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中国认可
国际互认
检测
TESTING
CNAS L0095

No.: RZUN2025-2070

检 测 报 告
TEST REPORT

UN38.3

NAME OF SAMPLE: 产品名称：	Liquid cooled industrial and commercial battery cabinets 液冷工商业电池柜
CLIENT: 委托单位：	SUNGROW POWER SUPPLY CO., LTD. 阳光电源股份有限公司
CLASSIFICATION OF TEST: 检测类别：	Commission Test 委托测试

威凯检测技术有限公司
CVC Testing Technology Co., Ltd.

检验检测专用章

检 测 报 告
TEST REPORT

Name of samples: Liquid cooled industrial and commercial battery cabinets 样品名称: 液冷工商业电池柜	Type/Model: 型号规格: ST255CS-2H,ST255CS-2H-AU,ST255CS-2H-US,ST255CS-S-2H 819,2V 314Ah 257kWh
Color: White 样品颜色: 白色	Physical shape: Prismatic 样品形状： 棱柱形
Commissioned by: SUNGROW POWER SUPPLY CO., LTD. 委托单位: 阳光电源股份有限公司	Commissioner address:No. 1699, Xiyou Road, New & High Technology Industrial Development Zone,Hefei, Anhui 230088, P.R. CHINA 委托单位地址:中国合肥市高新区习友路 1699 号（230088）
Manufacturer: SUNGROW POWER SUPPLY CO., LTD. 制造商: 阳光电源股份有限公司	Manufacturer address:No. 1699, Xiyou Road, New & High Technology Industrial Development Zone,Hefei, Anhui 230088, P.R. CHINA 制造商地址: 中国合肥市高新区习友路 1699 号（230088）
Factory: SUNGROW ENERGY STORAGE TECHNOLOGY CO., LTD. 生产厂: 阳光储能技术有限公司	Factory address: No. 788, Mingchuan Road, Boyan Technology Park, Hi-tech Zone, Hefei City 230088 P.R. China 生产厂地址: 中国合肥市高新区柏堰科技园铭传路 788 号（230088）
Classification of test: Commission Test 检测类别: 委托测试	Quantity of sample: 1 Battery assembly 样品数量: 1 集成电池组
Tested according to: 测试标准: ST/SG/AC.10/11/Rev.8/ Section 38.3	Sample identification: S1# 样品标识序号: S1#
Receiving date: 接样日期：2025-05-13	Means of receiving: Submitted by commissioner 接样方式：委托单位送样
Completing date: 完成日期：2025-05-29	Test item: - 测试项目：-

Test conclusion:
检测结论:

The Liquid cooled industrial and commercial battery cabinets submitted by SUNGROW POWER SUPPLY CO., LTD. complies with the requirements of Section 38.3 of the Eighth revised edition of the Manual of Tests and Criteria (ST/SG/AC.10/11/Rev.8/Section 38.3).

由阳光电源股份有限公司送检的液冷工商业电池柜，符合联合国《试验和标准手册》第八修订版第 38.3 相关要求。

Seal of CVC
CVC 印章
Date of issue:
签发日期: 2025-05-29

Title: Manager
批准人职务： 经理

Approved by: Zhang Siyao Reviewed by: Liu Zhen Tested by: Lin Qingyuan

批 准： 审 核： 检 测：

Description and illustration of the sample/样品说明及描述:

1. The sample's status is good. / 样品状况良好；
2. The are multiple models of Liquid cooled industrial and commercial battery cabinets (ST255CS-2H,ST255CS-2H-AU,ST255CS-2H-US,ST255CS-S-2H), with the only difference being the export regions. The key raw materials, production processes, and manufacturing plants are all the same.
   液冷工商业电池柜有多个型号（ST255CS-2H,ST255CS-2H-AU,ST255CS-2H-US,ST255CS-S-2H），区别仅在于出口地区不同，关键原材料、生产工艺、生产厂均一致。
3. Sample information and compositions/ 样品信息及组成

Name of samples 样品名称	Sample category 样品类别	Type/Model 型号	Specifications 规格参数	Composition 组成结构
Liquid cooled industrial and commercial battery cabinets 液冷工商业电池柜	Battery assembly 集成电池组	ST255CS-2H, ST255CS-2H-AU, ST255CS-2H-US, ST255CS-S-2H	819,2V 314Ah 257kWh	Consists of 1 battery clusters / 由 1 个电池簇组成
Battery Rack 电池簇	Battery Cluster 电池簇	R0257BL-AHAA	819,2V 314Ah 257kWh	Consists of 4 batteries / 由 4 个电池组组成
Battery Module 电池模块	Battery 电池组	P0643AL-AHA, P0643BL-AHA	204,8V 314Ah 64,3kWh	Consists of 64 component cells / 由 64 个内部电芯组成
Cell 电芯	Component Cell 内部电芯	L173F314	3,2V 314Ah 1004,8Wh	Single cell / 单电芯

4. Item information /项目信息

Name of samples 样品名称	Item 项目	Sample No. 样品编号	State 状态	Remark 备注
Liquid cooled industrial and commercial battery cabinets 液冷工商业电池柜	38.3.3(g)	S1#	more than 6200Wh 超过 6200Wh	-

Description of the sampling procedure/取样程序的说明:

/

Description of the deviation from the standard, if any/测试结果不符合标准项的说明:

/

Remarks/备注：

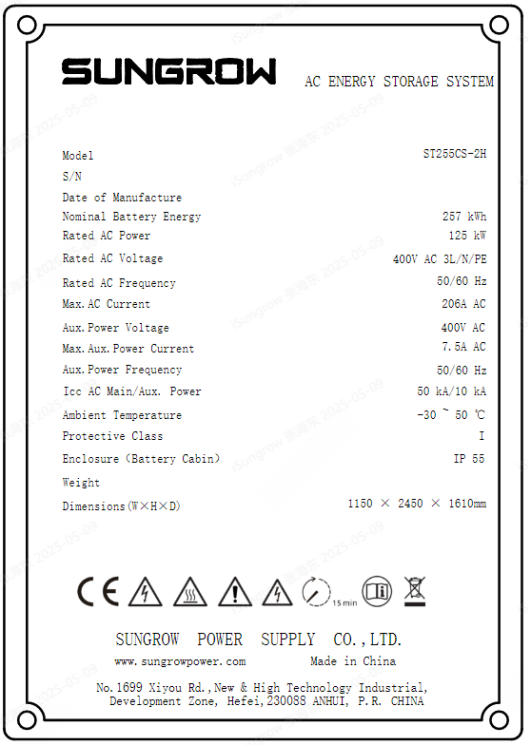
1. Throughout this report a comma is used as the decimal separator.
   本报告中以逗号代替小数点。
2. The Liquid cooled industrial and commercial battery cabinets (ST255CS-2H,ST255CS-2H-AU,ST255CS-2H-US,ST255CS-S-2H) described in this report is a collection of Battery Module (P0643AL-AHA,P0643BL-AHA). The Battery Module (P0643AL-AHA,P0643BL-AHA) has passed the testing of UN38.3. See the report RZUN2025-2067. According to the standard requirements, T.1~T.8 not need to be verified for Liquid cooled industrial and commercial battery cabinets (ST255CS-2H,ST255CS-2H-AU,ST255CS-2H-US,ST255CS-S-2H).
   本报告所述液冷工商业电池柜（ST255CS-2H,ST255CS-2H-AU,ST255CS-2H-US,ST255CS-S-2H）是电池模块（P0643AL-AHA,P0643BL-AHA）的集合体。该电池模块（P0643AL-AHA,P0643BL-AHA）已通过 UN38.3 测试，详情见报告 RZUN2025-2067。根据标准要求，液冷工商业电池柜（ST255CS-2H,ST255CS-2H-AU,ST255CS-2H-US,ST255CS-S-2H）无需进行 T.1~T.8 测试。

样品照片 Photos of Samples

集成电池组/ Battery assembly
（ST255CS-2H,ST255CS-2H-AU,ST255CS-2H-US,ST255CS-S-2H 819,2V 314Ah 257kWh）



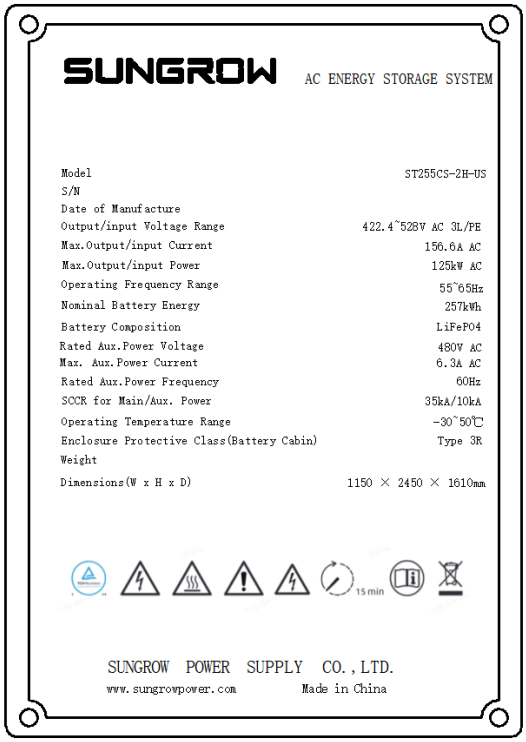




SUNGROW AC ENERGY STORAGE SYSTEM

Model	ST255CS-2H
S/N	
Date of Manufacture	
Nominal Battery Energy	257 kWh
Rated AC Power	125 kW
Rated AC Voltage	400V AC 3L/N/PE
Rated AC Frequency	50/60 Hz
Max. AC Current	206A AC
Aux. Power Voltage	400V AC
Max. Aux. Power Current	7.5A AC
Aux. Power Frequency	50/60 Hz
Icc AC Main/Aux. Power	50 kA/10 kA
Ambient Temperature	-30 ~ 50 ℃
Protective Class	I
Enclosure (Battery Cabin)	IP 55
Weight	
Dimensions(W×H×D)	1150 × 2450 × 1610mm

SUNGROW POWER SUPPLY CO., LTD.
www.sungrowpower.com Made in China
No.1699 Xiyou Rd.,New & High Technology Industrial, Development Zone, Hefei,230088 ANHUI, P.R. CHINA



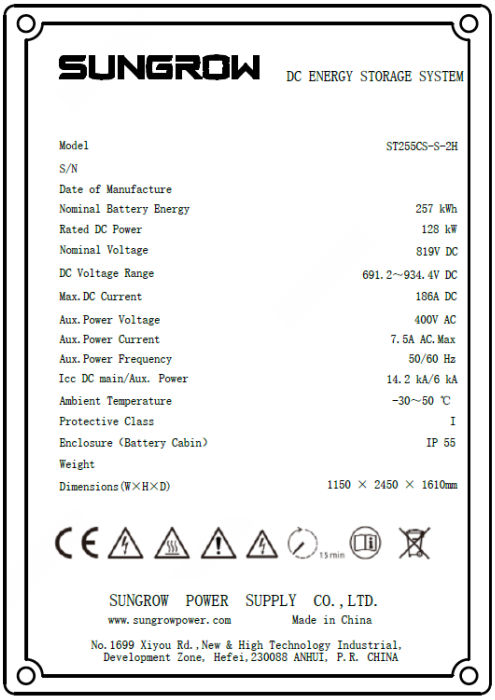
SUNGROW AC ENERGY STORAGE SYSTEM

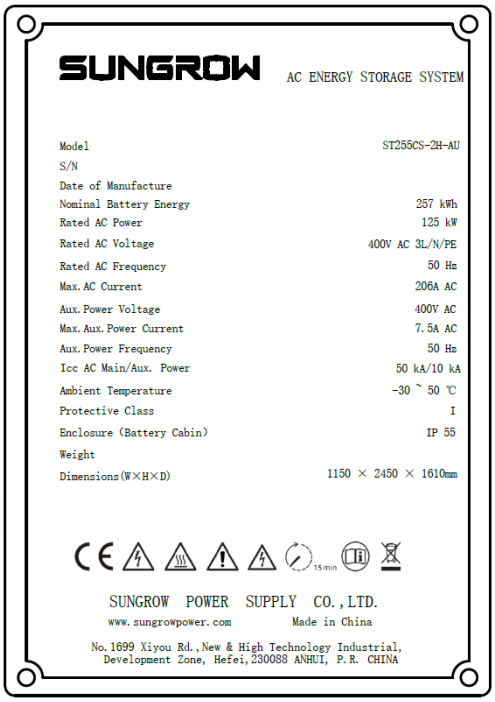
Model	ST255CS-2H-US
S/N	
Date of Manufacture	
Output/input Voltage Range	422.4~528V AC 3L/PE
Max.Output/input Current	156.6A AC
Max.Output/input Power	125kW AC
Operating Frequency Range	55~65Hz
Nominal Battery Energy	257kWh
Battery Composition	LiFePO4
Rated Aux.Power Voltage	480V AC
Max. Aux.Power Current	6.3A AC
Rated Aux.Power Frequency	60Hz
SCCR for Main/Aux. Power	35kA/10kA
Operating Temperature Range	-30~50℃
Enclosure Protective Class(Battery Cabin)	Type 3R
Weight	
Dimensions(W x H x D)	1150 × 2450 × 1610mm

SUNGROW POWER SUPPLY CO., LTD.
www.sungrowpower.com Made in China

样品照片 Photos of Samples

集成电池组/ Battery assembly
（ST255CS-2H,ST255CS-2H-AU,ST255CS-2H-US,ST255CS-S-2H 819,2V 314Ah 257kWh）



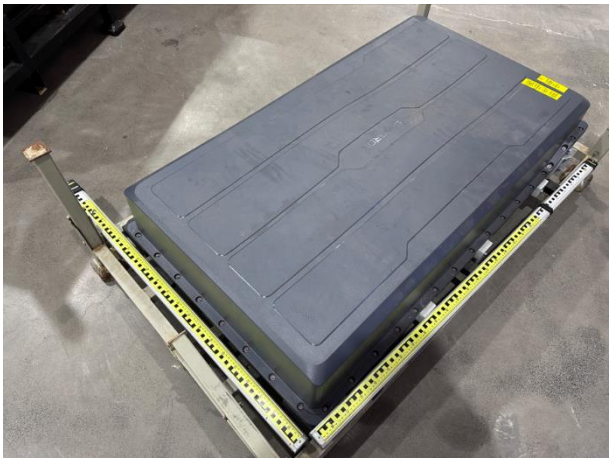


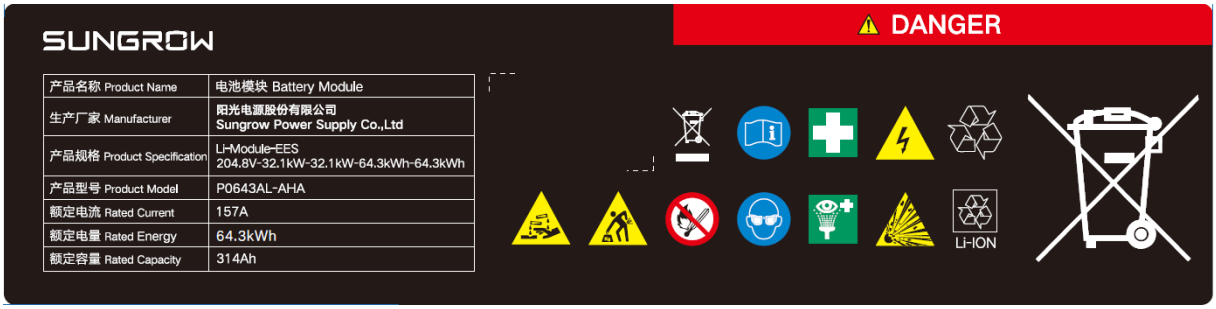
样品照片 Photos of Samples

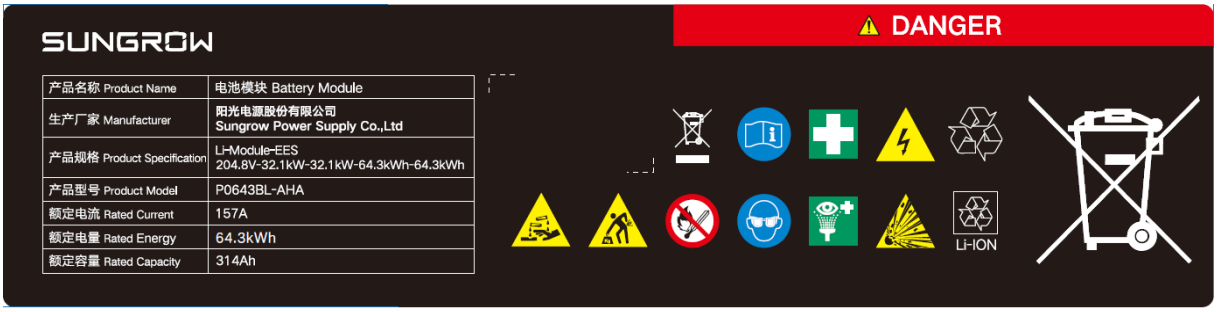
电池组/ Battery

（P0643AL-AHA,P0643BL-AHA 204,8V 314Ah 64,3kWh）



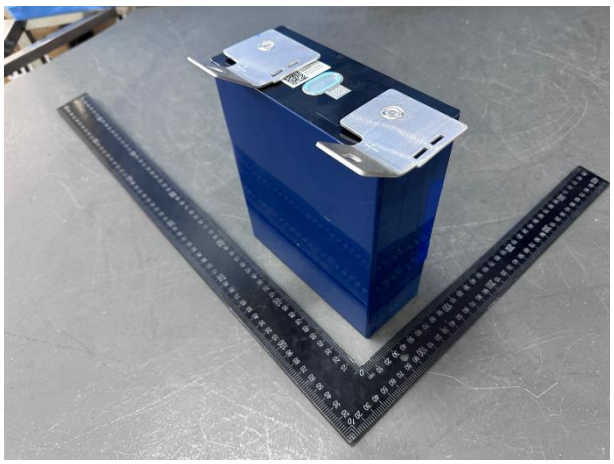


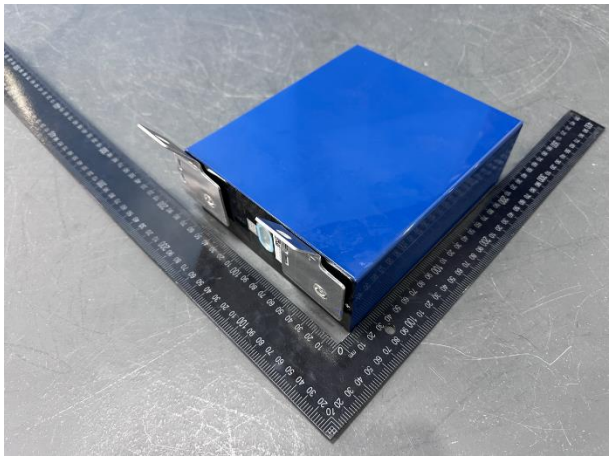


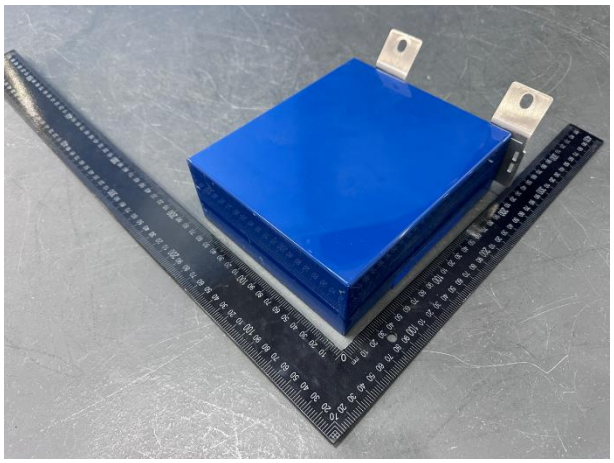


样品照片 Photos of Samples

内部电芯 / Component Cell
（L173F314 3,2V 314Ah 1004,8Wh）









ST/SG/AC.10/11/Rev.8/ Section 38.3			
Clause **章节**	**Requirements** **标准要求**	**Result** **结果**	**Verdict** **判定**
38.3.3(g)	Requirements/标准要求 When lithium batteries that have passed all applicable tests are electrically connected to form a battery in which the aggregate lithium content of all anodes, when fully charged, is more than 500g, or in the case of a lithium ion battery, with a Watt-hour rating of more than 6200Wh, the assembled battery does not need to be tested if the assembled battery is of a type that has been verified as preventing: (i) Overcharge; (ii) Short circuits; and (iii) Over discharge between the batteries. /对于已通过所有适用试验的若干锂电池组以电路连接而成的集成电池组，如在完全充电时所有正极的合计锂含量大于 500 克，或在锂离子电池组的情况下，如额定的瓦时数超过 6200 瓦时，该集成电池组如经过验证属于可防止下列状况，即无需进行试验（T.1~T.8 测试项）： (一) 过度充电； (二) 短路；以及 (三) 电池组之间过度放电。	The watt-hour rating of Liquid cooled industrial and commercial battery cabinets (ST255CS-2H,ST255CS-2H-AU,ST255CS-2H-US,ST255CS-S-2H) is 257kWh (more than 6200Wh); 该液冷工商业电池柜（ST255CS-2H,ST255CS-2H-AU,ST255CS-2H-US,ST255CS-S-2H）的额定瓦时数为257kWh（超过 6200Wh）； After verification, the Liquid cooled industrial and commercial battery cabinets (ST255CS-2H,ST255CS-2H-AU,ST255CS-2H-US,ST255CS-S-2H) is equipped with the energy storage system management unit, which can monitor and control each battery component. By sending instructions and cutting off the loop of the battery cluster, it can prevent overcharging, short circuit, and excessive discharge among the battery strings in the battery component. 经验证，液冷工商业电池柜（ST255CS-2H,ST255CS-2H-AU,ST255CS-2H-US,ST255CS-S-2H）具备储能系统管理单元，能够监测并控制各电池组件，通过发送指令，切断电池簇的回路等方式，达到防止过度充电、防止短路，以及防止电池组件内各电池组之间过度放电的功能。	**P**

注 意 事 项
Important

1. 报告无检测单位印章无效。
   The test report is invalid without the seal of CVC.
2. 未经本试验室书面同意，不得部分地复制本报告。
   Nobody is allowed to photocopy or partly photocopy this test report without written permission of CVC.
3. 本报告无批准人、审核人及检测人签名无效。
   The test report is invalid without the signatures of Ratifier, Reviewer and Testing engineer.
4. 本报告涂改无效。
   The test report is invalid if altered,
5. 对检测报告若有异议，应于收到报告之日起十五天内向检测单位提出。
   Objections to the test report must be submitted to CVC within 15 days.
6. 本报告仅对送检样品负责。
   The test report is valid for the tested samples only.
7. 判定栏中“-”表示“不需要判定”，“P”表示“通过”，“F”表示“不通过”，“N/A”表示“不适用”。
   As for the Verdict, “-” means “no need for judgement”, “P” means “pass”， “F” means “fail” and “N/A” means “not applicable”.

报告中未加 CMA 标志时，检测数据和结果仅供科研、教学或内部质量控制之用。
The test data and test results given in this test report should only be used for purposes of scientific research, teaching and internal quality control when the CMA symbol is not presented.

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