



中国认可  
国际互认  
检测  
TESTING  
CNAS L5138

# UN38.3 检测报告

## UN38.3 Test Report

样品名称: 锂离子蓄电池储藏柜

Sample name: Li-ion Battery Storage Cabinet

样品型号: AI-ES 100

Sample model:

委托单位: 苏州钧灏电力有限公司

Applicant: AI Power (Suzhou) Tech Co., Ltd.

深圳天溯计量检测股份有限公司

Shenzhen Tiansu Calibration and Testing Co., Ltd.



通用信息 General information			
委托单位 Applicant	名称 Name	苏州钧灏电力有限公司 AI Power (Suzhou) Tech Co., Ltd.	
	地址 Address	中国江苏省苏州市相城区元和街道平康路6号1楼至3楼西侧房屋 1st to 3rd Fl of Western building, No. 6 Pingkang Road, Xiangcheng District, Suzhou City, Jiangsu Province	
生产单位 Manufacturer	名称 Name	苏州钧灏电力有限公司 AI Power (Suzhou) Tech Co., Ltd.	
	地址 Address	中国江苏省苏州市相城区元和街道平康路6号1楼至3楼西侧房屋 1st to 3rd Fl of Western building, No. 6 Pingkang Road, Xiangcheng District, Suzhou City, Jiangsu Province	
	电话 Phone number	15205285750	邮箱 Email address lanqiang@aipowertec.com
	网址 Website	www.aipowertec.com	
测试实验室 Testing laboratory	名称 Name	深圳天溯计量检测股份有限公司 Shenzhen Tiansu Calibration and Testing Co., Ltd.	
	地址 Address	广东省深圳市龙岗区锦龙大道2号 No.2, Jinlong Avenue, Longgang District, Shenzhen, Guangdong, China	
样品名称 Sample name	锂离子蓄电池储藏柜 Li-ion Battery Storage Cabinet	样品型号 Sample model	AI-ES 100
类别 Classification	锂离子电池 Li-ion Battery	商标 Trade mark	/
额定值 Ratings	691.2V/150Ah/103.68kWh	样品形状 Shape of sample	近长方体 Approximate Cuboid
测试标准 Test standard	联合国《试验和标准手册》(第7版修订1) 38.3节 UN "Manual of Tests and Criteria" ST/SG/AC.10/11/Rev.7/Amend1/Subsection 38.3		
签发日期 Date of issue	2024.01.29	测试日期 Test date	2024.01.08 to 2024.01.29

主检  
Tested by 叶展芳

审核  
Reviewed by 张杨

批准  
Approved by 段江涛




样品说明及描述 Sample description	
	锂离子电池簇 Li-ion Battery Cluster
型号 Model	AI-ES 100
标称电压 Nominal voltage	691.2V
额定容量 Rated capacity	150Ah
充电限制电压 Limited charge voltage	777.6V
放电终止电压 Cut-off voltage	604.8V
标准充电电流 Standard charge current	75A
标准放电电流 Standard discharge current	75A
最大持续充电电流 Max continuous charge current	75A
最大持续放电电流 Max continuous discharge current	75A
尺寸 Dimension	2260.00*1251.00*1014.00(mm)
重量 Weight	1500.000kg
检测结论 <b>Test conclusion:</b> 苏州钧灏电力有限公司送检的样品，依据联合国《试验和标准手册》（第7版修订1）38.3节进行检测，对样品做了过充电保护、短路保护和过放电保护的三项测试，测试结果符合标准相关要求。组成该样品的内部电池组在{{电池组报告号}}中已经过验证，满足联合国《试验和标准手册》（第7版修订1）38.3节的相关要求。 The AI Power (Suzhou) Tech Co., Ltd. submitted samples are tested according to UN "Manual of Tests and Criteria" ST/SG/AC.10/11/Rev.7/Amend1/Subsection 38.3, the samples has done three tests of overcharge protection, short circuit protection and over-discharge protection, and the test results comply with the relevant requirements of the standard. The batteries that make up the samples have been verified in TSZ24010042-P07-R01.	
修订说明： Revision note : N/A	



测试概要 Test summary

章节 Clause	测试项目 Test item	Sample No. 样品编号	结论 Conclusion
38.3.3(g)	过充电保护 Overcharge protection	BMS01#	通过 Pass
38.3.3(g)	短路保护 Short-circuit protection	BMS01#	通过 Pass
38.3.3(g)	过放电保护 Over-discharge protection	BMS01#	通过 Pass

标准要求或标准条款号:  
Stand requirement or the clause number of standard:  
联合国《试验和标准手册》(第7版修订1) 38.3.3(g)节  
UN "Manual of Tests and Criteria" ST/SG/AC.10/11/Rev.7/Amend1/Subsection 38.3.3(g)



样品照片 Photos



Photo 1 电池组正面 Front view of battery



Photo 2 电池组背面 Back view of battery



样品照片 Photos

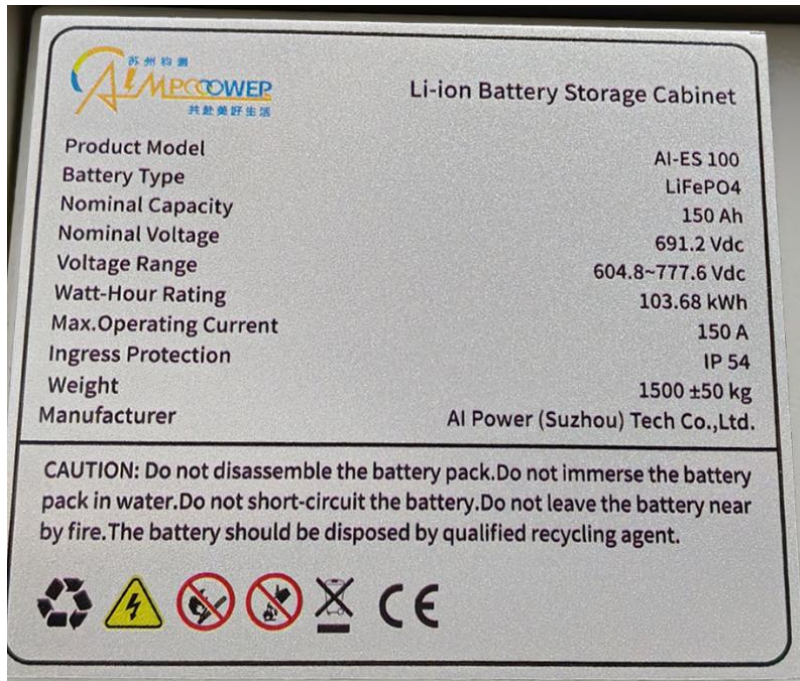


Photo 3 标签 Label



保护验证 1	过充电保护/ Overcharge protection				合格
38.3.3 (g) 过充电保护 Overcharge protection	测试步骤/ Procedure				
	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.				
	标准要求/Requirements BMS 过充保护功能按照制造商的设计规格动作。 BMS overcharge protection function activated follows the design specifications of the manufacturer.				
样品编号 Sample No.	试验前电压(V) Voltage before Test	充电电流(A) Charging current(A)	最大充电电压(V) Max. Charging voltage(V)	测试结果 Results	
BMS01#	721.12	30A	751.26	O	
其他补充: 测试结果“O”代表判定该电池包无起火、无爆炸, BMS 动作。 Supplements : Test result "O" decides that the Battery Pack no fire, no explosion, BMS action.					
保护验证 2	短路保护/Short-circuit protection				合格
38.3.3 (g) 短路保护 Short-circuit protection	测试步骤/Procedure				
	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.				
	标准要求/Requirements BMS 短路保护功能按照制造商的设计规格动作。 BMS short-circuit protection function activated follows the design specifications of the manufacturer.				
样品编号 Sample No.	试验前电压(V) Voltage before Test	试验后电压(V) Voltage after Test	回路总电阻 (mΩ) Total circuit Resistance	最高温度 (°C) Maximum Temperature °C	测试结果 Results
BMS01#	719.25	0	94	24.2	O
其他补充: 测试结果“O”代表判定该电池包无起火、无爆炸, BMS 动作。 Supplements : Test result "O" decides that the Battery Pack no fire, no explosion, BMS action.					
保护验证 3	测试步骤/Procedure				合格
38.3.3 (g) 过放电保护 Over-discharge protection	过放电保护/Over-discharge protection				
	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 charging method.				
	标准要求/Requirements BMS 过放电保护功能按照制造商的设计规格动作。 BMS over-discharge protection function activated follows the design specifications of the manufacturer.				
样品编号 Sample No.	试验前电压(V) Voltage before Test	放电电流(A) Discharging current(A)	最小电电压(V) Min. Voltage(V)	测试结果 Results	
BMS01#	634.37	30	582.19	O	
其他补充: 测试结果“O”代表判定该电池包无起火、无爆炸, BMS 动作。 Supplements : Test result "O" decides that the Battery Pack no fire, no explosion, BMS action.					



## 声 明

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-----报告结束-----  
-- End of report --

