



**Guangdong Sushi Guangbo Testing  
Technology Co., Ltd.**



中国认可  
检测  
TESTING  
CNAS L12110

# Test Report

No.: GDGT-H/R-2025-03035

**Applicant:** BSL NEW ENERGY TECHNOLOGY CO., LTD

**Applicant Address:** 8F,Building D-2-3,1F, Building D-2-3, 8F, Building D-2-2,  
No. 6, Xingyuan North Road, Starting AreaChina-Korea Huizhou Industrial Park,  
Zhongkai District, Huizhou City, Guangdong, P.R. China.

**Laboratory:** Guangdong Sushi Guangbo Testing Technology Co., Ltd.

**Laboratory Address:** Building No.4/5, Modern Enterprise Accelerator, No.24  
Industrial East Road, Songshan Lake, Dongguan, P.R. China.

**Date of test:** Mar.7.2025~Mar.15.2025





## Terms and Conditions

1、The company is entrusted by the principal to undertake the organization and implementation of the test, and issue the test report according to the test basis and the requirements of the accreditation standards and the reasonable needs of the principal.

2、The test results presented in the report apply only to tested sample. The customer provides their own information, the sample, and the sample information. Thus, company assumes no responsibility for representativeness, authenticity of the sample and validity and accuracy of the information.

3、Any report having not been signed by the person who prepared, reviewer of authorized approver, or having been altered without authorization, or without both the Dedicated Report Seal and its across-page seal is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written authorization of company. Any copy of reports without the Dedicated Report Seal is deemed to be invalid.

4、Company is not responsible for recalling the electronic version of the original report when any revision is made to them. The applicant assumes the responsibility of providing the revised version to any interested party who uses them.

5、The relevant content and effectiveness is subject to the electronic version of the original report which was only applied for. When an electronic report and a paper report are applied for at the same time, the electronic report is only a copy of the paper report, and the relevant content and effectiveness is subject to the paper report.

6、If there is any objection to the test report, it should be submitted to the testing unit within 15 days after receipt of the report, otherwise it will not be accepted after expiration.

### 7、Disclaimer

①When the customer knows that the test sample deviates from the specified conditions and insists on conducting the test, the company will describe the deviation of the test sample in a special font in the report, and explain that the deviation is the customer's requirement, and will not bear any consequences and responsibilities arising therefrom.

②The company is responsible for all information in the report, except information provided by customers. The use of data and related information provided by customers in the report will be marked as provided by customers, and the Company will not assume any consequences and responsibilities arising therefrom, including the validity of the results.



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## Test Report

### i. Product information

Product name: ESS-GRID Integrated Li-ion Battery Energy Storage System.

Product model: ESS-GRID C241、ESS-GRID C225、ESS-GRID C208、ESS-GRID C192、ESS-GRID C176、ESS-GRID C160;

Product No.: GS202503035-1#;

Product quantity: 1PC;

Manufacturer's name: BSL NEW ENERGY TECHNOLOGY CO., LTD;

Manufacturer's address: 8F,Building D-2-3,1F, Building D-2-3, 8F, Building D-2-2, No. 6, Xingyuan North Road, Starting AreaChina-Korea Huizhou Industrial Park, Zhongkai District, Huizhou City, Guangdong, P.R. China;

Factory Name: BSL NEW ENERGY TECHNOLOGY CO., LTD;

Factory Address: 8F,Building D-2-3,1F, Building D-2-3, 8F, Building D-2-2, No. 6, Xingyuan North Road, Starting AreaChina-Korea Huizhou Industrial Park, Zhongkai District, Huizhou City, Guangdong, P.R. China;

Trademark: 

Receipt of sample: Sent by the applicant;

Test sample arrived: Mar.6,2024;

Sample description: At room temperature, the test sample was visually inspected and the appearance was intact.

Note: Test sample information is provided by the customer.

### ii. Test results summary

Table 1 Test results summary

| Test Items              | Test Results                                                                                                                                                                                                               |
|-------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Dust proof<br>IP5X test | After the test, the appearance of the sample is normal and there is no damage. The metal probe with a diameter of 1mm does not enter the shell with a thrust of 1N, and there is no dust entry in the internal inspection. |
| Waterproof<br>IPX5 test | After the test, the appearance of the sample is normal, and there is no water inflow in the internal inspection.                                                                                                           |

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## 1 Atmospheric conditions of the test site

Temperature: 24°C~25°C.

Relative Humidity: 46%RH~52%RH.

## 2 Test site

Building No.4, Modern Enterprise Accelerator, No.24 Industrial East Road, Songshan Lake.

Building No.5, Modern Enterprise Accelerator, No.24 Industrial East Road, Songshan Lake

## 3 Referenced regulations and test sequence

### 3.1 Referenced regulations

IEC 60529:1989+AMD1:1999+AMD2:2013 CSV/COR2:2015 “Degrees of protection provided by enclosures (IP code)”.

The specific technical requirements shall be in accordance with the GDDT/CXJ008.02-2025-03035 “Testing Application Form”.

### 3.2 Sequence of test

Table 2 Sequence of test

| Test item            | Product No.    | Date of test | Test site  |
|----------------------|----------------|--------------|------------|
| Dust proof IP5X test | GS202503035-1# | 2025.03.07   | Building4. |
| Waterproof IPX5 test | GS202503035-1# | 2025.03.14   | Building4. |

## 4 Test personnel(s)

Table 3 Test personnel list

| Test item            | Test personnel |
|----------------------|----------------|
| Dust proof IP5X test | Zhaotao Liu    |
| Waterproof IPX5 test | Zhaotao Liu    |

## 5 Test equipment(s)

Table 4 Test equipment list

| Equipment name | Equipment model | Serial No. | Validity period |
|----------------|-----------------|------------|-----------------|
|----------------|-----------------|------------|-----------------|



|                                 |           |         |            |
|---------------------------------|-----------|---------|------------|
| Sand and dust test chamber      | YJ-IP56X  | GDGS036 | 2025.09.13 |
| Digital display push-pull meter | HP-1K     | GDGY007 | 2025.09.13 |
| The D probe is used             | OJN-9408D | GDGY075 | 2026.2.13  |
| Rain test device                | YJ-IPX1-8 | GDGS035 | 2025.06.20 |

## 6 Test item, conditions, processes, conclusions and figures

### 6.1 Protection level –IP5X

#### 6.1.1 Test conditions

1. Prevent contact with dangerous parts: the metal probe with a diameter of 1mm applies 1N thrust and shall not enter the shell;
2. Prevent solid foreign bodies:
3. Test dust: talc powder;
4. Test time: 8 hours;
5. No negative pressure

#### 6.1.2 Test processes

1. Before the test, visually inspect the appearance of the sample and take photos to record.;
2. Carry out dust-proof IP5X test according to the conditions and sequence in 6.1.1.;
3. 1. After the test, visually inspect the appearance and interior of the sample, and take photos to record.

#### 6.1.3 Test conclusions

1. All the test samples were completed in accordance with the conditions, After the test, the appearance of the sample is normal and there is no damage. The metal probe with a diameter of 1mm does not enter the shell with a thrust of 1N, and there is no dust entry in the internal inspection.

#### 6.1.4 Test figures



Fig 1 Before the test



Fig 2 After the test



Fig 3 Before the test



Fig 4 After the test



Fig 5 Before the test



Fig 6 After the test



Fig 7 Before the test



Fig 8 After the test



Fig 9 Testing of hazardous parts against contact



Fig 10 Testing of hazardous parts against contact

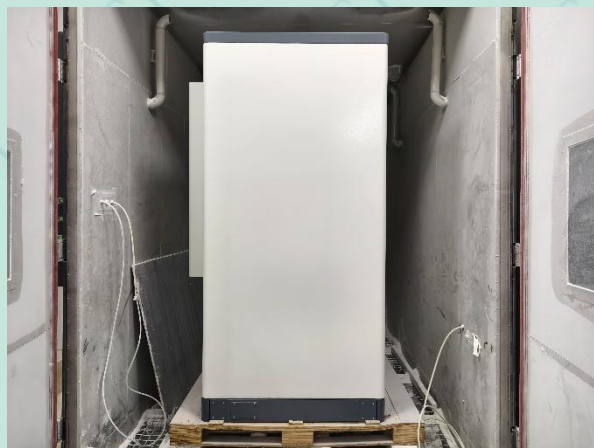


Fig 11 In the experiment



Fig 12 Internal inspection after test



Fig 13 Internal inspection after test



Fig 14 Internal inspection after test

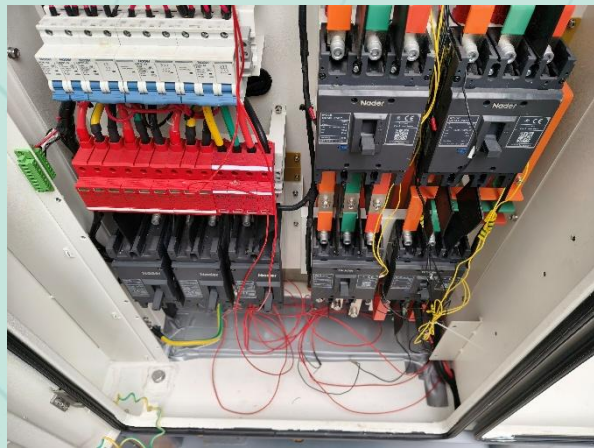


Fig 15 Internal inspection after test



Fig 16 Internal inspection after test

## 6.2 Waterproof test -IPX5

### 6.2.1 Test conditions

1. Inner diameter of nozzle: 6.3mm;
2. Water flow: 12.5L/min;
3. Distance from nozzle to sample surface: 2.5m~3m;
4. Test time: sample surface 1m<sup>2</sup>/min, at least 3min;
5. Qualified judgment: After the test, there is no water inside the sample or the water is not enough to affect the normal operation and safety of the equipment, that is, qualified.

### 6.2.2 Test processes

1. Inspect the appearance of the sample before the test;
2. Waterproof test -IPX5;
3. After the test, the sample shall be inspected externally and internally.

### 6.2.3 Test conclusions

1. All the test samples were completed in accordance with the conditions, After the test,



the appearance of the sample is normal, and there is no water inflow in the internal inspection.

## 6.2.4 Test figures



Fig 17 Before the test



Fig 18 After the test



Fig 19 Before the test



Fig 20 After the test



Fig 21 Before the test



Fig 22 After the test



Fig 23 Before the test



Fig 24 After the test



Fig 25 In test



Fig 26 In test



Fig 27 In test



Fig 28 In test



Fig 29 In test

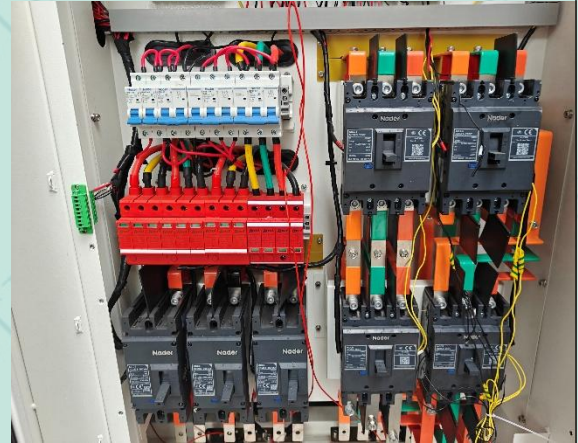


Fig 30 Internal inspection after test



Fig 31 Internal inspection after test

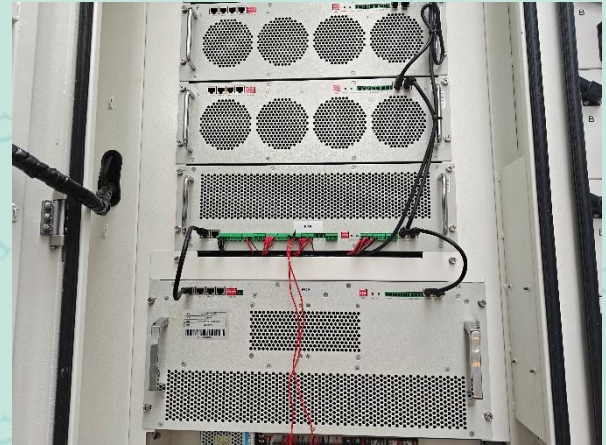


Fig 32 Internal inspection after test



Fig 33 Internal inspection after test



Fig 34 Internal inspection after test

— — End of Report — —