



中国船级社  
CHINA CLASSIFICATION SOCIETY  
船用产品证书  
CERTIFICATE OF MARINE PRODUCT

证书编号/Certificate No.  
FZ22PPS00041

兹证明本证书所列产品经本社署名验船师检验,符合本证书注明标准的要求。

This is to certify that the following products have been inspected by the undersigned surveyor of the Society and are found to comply with the requirements of the specified standards.

产品名称 Product	电池系统 Battery System
申请方 Applicant	福建巨电新能源股份有限公司 Fujian super power new energy co, LTD
制造厂 Manufacturer	福建巨电新能源股份有限公司 Fujian super power new energy co, LTD
订货方 Purchaser	广东精钢海洋工程股份有限公司 KEEN OFFSHORE ENGINEERING CO., Ltd.
认可证书号/Certificate No. of Approval	无/Nil
图纸批准号/Approval No. of Drawings	FZ21PPP20099
附加标志/Notations	无/Nil.
用于/Intended for	船舶与海上设施/Ships and Offshore Installations 船舶工程号/Hull No.: W1000-2
产品编号/Serail No.	J1A13820121642112001

产品检验标准/Product Inspection Standard

- 1.中国船级社《钢质海船入级规范》(2021)及其修改通报第4篇第1、3章  
Chapter 1 and 3, Part Four of China Classification Society Rules for the Classification of Sea-going Steel Ships 2021 and its Amendments
- 2.中国船级社《钢质内河船舶建造规范》(2016)第3篇第1、5章  
Chapter 1 and 5, Part Three of China Classification Society Rules for the Construction of Inland River Steel Ships 2016
- 3.中国船级社《纯电池动力船舶检验指南》(2019)第1, 2, 3, 7章  
Chapter 1,2,3,7 of China Classification Society Inspection Guide for Pure Battery Powered Ships 2019

产品检验/Inspection

位置/Position: 在产品铭牌上 / On the nameplate of the product  
标志样式/Type of Marking: 钢印标志 / CCS steel stamp

发证日期  
Date of issue

2022年03月25日  
Mar. 25, 2022

验船师  
Surveyor

邱瀚

Qiu Han

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Form No: P01.

联系方式/Contact Us, 见本社官方网站/See official web site of the Society (<http://www.ccs.org.cn>)



UTN: P022-13311333

产品明细/Product Description

电池系统/Battery System (M0001)

名称/Name	属性（值）/Value	单位/Unit
产品名称/Product Name	磷酸铁锂电池系统 Lithium iron phosphate Battery System	
型号/Type	ESS2102	
数量/Quantity	1	Set
系统组成/System Component	72个电池包；1个顶级主控；4个次级主控；72个从控；1个汇流柜；1个显示单元；1套液冷机组 72 battery packs; 1 top master; 4 secondary master controllers; 72 slave controllers; 1 combiner cabinet; 1 display unit; 1 set of liquid cooling unit	
额定电压/Rated Voltage	691.2	V
额定容量/Rated Capacity	2000	Ah
串并联方式/Connection Mode	4P216S	
锂电池包型号/Type of Battery Pack	PK2102SA1/12	
锂电池包数量/Quantity of Battery Pack	72	Sets
电池管理系统型号/Type of BMS	ESS SHIPPING V1.0	

备注/Remarks

1. 本社已审核了产品厂无石棉声明，但本社的审核不免除产品厂按照合同关系向订货方保证产品无石棉的责任。  
The declaration of asbestos-free submitted by manufacturer has been reviewed by the Society. However, liability of the manufacturer to guarantee the products are asbestos-free to purchaser under contract will not be exempted.

中国船级社福州分社  
CCS Fuzhou Branch