

# DECLARATION OF CONFORMITY

## I.Product Information

Product Name: Llead acid replacement

Model : ZEN-GS1280

## II.Declaration of Conformity

We solemnly declare that the above energy storage battery system complies with the following standards and requirements:

### 1.Technology standard

The energy storage battery system has been rigorously tested and verified in terms of performance, safety, reliability, etc. It meets the requirements of the following relevant technical standards and has obtained corresponding reports and certificates:

UN 38.3: Paragraph 38.3 of Part 3 of the United Nations Manual of Tests and Criteria for the Transport of Dangerous Goods

IEC62619: Lithium batteries and lithium battery packs containing alkaline or other non-acid electrolytes Safety requirements for industrial lithium batteries and lithium battery packs

EN-IEC61000-6-1: Electromagnetic compatibility (EMC) - Part 6-1: General standard - Immunity for residential, commercial and light industrial environments

EN-IEC61000-6-3: Electromagnetic compatibility (EMC) - Part 6-3:

General standard - Emission standards for residential, commercial and light industrial environments

IEC 62321: Tests for restricted hazardous substances in electrical and electronic products

MSDS: Material Safety Data Sheet

## 2.Safety requirement

1) The electrical safety performance of the battery complies with IEC62619 and UN38.3 standards, and it is equipped with over-charging protection, over-discharging protection, short-circuit protection, and over-heating protection, which ensures its safety under various conditions of use.

2) The battery shell has sufficient strength and protective properties to effectively prevent external impact and damage, and safeguard the integrity of the internal structure of the battery.

3) The energy storage system has a reliable electrical connection with good grounding measures to prevent electrical accidents.

## 3.Environmental requirement

The production and use process of the product meets the requirements of environmental protection, and does not contain hazardous substances or is within the specified limits. The recycling and disposal of batteries comply with relevant environmental regulations and meet the requirements of the European Union (EU) Directive 2011/65/EU (also

known as RoHS) and the IEC 62321 standard.

#### 4.Performance Requirements

1) The energy storage battery system has good charging and discharging performance and meets the designed capacity, power and cycle life requirements.

2) It can operate stably and maintain good performance under different operating temperatures and environmental conditions.

### **III.Commitment to Responsibility**

We undertake to be responsible for the quality and conformity of the supplied energy storage battery systems. If the product is found to be non-compliant with the declared contents during use, we will assume the corresponding legal responsibility and take active measures to rectify and remedy the situation.

Declarant (seal): Zhejiang Zhenjiang New Energy  
Equipment Co., Ltd.

Date: March 12, 2025


## Attachments

- 1、 Annex I: EMC Certificate
- 2、 Annex II: EMC report
- 3、 Annex III: MSDS report
- 4、 Annex IV: UN38.3 report
- 5、 Annex V: Maritime Transportation Appraisal
- 6、 Annex VI: RoHs Certificate
- 7、 Annex VII: RoHs Report
- 8、 Annex VIII: CB Certificate
- 9、 Annex IX: CB Report
- 10、 Annex X: REACH Report
- 11、 Annex XI: Hazardous Characteristics Classification Identification

## Report



## Annex I: EMC certificate



**BUREAU  
VERITAS**

## ATTESTATION

### of conformity with European Directives

<b>BY L/CIE CHINA Number</b> <b>Product</b> <b>Reference</b> <b>Trade mark</b> <b>Issued to</b> <b>Address</b> <b>Manufacturer</b> <b>Address</b> <b>Technical characteristics</b>	<b>N°2 466A/B09/CND056881</b> 51.2V/100Ah Low-voltage Li-ion Battery Pack ZJEN-5120K1-A -- Zhejiang Zhenjiang New Energy Equipment Co., Ltd. Room 125, Building D, West Lake Kechuang Park, Si'an Town, Changxing County, Huzhou City, Zhejiang Province Zhejiang Zhenjiang New Energy Equipment Co., Ltd. Room 125, Building D, West Lake Kechuang Park, Si'an Town, Changxing County, Huzhou City, Zhejiang Province 51.2Vdc, 100Ah, 5.12K Wh
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The submitted sample of the above equipment has been tested according to following European Directive and following standards:


**Electromagnetic Compatibility Directive 2014/30/EU**

Standards	Report number	Report date
EN IEC 61000-6-3:2019	CND0-ESH-P24080273B	23/09/2024
EN IEC 61000-6-3:2021		
EN IEC 61000-6-2:2019		
EN IEC 61000-6-1:2019		

The referred test report(s) show that the product complies with standard(s) recognized as giving presumption of compliance with the essential requirements in the specified European Directive

This verification does not imply assessment of the production of the product

Shanghai (P.R. China), Sep.23, 2024.

**EMC Project Manager**  
*Wen ZHU*  


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Version: 04 / 11th Dec 2020
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## Annex II: EMC report

[illegible]

## Annex III: MSDS Report

	
<h2>材料安全数据表</h2> <h3>MATERIAL SAFETY DATA SHEET</h3>	
产品名称	: 51.2V100Ah 低压锂离子蓄电池组
Goods Name	: 51.2V100Ah Low-voltage Li-Ion Battery Pack
型号	: ZEN-S120K1-A
Model Name	: ZEN-S120K1-A
委托单位	: 浙江振江新能源装备有限公司
Applicant	: Zhejiang Zhenjiang New Energy Equipment Co., Ltd.
报告编号	: KS2407S3166B04
Report Number	: KS2407S3166B04
发行日期	: January 02, 2025
Issue Date	: January 02, 2025
(制作)	(批准)
Written by: 赵雄风	Approved by: 杨龙
<b>广东科正技术有限公司</b> <b>KSIGN(Guangdong) Testing Co., Ltd.</b>	
<small>             KSGN(Guangdong) Testing Co., Ltd. 广东科正技术有限公司              Vestal Side of 9th, Building C, Zone A, Fuyuan New Factory, Jiahu Industrial Park, Maolin, Shaohe, Shengding, Baotai District, Shenzhen, Guangdong, China. 广东省深圳市宝安区沙井镇马林社区沙井大道9号科正工业九区A区C栋一楼西面. 518104              Tel.: (86)- (0)755-2955 2078 Fax: (86)- (0)755-2955 2397 E-mail: info@ksign.cn http://www.ksign.cn           </small>	

## Annex IV: UN38.3 report



东和正技术  
检测  
TESTING  
CNAS L1201

Page 1 of 16

Report No.: KS2407S3168B01

# UN38.3 Test Report

Samples Name	51.2V100Ah Low-voltage Li-Ion Battery Pack
样品名称	51.2V100Ah 低压锂离子电池组
Model	ZEN-5120K1-A
型号	
Applicant	Zhejiang Zhenjiang New Energy Equipment Co., Ltd.
委托单位	浙江振江新能源装备有限公司



东和正技术  
KSIGN  
检测检测专用章

广东和正技术服务有限公司  
KSIGN(Guangdong) Testing Co., Ltd.

TWF No: UN38.3 Rev.0-01  
West Side of T.F., Building C, Zone A, Fuyuan New Factory, Jihu Industrial Park, Minxue, Shaoxing, Baofan District, Shenzhen, Guangdong, China  
广东省深圳市宝安区沙井街道沙头社区联丰九九工业区福源厂A区4号楼一层西苑, 018104  
Tel: +86(0) 0755-2985 2878 Fax: +86(0) 0755-2985 2397 E-mail: info@ksign.cn http: www.ksign.cn



## Annex V: Maritime Transportation Appraisal

## Annex VI: RoHs Certificate

海运  
By Sea

中国认可  
检验  
INSPECTION  
CNAS ISO9001

# 运输危险性鉴别报告书

Identification and Classification Report for Transport of Goods

危险物品  
(Dangerous Goods)

报告编号:

SEKSC202411280354YD840001

Issued No:

生效日期:

2025.01.01

Effective Date:

委托单位:

浙江振江新能源装备有限公司

Applicant:

Zhejiang Zhenjiang New Energy Equipment Co., Ltd.

物品名称:

SL 2Y100Ah 低压锂离子电池组 ZEN-S120K1-A 51.2V 100Ah 5.12kWh

Name of Goods:

SL 2Y100Ah Low-voltage Li-ion Battery Pack ZEN-S120K1-A 51.2V 100Ah 5.12kWh

此报告本年度有效  
有效期至2025年12月31日

北京迪捷姆空运技术开发有限公司

Beijing DGM Air Transport Technology Development Co., Ltd.

第 1 页 共 4 页

Shenzhen Deeserv Testing International Corporation(DTI)  
Floor 9, block B, feiyang science and technology park, no. 8 longchang road, in 'an sub-district 67, bao'an district, shenzhen city, guangdong province, China

Phone: +86-0755-32936716, E-mail: DTI@deeserv.com  
www.deeserv.com

## Certificate of Conformity

for RoHS

Date of Issue: 2024-09-27 Certificate Number:DTI0245399-1C

Shenzhen Deeserv Testing International Corporation(DTI) hereby declares that testing has been completed and reports have been generated.

Applicant: Zhejiang Zhenjiang New Energy Equipment Co.,Ltd.  
Applicant address: Room 125, Building D,West Lake Kechuang Park, S'han Town,Changting County,Huzhou City,Zhejiang Province  
Product: 51.2V/100Ah Low-voltage Li-ion Battery Pack  
Model No. : ZEN-5120K1-A,ZEN-5120K1-C

And, in accordance with the following Directives:

2011/65/EU and its amendment directive 2015/863/EU

That this product has been assessed against the following Standards:

IEC 62321-3-1:2013;IEC 62321-4:2013+AMD1:2017;  
IEC 62321-5:2013;IEC 62321-7-1:2015;  
IEC 62321-7-2:2017;IEC 62321-6:2015;  
IEC 62321-8:2017



This is to attest that, on the basis of the tests undertaken as per Report No. DTI0245399-1, the submitted sample of the above item complies with this specified standard.

Attestation by:   Certification Manager

Date: 2024-09-27



## Annex VII: RoHs Report

 <h1>TEST REPORT</h1>	
REPORT No.: DTI20245399-2	Date: 2024-06-27
Page 1 of 25	
Applicant Company Name: Zhejiang Zhenjiang New Energy Equipment Co., Ltd.	
Applicant Company Address: Room 125, Building D, West Lake Kechuang Park, Si'an Town, Changxing County, Huzhou City, Zhejiang Province	
The following sample(s) was/were submitted and identified on behalf of the client as:	
Sample Name	: 51.2V100Ah Low-voltage Li-ion Battery Pack
Model No.	: ZEN-5120K1-A, ZEN-5120K1-C
Sample Receiving Date	: September 18, 2024
Testing Period	: From September 18, 2024 to September 27, 2024
Results	: Please refer to next page(s).
<hr/>	
Summary of Test Results:	
<b>TEST REQUEST</b>	<b>CONCLUSION</b>
A Two hundred and forty one (241) substances in the Candidate List of Substances of Very High Concern (SVHC) for authorization published by European Chemical Agency (ECHA) on <u>EC/1907/2006 concerning the REACH</u>	<b>Pass</b> (As remark)
Remark: According to the specified scope and analytical technique, concentration of each 241 SVHC is <0.1% in the submitted sample(s)	
<hr/>	
Shenzhen Deenter Testing International Corp	
	
Approved by:	
<small>           This report of this document is delivered that information contained herein reflects the company's findings at the time of its information only and within the limit of client's representation if any. The company's sole responsibility is to deliver the test results and/or test reports as requested by the client and/or the client's representative only on the basis of the information provided. The laboratory will not be responsible for any errors or omissions in the test results and/or test reports. The client is responsible for the accuracy and completeness of the information provided. The client is responsible for the accuracy and completeness of the information provided. The client is responsible for the accuracy and completeness of the information provided.         </small>	
Shenzhen Deenter Testing International Corp     Address: 8th Fl., Building 8, Peijiang Science & Technology Park, Longjiang Rd & Lu in Shekou, Shenzhen, Guangdong, China	

## Annex VIII: CB Certificate

IEC

IECEE

Ref. Certif. No.  
 FR\_720400

# IEC SYSTEM FOR MUTUAL RECOGNITION OF TEST CERTIFICATES FOR ELECTRICAL EQUIPMENT (IECEE) CB SCHEME

## CB TEST CERTIFICATE

Product

Name and address of the applicant

Name and address of the manufacturer

Name and address of the factory

Note: When new data are being placed on report at page 2

Rating and principal characteristics

Trademark / Brand (if any)

Customer's Testing Facility (CTF) Stage used

Model / Type Ref.

Additional information (if necessary may also be reported on page 2)

A sample of the product was tested and found to be in conformity with

As shown in the Test Report Ref. No. which forms part of this Certificate

This CB Test Certificate is issued by the National Certification Body

Lithon battery Pack

51,2V100Ah, Low-voltage Lithon Battery Pack

Zhejiang Zhenjiang New Energy Equipment Co., Ltd.  
 Room 125, Building D, West Lake Keuchang Park, Si'an Town,  
 Changxing County, Huzhou City,  
 Zhejiang Province - CHINA

Zhejiang Zhenjiang New Energy Equipment Co., Ltd.  
 Room 125, Building D, West Lake Keuchang Park, Si'an Town,  
 Changxing County, Huzhou City,  
 Zhejiang Province - CHINA

Zhejiang Zhenjiang New Energy Equipment Co., Ltd.  
 Room 125, Building D, West Lake Keuchang Park, Si'an Town,  
 Changxing County, Huzhou City,  
 Zhejiang Province - CHINA

☐ Additional information at page 2

51.2V, 100Ah, 5120Wh

/

/

ZEN5120K-LA, ZEN-5120K-1C

☐ Additional information on page 2

IEC 62619:2022




CNO-ESM-PT-080422

LABORATOIRE CENTRAL DES INDUSTRIES ELECTRIQUES - LCI-E  
 33 avenue du Général Leclerc  
 92050 Fontenay-aux-Roses, FRANCE  
[www.lci-e.fr](http://www.lci-e.fr)



Date: 00/11/2024

Signature:  Jérôme REYSSON  
 Certification Officer

## Annex IX: CB Report



 		Test Report issued under the responsibility of 	
<b>TEST REPORT</b> IEC 62619			
<b>Secondary cells and batteries containing alkaline or other non-acid electrolytes – Safety requirements for standard lithium cells and batteries, for use in industrial applications</b>			
Report Number.....	CMDO-ESH-P2408042		
Date of issue.....	2024-11-04		
Total number of pages.....	27 Pages		
Name of Testing Laboratory preparing the Report.....	LDC CHINA COMPANY LIMITED Building 4, No. 518, Xun Zhuan Road, Caohejing Songjiang High Tech Park, Shanghai P.R.C (201612)		
Applicant's name.....	Zhejiang Zhenyuan New Energy Equipment Co., Ltd.		
Address.....	Room 125, Building D, West Lake Kechuang Park, Si'an Town, Changzhou County, Huaihou City, Zhejiang Province		
Test specification:	IEC 62619:2022		
Standard.....	CB Scheme		
Test procedure.....	N/A		
Non-standard test method.....	IECEE OD-2020-F1:2022, Ed 1.5		
TRF template used.....	USC Solutions (Demko)		
Test Report Form No.....	Dated 2023-02-24		
Test Report Form(s) Originator.....			
Master TRF.....			
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## Annex X: REACH Report

<div>TEST REPORT</div>	
REPORT NO.: DTI20245399-2	Date: 2024-06-27
Page 1 of 25	
Applicant Company Name: Zhejiang Zhenjiang New Energy Equipment Co., Ltd.	
Applicant Company Address: Room 125, Building D, West Lake Kechuang Park, S'ran Town, Changxing County, Jinhua City, Zhejiang Province	
The following sample(s) was/were submitted and identified on behalf of the client as:	
Sample Name	512V/100Ah Low-voltage Li-ion Battery Pack
Model No.	ZEN-5120K1-AZEN-5120K1-C
Sample Receiving Date	September 18, 2024
Testing Period	From September 18, 2024 to September 27, 2024
Results	Please refer to next page(s).
Summary of Test Results:	
<b>TEST REQUEST</b>	<b>CONCLUSION</b>
A Two hundred and forty one (241) substances in the Candidate List of Substances of Very High Concern (SVHC) for authorization published by European Chemical Agency (ECHA) on: <u><a href="#">EC No.1907/2006 concerning the REACH</a></u>	Pass (As remark)
Remark: According to the specified scope and analytical technique, concentration of each 241 SVHC is <0.1% in the submitted sample(s).	
Shenzhen Deen Testing International Corp	
Approved by 	
<small>As holder of the rights of the Test Report, the Applicant hereby declares that the Test Report is true and valid and that the information provided is correct and reliable. The Applicant is responsible for the accuracy and reliability of the information provided and for the consequences of any misuse of the Test Report. The Applicant is also responsible for the consequences of any misuse of the Test Report. The Applicant is also responsible for the consequences of any misuse of the Test Report. The Applicant is also responsible for the consequences of any misuse of the Test Report.</small>	
Shenzhen Deen Testing International Corp	Address: No. 8, Building A, Fuyang Street, Xixiang Park, Longgang District, Shenzhen, Guangdong, China Tel: +86 755 23077777 Email: dti@deen.com.cn www.deen.com.cn

## Annex XI: Hazardous Characteristics

### Classification Identification Report

 中国民用航空总局第二研究所 The Second Research Institute of CAAC 检测鉴定报告		编号: DGT2404DW7010737N 日期: 2025-01-02 第 1 页 共 2 页
电话: 026-64458155 传真: 026-64458195 地址: 610200 地址: 四川成都双流区西航港经济开发东区锦飞路 765 号		
<b>危险性分类鉴别报告</b>		
样品名称	中文名称	51.2V100Ah 低压锂离子蓄电池组 ZEN-5120K1-A 51.2V 100Ah 5.12kWh
	英文名称	51.2V100Ah Low-voltage Li-ion Battery Pack ZEN-5120K1-A 51.2V 100Ah 5.12kWh
委托单位	浙江振江新能源装备有限公司	
生产单位	浙江振江新能源装备有限公司	
分析/试验要求	联合国《关于危险货物运输的建议书 规章范本》（第二十三修订版） 联合国《全球化学品统一分类和标签制度》（第十修订版） 《危险化学品目录》（2015 版）	
鉴定依据	联合国《关于危险货物运输的建议书 规章范本》（第二十三修订版） 联合国《全球化学品统一分类和标签制度》（第十修订版） 《危险化学品目录》（2015 版）	
样品标识	ZEN-5120K1-A 51.2V 100Ah 5.12kWh	
<b>一、样品信息</b>		
1. 组分（企业申报）：磷酸铁锂 20-40%，六氟磷酸锂 10-20%，铝 10-20%，石墨 10-20%，铜 7-13%，聚酰乙烯 1-5% 2. 样品性状：黑色长方体		
<b>二、鉴定结论</b>		
1. 正式运输名称：锂离子电池组 技术名称（如有）：/ 2. 联合国编号：UN 3480 3. 危险货物类别：9 4. 建议包装类别：包装必须符合 II 类包装性能水平 5. GHS 分类：/ 6. 是否属于《危险化学品目录》（2015 版）列明的危险化学品：否 是否符合《危险化学品目录》（2015 版）中关于“危险化学品的定义和确定标准”：否		
授权人签字  签发日期 2025-01-02		有效日期 2026-01-01