

UN38.3 Test Report

UN38.3 检测报告

Applicant's Name 委托方名称	Shenzhen EEnovance Energy Technology CO., LTD 深圳盛齐能源技术有限公司
Applicant's Address 委托方地址	Room401, Building2, Yufengda Industrial Park, No.1008 Guangqiao Avenue, Yulv Community, Yutang Streets, Guangming District, Shenzhen, P.R.China 深圳市光明区玉塘街道玉律社区光侨大道 1008 号裕丰达工业园 2 栋 401
Name of Sample 样品名称	Rechargeable Li-ion Battery System 可充电锂离子系统
Model 型号	E-MATE 128-A
Testing Laboratory 测试实验室	Shenzhen TCT Testing Technology Co., Ltd. 深圳市通测检测技术有限公司 2101 & 2201, Zhenchang Factory, Renshan Industrial Zone, Fuhai Subdistrict, Bao'an District, Shenzhen, Guangdong, China 广东省深圳市宝安区福海街道桥头社区稔山工业区振昌胶粘制品厂 2101、2201
Report No. 报告编号	TCT260520B025
Date of Issue 签发日期	2026. 06. 02
Test Conclusion 测试结论: 经检测, 该样品符合联合国《试验和标准手册》(第八修订版)38.3 节测试要求。 After testing, the sample meets the UN "Manual of Tests and Criteria" ST/SG/AC.10/11/Rev.8 Subsection 38.3 test requirements.	

Tested by 主检人:

Spring Fu / Test Engineer 傅福花/测试工程师

Approved by 批准人:

Tomsin / Laboratory Director 汤海森/实验室主任

Reviewer by 审核人:

Abby Luo / Project Engineer 罗育花/项目工程师

Seal of TCT 报告单位 (盖章):



I、General product information:

一般产品信息

Manufacturer's Name 生产单位名称	Shenzhen EEnovance Energy Technology CO., LTD 深圳盛齐能源技术有限公司		
Manufacturer's Address 生产单位地址	Room401, Building2, Yufengda Industrial Park, No.1008 Guangqiao Avenue, Yulv Community, Yutang Streets, Guangming District, Shenzhen,P.R.China 深圳市光明区玉塘街道玉律社区光侨大道 1008 号裕丰达工业园 2 栋 401		
Manufacturer's Contact Telephone 生产单位联系电话	+86-15995664941	E-mail 邮箱	liumeng@eenovance.com
Web 网址	www.eenovance.com	Trade Mark 商标	EENOVANCE
Sample Receiving Date 样品接收日期	2026.05.20	Testing Date 测试日期	2026.05.26 – 2026.06.02

Sample Category 样品类别	Name of Samples 样品名称	Model 型号	Ratings 规格	Composition 组成结构
Battery System 电池系统	Rechargeable Li-ion Battery System 可充电锂离子电池系统	E-MATE 128-A	409.6V/314Ah/ 128614.4Wh	Consists of 8 Lithium Battery Modules 由 8 个锂电池模组组成
Battery Module 电池模组	Rechargeable Li-ion Battery 可充电锂离子电池	E-MATE-16-QC	51.2V/314Ah/ 16076.8Wh	Consists of 16 Lithium Cells 由 16 个锂电芯组成 (16 串 1 并)
Inner Cell 内部电芯	LiFePO4 Cell 磷酸铁锂电芯	PC-0B1- 72174L4-BE	3.2V/314Ah 1004.8Wh	Single Cell 单电芯

Nominal capacity 额定容量	Nominal voltage 标称电压	Nominal Charge Current 标称充电电流	Nominal Discharge Current 标称放电电流	Maximum Charge Current 最大充电电流	Maximum Discharge Current 最大放电电流	Maximum Charge Voltage 最大充电电压	Cut-off Voltage 放电截止电压
Battery System 电池系统 Model 型号: E-MATE 128-A, Size 尺寸: (2373.0×1257.0×780.0) mm							
314Ah	409.6V	157A	157A	157A	157A	460.8 V	358.4V
Battery Module 电池模组 Model 型号: E-MATE-16-QC, Size 尺寸: (782.5×487.0×227.0) mm							
314Ah	51.2V	157A	157A	157A	157A	57.6V	44.8V
Inner Cell 内部电芯 Size 尺寸: (207.0×174.0×71.72) mm							
314Ah	3.2V	157A	157A	250A	314A	3.8V	2.0V

II、Test Standard 检测标准

UN "Manual of Tests and Criteria" ST/SG/AC.10/11/Rev.8/Subsection 38.3.

联合国《试验和标准手册》（第八修订版）38.3 节。

III、Test Item 检测项目

Test clause 测试条款	Tests performed 测试项目	Test conclusion 测试结论
38.3.3(g)	Overcharge 过度充电	Pass 合格
38.3.3(g)	Short circuit 短路	Pass 合格
38.3.3(g)	Over discharge between the batteries 电池组之间过度放电	Pass 合格
Remark 备注: a) Unless otherwise stated in this document, the test procedure was performed at ambient temperatures of 20±5°C. 除非本文档另有说明, 否则测试过程在 20°C±5°C 的环境温度下进行。 b) The battery system described in this report is a collection of battery module. The battery module has passed the testing of ST/SG/AC.10/11/Rev.8/ Subsection 38.3. See the report TCT260228B007. According to the standard requirements, T.1~T.8 not need to be verified for Battery System. 本报告所述电池系统是电池模组的集合体。该电池模组已通过 ST/SG/AC.10/11/Rev.8/Subsection 38.3. 测试, 见报告 TCT260228B007。根据标准要求, 电池系统无需进行 T.1~T.8 测试。		

Possible test case verdicts: 可能发生的试验情况判定

- test case does not apply to the test object 试验情况不适用本试验产品: N/A
- test object does meet the requirement 试验样品满足要求: P (Pass 合格)
- test object does not meet the requirement 试验样品不满足要求: F (Fail 不合格)

IV、Test Method and Requirement 检测方法和要求

Clause 章节	Name of test 测试项目名称	Requirements 要求	Test result 测试结果
38.3.3(g)	Overcharge 过度充电	Verify overcharge protection according to the manufacturer's charging method. All functions of the battery system shall be fully operational as designed during the test. 根据制造商的充电方法验证过充保护。测试过程中，电池系统的所有功能应按照设计完全运行。	P
	Short circuit 短路	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. All functions of the battery system shall be fully operational as designed during the test. 按厂家规定的充电方式充满电。将样品正负极用小于 0.1 欧姆的总电阻回路进行短路。检查短路保护。 测试过程中，电池系统的所有功能应按照设计完全运行。	P
	Over discharge between the batteries 电池组之间过度放电	Verify over discharge protection according to the manufacturer's discharging method. All functions of the battery system shall be fully operational as designed during the test. 根据制造商的放电方法验证过放电保护。 测试过程中，电池系统的所有功能应按照设计完全运行	P

V、Picture of the sample 样品图片



Picture 1. Overall view of Battery System
图片 1. 电池系统图



Picture 2. Overall view of Battery System
图片 2. 电池系统图

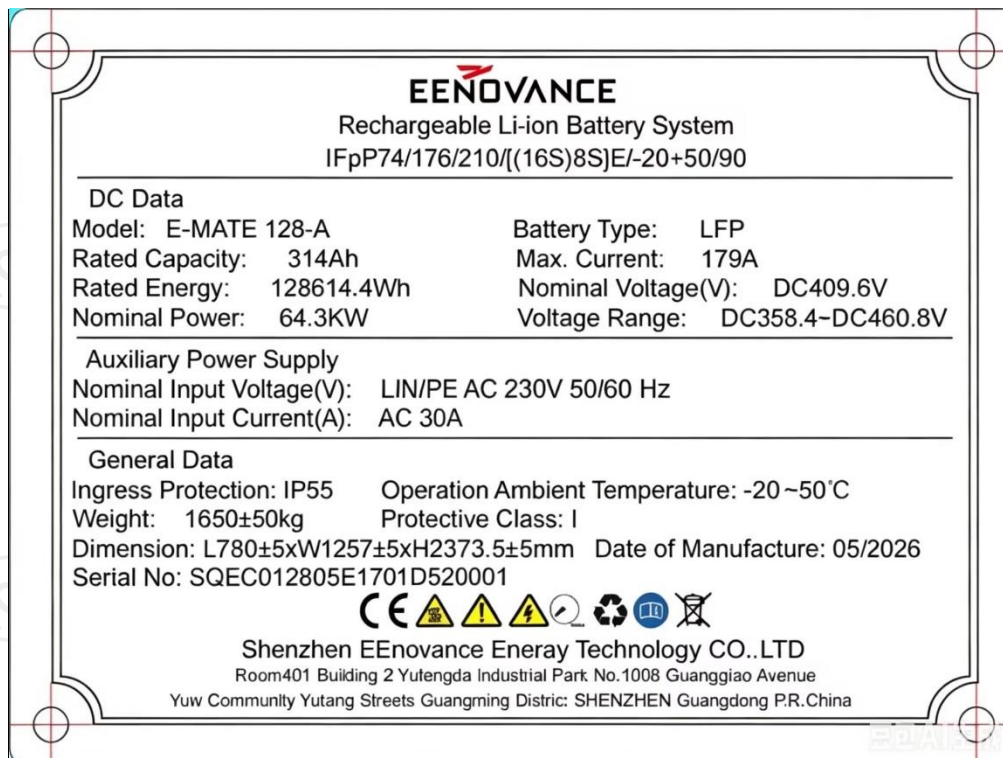


Figure 3 Battery System Label

图片 3. 电池系统标签



Picture 4. Front view of Battery Module

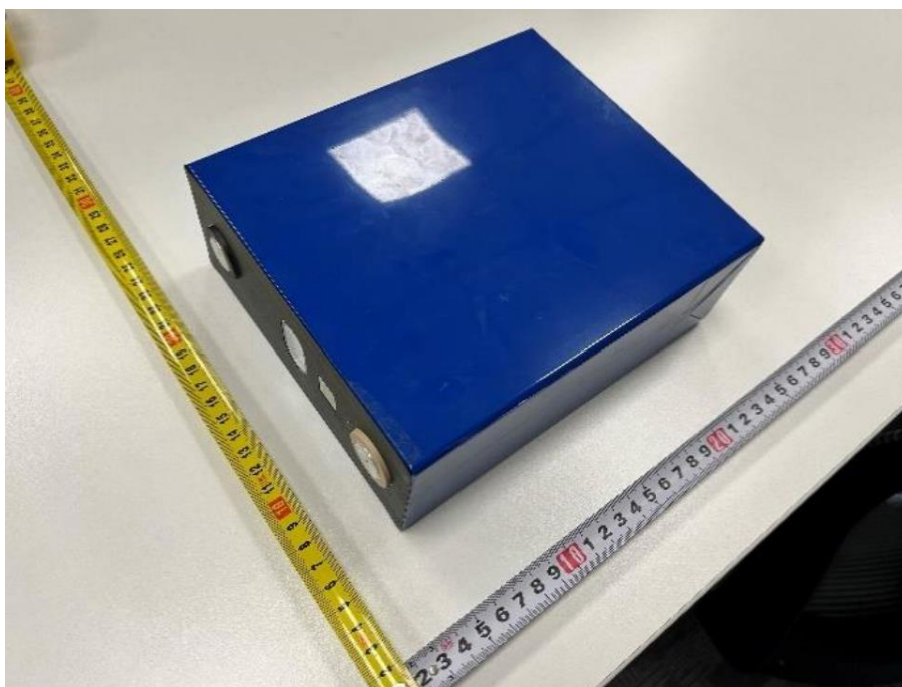
图片 4. 电池模组前视图



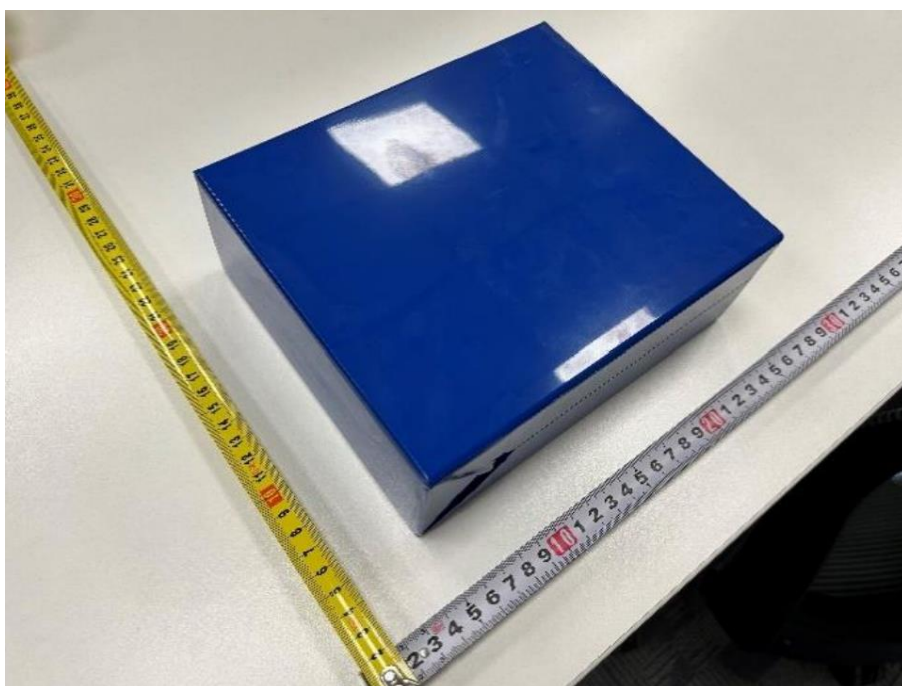
Picture 5. Back view of Battery Module
图片 5. 电池模组后视图

EENOVANCE IFpP/74/176/210[1P16S]E/-20+50/90		Rechargeable Li-ion Battery	
Model: E-MATE-16-QC Voltage Range: 44.8V~57.6V Ingress Protection Rating: IP20		Ratings: 16076.8Wh/51.2V/314Ah Max. Output Power: 8.03kW Protective Class: I	
• Do not disassemble • Do not place in fire or near hot source • Please read user manual carefully • Charging the battery with 157A constant current until battery system voltage reach 51.2V at ambient 20°C±5°C • Disposal the battery must comply with the local applicable disposal regulations for electronic waste and used batteries		CAUTION! 	
Shenzhen EEnovance Energy Technology CO.,LTD Room 401, Building 2, Yufengda Industrial Park, No. 1008 Guangqiao Avenue, Yulv Community, Yutang Streets, Guangming District, SHENZHEN.PRC.		 UN38.3 MADE IN CHINA	

Picture 6. Battery Module Label
图片 6. 电池模组标签



Picture 7. Front view of cell
图片 7. 电芯前视图



Picture 8. Back view of cell
图片 8. 电芯后视图

*****End of Report 报告结束*****

Important Notice

注意事项

1. The test report is invalid without the official stamp of TCT.
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2. Nobody is allowed to photocopy or partly photocopy this test report without written permission of TCT.
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3. The test report is invalid without the signatures of Ratifier, Reviewer and Testing engineer.
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5. Objections to the test report must be submitted to TCT within 15 days.
对报告书若有异议，应于收到报告之日起 15 天内向本公司提出。
6. The test report is valid for the tested samples only.
本报告仅对本次测试样品有效。
7. The Chinese contents in this report are only for reference.
本报告中的中文内容仅供参考。