



## LISTING REPORT/INSPECTION PROCEDURE

Shanghai PYTES Energy Co., Ltd.  
PROJECT NUMBER: SH-CERT250504332

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Issued: September 24, 2025  
Revised: None

**620 Old Peachtree Road NW, Suite 100, Suwanee, GA 30024 USA (770) 570-1800**

Test Report Number: SHES250500929631

A representative sample of the product covered by this report has been evaluated and found to comply with the applicable requirements of

- Energy Storage Systems and Equipment – ANSI/CAN/UL 9540:2023, Third Edition, dated June 28, 2023

|                                             |                                                                                    |
|---------------------------------------------|------------------------------------------------------------------------------------|
| <b>Issuing Laboratory</b> .....             | SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd.                         |
| Address.....                                | 588 West Jindu Road, Xinqiao, Songjiang, 201612 Shanghai, China                    |
| <b>Applicant (Certificate Holder)</b> ..... | Shanghai PYTES Energy Co., Ltd.                                                    |
| Address.....                                | No. 3492 Jinqian Road, Qingcun Town, Fengxian District,<br>Shanghai, 201400, China |
| Contact Details .....                       | Zhang Lin<br>Phone: +86 13104603326<br>E-mail: lin_zhang_lz@pytesgroup.com         |
| <b>Manufacturer</b> .....                   | Shanghai PYTES Energy Co., Ltd.                                                    |
| Address.....                                | No. 3492 Jinqian Road, Qingcun Town, Fengxian District,<br>Shanghai, 201400, China |
| Contact Details .....                       | Zhang Lin<br>Phone: +86 13104603326<br>E-mail: lin_zhang_lz@pytesgroup.com         |
| <b>Factory</b> .....                        | Shanghai PYTES Energy Co., Ltd.                                                    |
| Address.....                                | No. 3492 Jinqian Road, Qingcun Town, Fengxian District,<br>Shanghai, 201400, China |
| Contact Details .....                       | Zhang Lin<br>Phone: +86 13104603326<br>E-mail: lin_zhang_lz@pytesgroup.com         |

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|                                              |                                                                                                                                                                                                                                                                                                                                                              |
|----------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Product Type</b> .....                    | <b>DC Energy Storage System</b>                                                                                                                                                                                                                                                                                                                              |
| <b>Trademark</b> .....                       | <b>PYTES</b>                                                                                                                                                                                                                                                                                                                                                 |
| <b>Product description</b> .....             | The products covered by this report are permanently connected DC Energy Storage System for use in household or electric power systems. The units are suitable for installation in indoor locations.<br><br>The installation should be accordance with the National Electrical Code, NFPA 70 and Installation of Stationary Energy Storage Systems, NFPA 855. |
| <b>Model Number(s)</b> .....                 | <b>V5°α Plus ESS</b>                                                                                                                                                                                                                                                                                                                                         |
| <b>Model Differences</b> .....               | N/A                                                                                                                                                                                                                                                                                                                                                          |
| <b>Electrical Ratings</b> .....              | V5°α Plus ESS includes Batteries of V5°α Plus and Battery Boxes or Brackets.<br><br>Battery Type LFP, Battery Voltage Range 47.5Vdc~57.6Vdc, Max Charge / Discharge Current 75A for each pack, Max Energy Output 5.12kWh for each pack, up to 12 battery packs in parallel,<br><br>Charge Temperature 2~57°C, Discharge Temperature -18~57°C, 6000 cycles.   |
| <b>Other Ratings</b> .....                   | IP20                                                                                                                                                                                                                                                                                                                                                         |
| <b>Accessories</b> .....                     | N/A                                                                                                                                                                                                                                                                                                                                                          |
| <b>Testing Laboratory</b> .....              | Suzhou Institute of Product Quality Supervision and Inspection                                                                                                                                                                                                                                                                                               |
| <b>Address</b> .....                         | 2/F North C, Building 2, No.50, North Guandu Road, Wuzhong District, Suzhou, Jiangsu, China                                                                                                                                                                                                                                                                  |
| <b>Date of receipt of test item</b> .....    | 2024-09-30                                                                                                                                                                                                                                                                                                                                                   |
| <b>Date(s) of performance of tests</b> ..... | 2024-10-15 to 2024-10-25                                                                                                                                                                                                                                                                                                                                     |
| <b>Certification Conditions</b>              |                                                                                                                                                                                                                                                                                                                                                              |
| <b>(X Condition)</b> .....                   | N/A                                                                                                                                                                                                                                                                                                                                                          |
| <b>Component Conditions</b>                  |                                                                                                                                                                                                                                                                                                                                                              |
| <b>(U Condition)</b> .....                   | N/A                                                                                                                                                                                                                                                                                                                                                          |

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### CO-LISTING PAGE

#### CO-LISTING APPLICANT I

Applicant's Name:

Address:

Primary Contact:

Phone:

Email:

#### Product Correlation:

| Basic Models | Co-Listed Models | Note any differences between Basic and Co-Listed models |
|--------------|------------------|---------------------------------------------------------|
|              |                  |                                                         |
|              |                  |                                                         |
|              |                  |                                                         |

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### **CO-LISTING APPLICANT II**

Applicant's Name:

\_\_\_\_\_

Address:

\_\_\_\_\_

\_\_\_\_\_

Primary Contact:

\_\_\_\_\_

Phone:

\_\_\_\_\_

Email:

\_\_\_\_\_

### **Product Correlation:**

| Basic Models | Co-Listed Models | Note any differences between Basic and Co-Listed models |
|--------------|------------------|---------------------------------------------------------|
|              |                  |                                                         |
|              |                  |                                                         |
|              |                  |                                                         |

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**GENERAL INFORMATION****Components**

Components used in the covered products must be those outlined in the latest edition of the Listing Report.

**Listing Marking**

This report along with a valid certificate authorizes the certificate holder to use the Listing Marking of SGS North America only on products covered by this report and in accordance with the Product Certification Program Policy Handbook.

**Production Line Tests**

Manufacturing and Production Tests shall be performed as required by this Report.

**Responsibility of the Manufacturer and Factory**

- 1) It is the manufacturer and factory's responsibility to restrict the use of markings which reference SGS to those products which are found by the manufacturers own inspection to comply with the product description in this report. This includes reference to SGS directly and/or indirectly.
- 2) During hours in which the factory is in operation, the SGS inspector shall be given unlimited access to any portion of the premises where the product and/or parts are being produced, assembled, inspected and labeled; and to the test area designated for routine tests. The SGS inspector shall be permitted to inspect and subject the products to prescribed tests prior to shipment any product bearing or intended to bear marking referencing SGS.
- 3) The factory shall provide all required testing equipment and facilities including trained personnel for conducting all routine tests that are to be performed at the factory. These shall be available when needed so that the inspection work can proceed without delays.

**Follow up Inspections**

As part of the SGS Follow-Up inspection, it is required that an inspector periodically visit the factory location(s) and select for examination and/or testing, the most recent production sample of the product covered in the Listing Report.

**SGS Inspector**

- 1) A product which is found by the SGS inspector to have features which make it unacceptable to bear marking referencing SGS shall be corrected if the listing marking is to be used. The inspector shall carefully check additional production for such features until conditions are considered normal.
- 2) A product which does not comply with the provisions of the listing report shall have all reference to SGS removed. If the rejection of the product is questioned by the factory representative, it may be put on hold in separate area of location pending appeal. The factory shall satisfy the inspector that all marks referencing SGS are removed from the rejected material or finished product. Factory shall destroy product and or turn over to inspector for destruction.
- 3) All discrepancies between the product and the listing report shall be immediately stated to the attention of the factory representative. This shall be noted in the follow-up inspection report as a discrepancy.

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## GENERAL CONSTRUCTIONAL REQUIREMENTS TO BE VERIFIED

Construction Details - This section specifies construction and component details in addition to the critical components table which are to be verified during factory follow-up inspections.

1. Mechanical Assembly – A wiring device shall be prevented from any turning that can apply tension to conductor connections, result in damage to the conductor, or otherwise adversely affect the assembly. Friction alone between the mating parts of the assembly shall not be acceptable to prevent turning.
2. Corrosion – All bare metal parts are protected against corrosion by coating, painting, plating or other means specifically identified in the specific construction details unless these metal parts inherently possess such properties to resist corrosion.
3. Accessibility of Live Parts – All uninsulated live parts in primary circuitry are housed within a metallic enclosure constructed without openings unless otherwise described in the construction details.
4. Grounding – All dead-metal parts external or within the enclosure that are exposed to contact during normal or any servicing operation are connected to the equipment grounding terminal. The methods of protective bonding and grounding of an ESS shall be in accordance with Article 250 of NFPA 70 or Section 9 of IEEE C2 as applicable to where the system is located. When sizing the protective bonding and grounding wire, the rating and fault current path of all sources of supply connected to the equipment or system shall be considered. In Canada, the methods of bonding and grounding of an ESS shall be in accordance with Section 10 and 36 of CSA C22.1.
5. Conductor Protection - Conductors that pass over edges or through openings in metal shall be secured from contacting the edges or be protected from cutting and abrasion. For sheet metal less than 1.1 mm thick, protection shall be provided by one of the following methods:
  - (a) rolling the edge of the metal not less than 120 degrees;
  - (b) a bushing or grommet of a material other than rubber at least 1.2 mm thick; or
  - (c) glass sleeving at least 0.25 mm thick.
6. Internal Wiring – UL/CUL listed. Internal wiring shall be routed, supported, clamped or secured in a manner that reduces the likelihood of excessive strain on wire and on terminal connections; loosening of terminal connections; and damage of conductor insulation.
7. Wire Connectors – UL/CUL listed of UL486A-486B.
8. Heat Shrinkable Tubing – UL recognized of materials, covered on wire connectors.
9. Marking and Labeling Systems – Pressure-sensitive labels and nameplates of the permanent type (Type P) that are secured by adhesive shall be in accordance with CSA C22.2 No. 0.15 or UL 969, suitable for damp locations and rated min. 60 °C when applied on Canopy.
10. Installation, Operating and Safety Instructions – Instructions for installation and use of this product are provided by the manufacturer as required by the standards.

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11. Opening and/or knockout – Opening and/or knockout for conduit or armored cable will be provided in field, then suitable conduit hubs shall be used to guarantee minimum 12.7mm spacing to wall shall be guaranteed.
12. Field wiring – The field wiring for different part of system will not be provided by Manufacturer, so suitable wire size and number shall be chosen according to National Electrical Code, NFPA 70, the Canadian Electrical Code, Part I Safety Standard for Electrical Installations, C22.1, or the National Electrical Safety Code, IEEE C2 as applicable to where the system is located.

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**ROUTINE TESTS FOR MANUFACTURING AND PRODUCTION**

The manufacturer shall perform the following Manufacturing and Production Tests on 100% of equipment produced which has both hazardous live parts and accessible conductive parts.

**Required Tests**

Dielectric Voltage Withstand Test  
Grounding Continuity Test  
Check of Safety Controls

**Dielectric Voltage Withstand Test**

A dielectric withstand test as outlined in the Dielectric Voltage Withstand Test in Section 32 shall be conducted on 100 % production of ESS with working voltage exceeding 60 Vdc or 30 Vrms/42.4 Vpeak.

**Section 32:**

The dielectric voltage withstand test is an evaluation of the electrical spacings and insulation associated with the hazardous voltage circuits within the DUT.

Circuits at 42.4Vpeak / 30Vrms or 60Vdc or higher shall be subjected to a dielectric withstand voltage in accordance with the "Determining clearances using required withstand voltage" clause of UL 62368-1/CSA C22.2 No. 62368-1.

Exception No. 1: Semiconductors or similar electronic components liable to be damaged by application of the test voltage shall be bypassed or disconnected.

Exception No. 2: The dielectric voltage withstand test need not be conducted on integral ESS, fuel cells, and inverter systems, etc. that have already been evaluated in accordance with their individual standard requirements. Only those electrical parts external to the tested systems and their connections not previously evaluated need to be tested.

The voltage applied during the dielectric voltage withstand test is to be applied between the hazardous voltage circuits of the DUT and accessible non-current carrying conductive parts.

The voltage applied during the dielectric voltage withstand test is also to be applied between the hazardous voltage charging circuit and the enclosure/accessible non-current carrying conductive parts of the DUT.

The voltages applied during the dielectric voltage withstand test shall be applied for a minimum of 1 min.

The test equipment shall consist of a 500VA or larger capacity transformer, the output voltage, which is variable and which is essentially sinusoidal if using ac test method, a dc output if using a dc test method. There is no trip current setting for the test equipment since the test is checking for insulation breakdown, which results in a large increase of current. Setting a trip current may result in a false failure of this test, as it is not necessarily indicative of insulation breakdown.

Exception: A 500VA or larger capacity transformer need not be used if the transformer is provided with a voltmeter that directly measures the applied output potential.

There shall be no evidence of a dielectric breakdown (breakdown of insulation resulting in a short through insulation/arcing over electrical spacings) as evidenced by an appropriate signal from the dielectric withstand test equipment as a result of the applied test voltage. Corona discharge or a single momentary discharge is not regarded as dielectric breakdown (i.e. insulation breakdown).

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Exception No. 1: The time for the production Dielectric Withstand Test can be reduced to 1s.

Exception No. 2: Testing can be conducted on subassemblies of the system.

Exception No. 3: Testing can be waived if conducted as part of the specific technology evaluation (i.e. tested per UL 1973, etc.).

### **Grounding Continuity Test**

#### **Method**

The grounding and bonding system of an ESS shall be subjected to a check using an impedance measuring device. The measurements shall occur between any two locations of the grounding and bonding system.

No resistance measurements of the grounding and bonding system shall exceed 0.1Ω or if using the test method in (d), the compliance criteria shall be in accordance with IEC 60364-4-41.

The impedance of the system grounding and bonding circuit shall be determined using one of the following methods:

- a) The circuit between the grounding terminal and the part to be grounded is measured using impedance measuring equipment;
- b) In accordance with the Continuity of the Equipment Grounding Circuit section, Section 18.2 of NFPA 79 (voltage drop measurement of the circuit using a 10 A low voltage supply source); or
- c) In accordance with test in the "Resistance of the Protective Bonding System" clause, Clause 5.6.6 of UL 62368-1/CSA C22.2 No. 62368-1 (measuring voltage drop in circuit using a low voltage supply source providing a current based upon circuit protection rating).
- d) The fault loop impedance measurement in accordance with IEC 60364-4-41.

In Canada, the circuit under test is referred to as the bonding circuit per CSA C22.1.

Exception: This testing can be waived if it is determined that the ESS construction and production methods to ensure good grounding and bonding of the system production can be determined through a review of production practices. However, if any point of the grounding system is maintained through a single fastener, a ground bond test shall be conducted.

### **Check of safety controls**

Energy storage systems shall be subjected to 100 % production screening to determine that any active controls utilized for safety are functioning.

Exception: This check of the safety controls can be conducted on subassemblies or components of the system before final assembly

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### PHOTOGRAPHS

DC Energy Storage System (including Battery Packs)  
V5°α Plus ESS  
PHOTOS NO. 1-8

**Photo 1: Battery Module (V5°α Plus)**



**Photo 2: Battery Module (V5°α Plus)**



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**Photo 3: Battery Box (V-BOX-OC)**

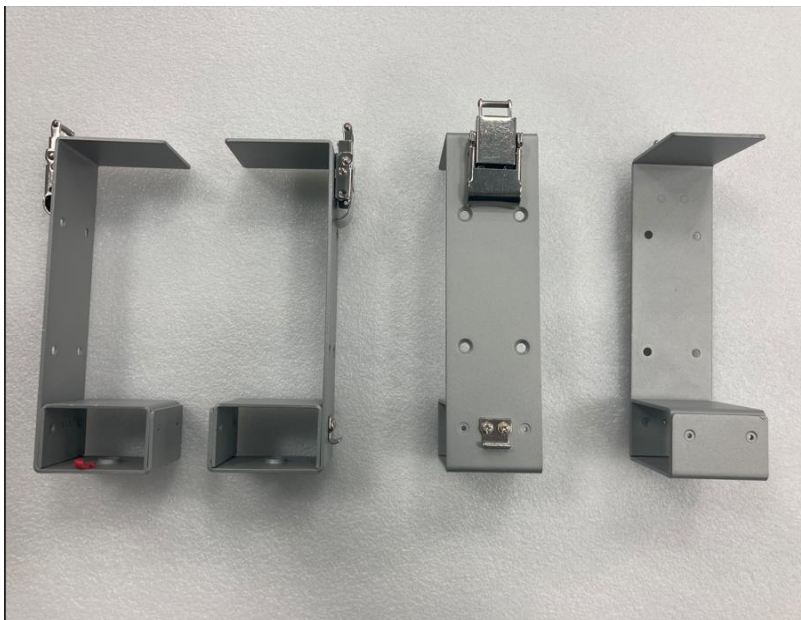


**Photo 4: Battery Box (V-BOX-OC PLUS)**

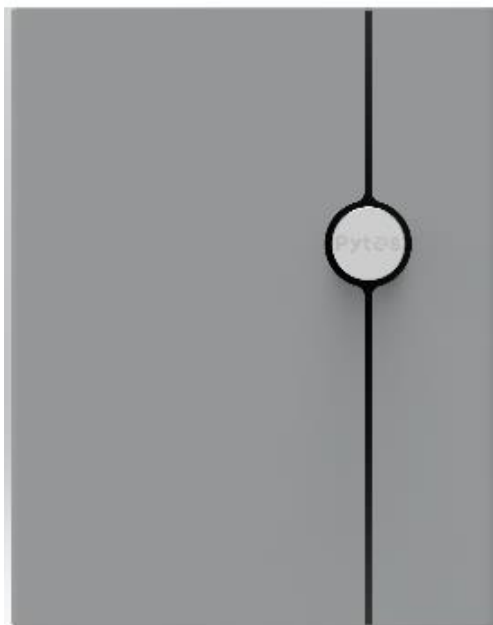


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**Photo 5: Battery Bracket (V5° Bracket)**

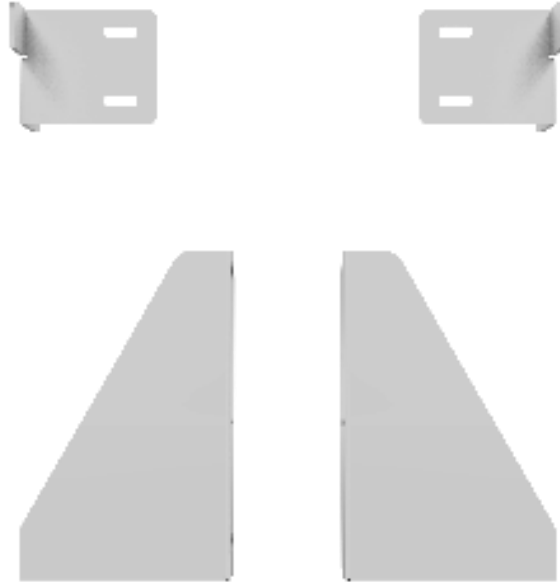


**Photo 6: Battery Box (VR-BOX-IC)**

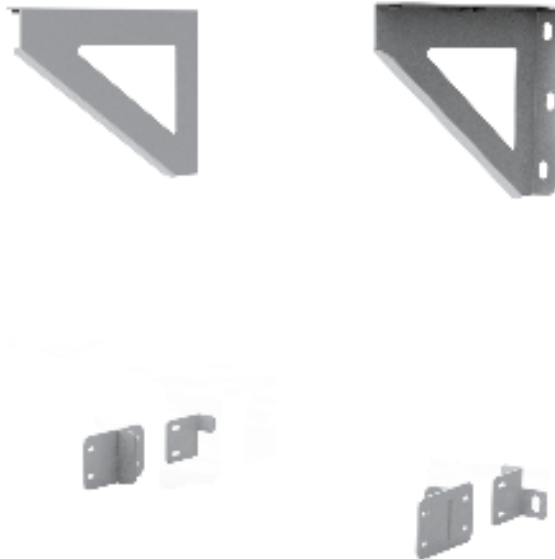


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**Photo 7: Battery Bracket (V5 BK1)**



**Photo 8: Battery Bracket (V5 BK2)**



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## CRITICAL COMPONENTS

The following components are considered "critical" in terms of this certification and must be verified during factory inspections. No substitutions or alternate components are allowed unless specifically as stated in this report.

| Photo No. | Item No. | Component name  | Manufacturer / trademark | Type/model    | Technical data                                                                                                                                                                                                                            | Standard | Mark(s) of conformity                              |
|-----------|----------|-----------------|--------------------------|---------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|----------------------------------------------------|
| 1-2       | 1        | Battery Pack    | Pytes                    | V5°α Plus     | Battery: Nominal Capacity 100Ah (5.12kWh) for each pack, Nominal Voltage 51.2Vdc, Max continuous Charge/Discharge Current 75A, Charge Temperature 0~65°C, Discharge Temperature -20~65°C, 6000 cycles, up to 12 battery packs in parallel | UL 1973  | cTUVus<br>(Certificate No.: U8 003364 0029 Rev.00) |
| 3         | 2        | Battery Box     | Pytes                    | V-BOX-OC      | 645mm*395mm*1395mm<br>4 Battery Modules / Box                                                                                                                                                                                             | UL 9540  | Tested with appliance                              |
| 4         | 3        | Battery Box     | Pytes                    | V-BOX-OC PLUS | 655mm*395mm*1416mm<br>4 Battery Modules / Box                                                                                                                                                                                             | UL 9540  | Tested with appliance                              |
| 5         | 4        | Battery Bracket | Pytes                    | V5° Bracket   | 50mm*177.8mm*62.2mm each piece, 4 pieces as a set to hold one Battery Module                                                                                                                                                              | UL 9540  | Tested with appliance                              |
| 6         | 5        | Battery Box     | Pytes                    | VR-BOX-IC     | 681mm*341mm*851mm<br>2 Battery Modules / Box                                                                                                                                                                                              | UL 9540  | Tested with appliance                              |
| 7         | 6        | Battery Bracket | Pytes                    | V5 BK1        | Upper bracket:<br>27mm*92mm*145mm<br>Lower auxiliary bracket:<br>48mm*50mm*60mm                                                                                                                                                           | UL 9540  | Tested with appliance                              |
| 8         | 7        | Battery Bracket | Pytes                    | V5 BK2        | Upper bracket:<br>27mm*87mm*291mm<br>Lower bracket:<br>53mm*50mm*60mm<br>Connection Board:<br>27.5mm*60mm*100mm                                                                                                                           | UL 9540  | Tested with appliance                              |

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Revised: None

### ANNUAL RE-TESTING OF UNLISTED COMPONENTS

The unlisted components on this page are uncontrolled (not falling under a third party certification program) and require periodic retesting and/or evaluation.

**Note to SGS Follow Up Inspector: The inspection office will notify you in writing when these components must be selected and sent to the Lab indicated below for re-evaluation.**

Ship the samples to:

The unlisted components covered by this report and are required to be re-tested/evaluated are shown in the following table:

| PHOTO #                      | ITEM #      | DESCRIPTION                 | MFR | TYPE/<br>MODEL | RATING |
|------------------------------|-------------|-----------------------------|-----|----------------|--------|
|                              |             |                             |     |                |        |
| <b>VERIFICATION PROCESS</b>  |             |                             |     |                |        |
| <b>Test Standard:</b>        |             |                             |     |                |        |
| <b>Frequency of Testing:</b> |             | <b>No. of Test Samples:</b> |     |                |        |
| <b>Clause No.</b>            | <b>TEST</b> | <b>PARAMETERS</b>           |     |                |        |
|                              |             |                             |     |                |        |
|                              |             |                             |     |                |        |
|                              |             |                             |     |                |        |

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## MARKINGS

The following markings are required:

Copy of marking plate:



### DC Energy Storage System

#### V5°a Plus ESS

|                                       |                 |
|---------------------------------------|-----------------|
| Battery Type                          | LFP             |
| Battery Voltage Range                 | 47.5Vdc-57.6Vdc |
| Battery Max. Charge/Discharge Current | 75A*n           |
| Battery Maximum Energy Output         | 5.12kWh*n       |
| Duty cycle                            | 6000 Cycles     |
| Standard Charge Temperature           | 2°C - 57°C      |
| Standard Discharge Temperature        | -18°C - 57°C    |
| Max. Weight                           | 45.34kg*n       |
| Battery Ingress Protection            | IP20            |
| Max. Efficiency                       | 97.5%           |

This system is UL 9540 certified under Test Report No.SHES250500929631.

\*Suitable for Use in Residential Non-Habitable Spaces.

\*The components of the system:

Battery:Pytes,V5°a Plus \*(1~12)pcs

Battery Box or Bracket(Optional):V-BOX-OC,V-BOX-OC PLUS, V5° Bracket, VR-BOX-IC, V5 BK1, V5 BK2









Product Serial Number

1. Label is attached on the side surface of enclosure and visible after installation.
2. IP20 for Batteries.

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### Safety Markings

| Warning!<br>Avertissement!                                                                                                                           | Warning!<br>Avertissement!                                                                                                                                                                                                                                                                                                                           | Warning!<br>Avertissement!                                                                                                                                                                                        |
|------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  <p>Hazardous Voltage Circuits</p> <p>Circuits à tension élevée</p> |  <p>Risk of Electric Shock or Serious Injury. Care Shall be taken when entering enclosure<br/>- Authorized personnel only.</p> <p>Risque de choc électrique ou de blessure grave. Faire attention en entrant dans l'enceinte - Personnes autorisées uniquement.</p> |  <p>To Reduce the Risk of Injury, read all instructions.</p> <p>Pour Prévenir les blessures, lire toutes les instructions.</p> |

## DANGER

Charge the battery every six months to reach 90% SOC, in case of long-term storage.  
Chargez la batterie tous les six mois pour atteindre un état de charge de 90 %, en cas de stockage à long terme.

**ATTENTION!**  
Read the user's manual carefully before wire connection.  
Make sure the ground connection is properly set before use.  
Repair work must be carried out by authorized and trained persons only.  
Do not place the battery in an area that can be touched by children or pets.  
Do not place the battery near open flame or flammable material.  
Do not allow the battery to be immersed in or in contact with water or other liquids.  
Avoid direct sunlight and humid environment.  
Do not dismantle this battery by non-qualified personnel.  
Do not drop, crush, or impact the battery; do not cut or spear the battery with a sharp object.  
Do not cover or wrap the battery.  
Do not sit or place heavy objects on the battery.  
If the battery leaks liquid, catches fire or is damaged, switch off the breaker on DC side and stay away from the battery.  
Contact your supplier within 24 hours in case of failure.



**ATTENTION !**  
Lisez attentivement le manuel de l'utilisateur avant de procéder à la connexion des câbles.  
Assurez-vous que la connexion à la terre est correctement arrangée avant l'utilisation.  
Les travaux d'entretien ne doivent être effectués que par du personnel autorisé et expert.  
Ne placez pas la batterie dans un endroit susceptible d'être touché par des enfants ou des animaux domestiques.  
Ne pas placer la batterie à proximité d'une flamme nue ou d'un matériau inflammable.  
Ne laissez pas la batterie être immergée ou en contact avec de l'eau ou d'autres liquides.  
Éviter la lumière directe du soleil et un environnement humide.  
Cette batterie ne doit pas être démontée par du personnel non qualifié.  
Ne pas laisser tomber, écraser ou heurter la batterie ; ne pas la couper ou l'entailler avec un objet pointu.  
Ne pas couvrir ou envelopper la batterie!  
Ne vous asseyez pas et ne placez pas d'objets lourds sur la batterie.  
Si la batterie fuit, prend feu ou est endommagée, coupez le disjoncteur de DC côté et éloignez-vous de la batterie.  
Contactez votre fournisseur dans les 24 heures en cas de panne.

**Danger!** High DC voltage inside  
**Danger!** Arc flash & shock hazard

**Danger,** tension continue élevée à l'intérieur  
**Danger,** arc électrique et risque d'électrocution

#### Note:

- The marking is affixed on canopy. SGS NA Listed Mark shall be at least 5 mm high. Other letters shall be at least 2.4 mm high.
- The "CAUTION" shall be at least 3.2mm high; The remaining letters shall not be less than 1.6mm high.
- The S/N number should be pasted on every end product, every S/N number denote the date code or other dating of manufacture.

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### ILLUSTRATIONS

The System Manual is as follows with products packaging:

User Manual Energy Storage Systems Pi PLUS Series Version 1.0.

1 Safety Instructions

2 Overview

3 Installation

3.1 Install the Battery

3.2 Connect Ground Cable

3.3 Connecting the Power Cable

3.4 Connecting Communication Cables

3.5 Procedure of Starting/Shut down the Battery

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## SUMMARY OF TEST RESULTS

The following tests were performed:

ANSI/CAN/UL 9540:2023 (Dated June 28, 2023)

| <u>Section</u> | <u>Test Description</u>                        |
|----------------|------------------------------------------------|
| 13             | Electrical Spacings and Separation of Circuits |
| 22             | Noise Levels                                   |
| 30             | Normal Operations Test                         |
| 32             | Dielectric Voltage Withstand Test              |
| 34             | Equipment Grounding and Bonding Test           |
| 35             | Insulation Resistance Test                     |
| 36             | Electromagnetic Immunity Tests                 |

Results of the tests indicate the specimens conform to the test criteria that were found to be applicable.

Battery Part:

ANSI/UL1973:2022: Test Report No.64.280.24.60500.01 on January 14th, 2025, which issued by TUV SUD.

ANSI/CAN/UL 9540A: 2019: Test Report of Module Level No.5061924025703 on January 20th, 2025, which issued by TUV SUD.

ANSI/CAN/UL 9540A: 2019: Test Report of Unit Level No. 5061924025704 on May 8th, 2025, which issued by TUV SUD.

System:

Electromagnetic Immunity tests of the system:

Test Report No. WPHM251595 on July 14th, 2025, which issued by Suzhou Institute of Product Quality Supervision and Inspection.

Noise level tests of the system:

Test Report No. WPHM251596 on July 14th, 2025, which issued by Suzhou Institute of Product Quality Supervision and Inspection.



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### REVISION TABLE

The following changes have been made to this Report:

| <u>Revision No.</u> | <u>Date</u> | <u>Project No.</u> | <u>Revision prepared by</u> | <u>Page</u> | <u>Description of Change</u> |
|---------------------|-------------|--------------------|-----------------------------|-------------|------------------------------|
| --                  | 2025-09-24  | SHES2505009296PV   | Bella Liu                   | None        | First issuance               |
|                     |             |                    |                             |             |                              |
|                     |             |                    |                             |             |                              |
|                     |             |                    |                             |             |                              |
|                     |             |                    |                             |             |                              |

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### CONCLUSION

Samples of the products covered by this Report have been found to comply with the applicable requirements of

- Energy Storage Systems and Equipment – ANSI/CAN/UL 9540:2023 Third Edition, dated June 28, 2023

Report Prepared by:

Bella Liu  
Project Engineer

Report Reviewed by:

Allen Sun  
Local Reviewer

Report Reviewed and Approved by:

Michael Tong  
Global Reviewer

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