant only to the sample(s) tested.
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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 Stand 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.7/Amend.1, 38.3.3(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.7/Amend.1, 38.3.3(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.7/Amend.1, 38.3.3(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	Pack 1#: 一个功能正常的集成电池组; Pack 1#: 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)

Make life full of hope

Lithium iron phosphate battery

Model	LPBF48350
Nominal Voltage	51.2V
Energy	17.5kWh
Operating Voltage	48-57.6V
Recommend Charge/Discharge Current	≤200A
Recommend Charge/Discharge Power	≤10000W
Scalability	Up to 6 units in parallel
Communication	RS485 / CAN
Cycle Life	≥6000@25°C, 80%DOD
Charging Temperature Range	0-55°C
Discharging Temperature Range	-20-60°C

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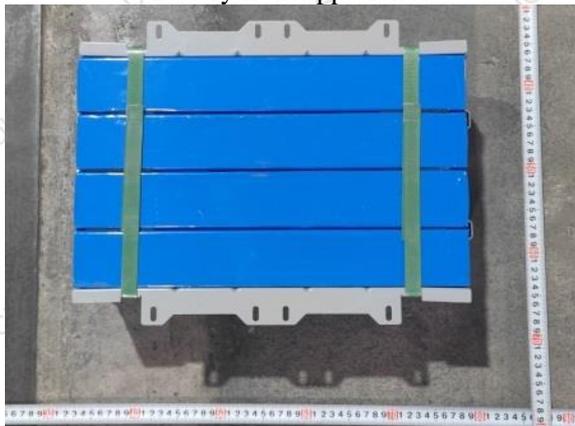
样品图片

Photo of the sample

内含电池模组/Battery module

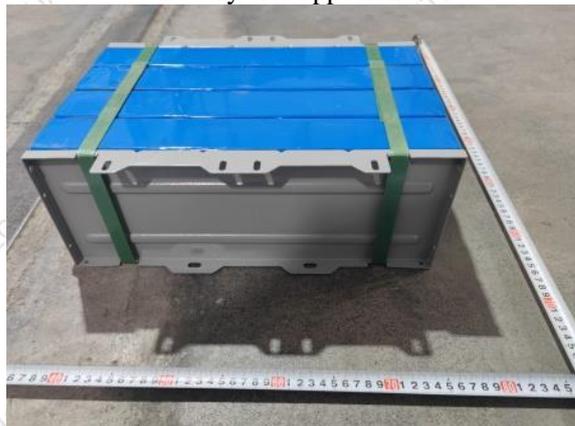
电池正面外观

Battery front appearance



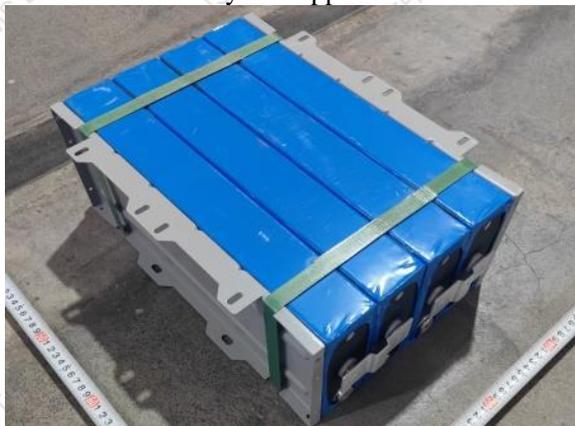
电池侧面外观

Battery side appearance



电池侧面外观

Battery side appearance



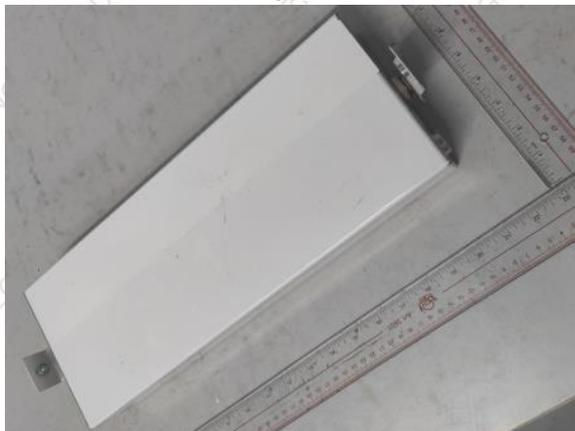
电池侧面外观

Battery side appearance



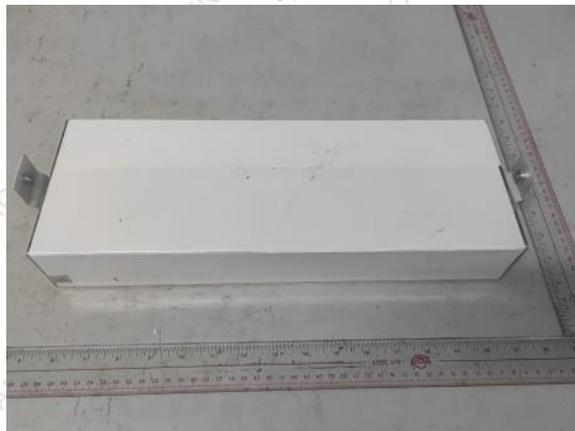
电芯

Cell



电芯

Cell



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电话(Tel): 020-38669019-811

电子邮箱(E-mail): battery@iqtcnet.cn

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