

# CERTIFICATE OF COMPLIANCE

**Certificate Number:** SGSNA/26/SH/00387X

**Contract Number:** 801410  
**Certificate Project Number:** SH-CERT250504298

**Certified Product:** DC Energy Storage System  
**Trademarks:** PYTES  
**Model(s):** HV48100 1P5S ESS, HV48100 1P6S ESS, HV48100 1P7S ESS, HV48100 1P8S ESS, HV48100 1P9S ESS, HV48100 1P10S ESS, HV48100 1P11S ESS, HV48100 1P12S ESS, HV48100 1P13S ESS, HV48100 1P14S ESS, HV48100 1P15S ESS, HV48100 2P5S ESS, HV48100 2P6S ESS, HV48100 2P7S ESS

**Technical Data:** See page 2

**Certificate Holder:** Shanghai PYTES Energy Co., Ltd.  
No.3492 Jinqian Road, Qingcun Town, Fengxian District, Shanghai, 201400, China

*This certificate supercedes previous certificates issued with the same certificate number. Certification is valid when products are indicated on the SGS directory of certified products at [www.sgs.com](http://www.sgs.com) or using the QR code below. This product has been certified in accordance with ISO/IEC 17065:2012, Conformity assessment — Requirements for bodies certifying products, processes and services and under the Type 3 guidelines provided in ISO/IEC 17067:2013, Conformity assessment — Fundamentals of product certification, and in accordance with:*

ANSI/CAN/UL 9540:2023, Third Edition, Dated June 28, 2023

## Certification Condition

The DC Energy Storage System is to be installed in accordance with the National Electrical Code NFPA 70 (National Electric Code) or CSA C22.1 (Canadian Electric Code) and Installation of Stationary Energy Storage Systems, NFPA 855 by end user.

Authorized by:

Effective date: 01 July 2026



Mark Lohmann  
Certifier



## Certification Body

Connectivity & Products, a division of SGS North America Inc.  
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## Additional Information:

### Technical Data:

HV48100 1P5S ESS

1 series of batteries HV48100 BMU-5 and

Optional: HV48100 Cabinet / HV48100 12S Cabinet / HV48100 15S Cabinet / HV48100 15S Bracket / Torus Nova Pulse

Battery Type LFP, Battery Voltage Range: 237.5Vdc~288Vdc,

Max Charge / Discharge Current: 50A,

Max Energy Output: 25.6kWh,

Charge Temperature: 0~57°C, Discharge Temperature: -18~57°C, 6000 cycles, Max. 16 clusters in parallel.

HV48100 1P6S ESS

1 series of batteries HV48100 BMU-6 and

Optional: HV48100 Cabinet / HV48100 12S Cabinet / HV48100 15S Cabinet / HV48100 15S Bracket / Torus Nova Pulse

Battery Type LFP, Battery Voltage Range: 285Vdc~345.6Vdc,

Max Charge / Discharge Current: 50A,

Max Energy Output: 30.72kWh,

Charge Temperature: 0~57°C, Discharge Temperature: -18~57°C, 6000 cycles, Max. 16 clusters in parallel.

HV48100 1P7S ESS

1 series of batteries HV48100 BMU-7 and

Optional: HV48100 Cabinet / HV48100 12S Cabinet / HV48100 15S Cabinet / HV48100 15S Bracket / Torus Nova Pulse

Battery Type LFP, Battery Voltage Range: 332.5Vdc~403.2Vdc,

Max Charge / Discharge Current: 50A,

Max Energy Output: 35.84kWh,

Charge Temperature: 0~57°C, Discharge Temperature: -18~57°C, 6000 cycles, Max. 16 clusters in parallel.

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## Additional Information:

### HV48100 1P8S ESS

1 series of batteries HV48100 BMU-8 and

Optional: HV48100 Cabinet / HV48100 12S Cabinet / HV48100 15S Cabinet / HV48100 15S Bracket / Torus Nova Pulse

Battery Type LFP, Battery Voltage Range: 380Vdc~460.8Vdc,

Max Charge / Discharge Current: 50A,

Max Energy Output: 40.96kWh,

Charge Temperature: 0~57°C, Discharge Temperature: -18~57°C, 6000 cycles, Max. 16 clusters in parallel.

### HV48100 1P9S ESS

1 series of batteries HV48100 BMU-9 and

Optional: HV48100 12S Cabinet / HV48100 15S Cabinet / HV48100 15S Bracket / Torus Nova Pulse

Battery Type LFP, Battery Voltage Range: 427.5Vdc~518.4Vdc,

Max Charge / Discharge Current: 50A,

Max Energy Output: 46.08kWh,

Charge Temperature: 0~57°C, Discharge Temperature: -18~57°C, 6000 cycles, Max. 16 clusters in parallel.

### HV48100 1P10S ESS

1 series of batteries HV48100 BMU-10 and

Optional: HV48100 12S Cabinet / HV48100 15S Cabinet / HV48100 15S Bracket / Torus Nova Pulse

Battery Type LFP, Battery Voltage Range: 475Vdc~576Vdc,

Max Charge / Discharge Current: 50A,

Max Energy Output: 51.2kWh,

Charge Temperature: 0~57°C, Discharge Temperature: -18~57°C, 6000 cycles, Max. 16 clusters in parallel.

### HV48100 1P11S ESS

1 series of batteries HV48100 BMU-11 and

Optional: HV48100 12S Cabinet / HV48100 15S Cabinet / HV48100 15S Bracket / Torus Nova Pulse

Battery Type LFP, Battery Voltage Range: 522.5Vdc~633.6Vdc,

Max Charge / Discharge Current: 50A,

Max Energy Output: 56.32kWh,

Charge Temperature: 0~57°C, Discharge Temperature: -18~57°C, 6000 cycles, Max. 16 clusters in parallel.

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## Additional Information:

### HV48100 1P12S ESS

1 series of batteries HV48100 BMU-12 and

Optional: HV48100 12S Cabinet / HV48100 15S Cabinet / HV48100 15S Bracket / Torus Nova Pulse

Battery Type LFP, Battery Voltage Range: 570Vdc~691.2Vdc,

Max Charge / Discharge Current: 50A,

Max Energy Output: 61.44kWh,

Charge Temperature: 0~57°C, Discharge Temperature: -18~57°C, 6000 cycles, Max. 16 clusters in parallel.

### HV48100 1P13S ESS

1 series of batteries HV48100 BMU-13 and

Optional: HV48100 15S Cabinet / HV48100 15S Bracket / Torus Nova Pulse

Battery Type LFP, Battery Voltage Range: 617.5Vdc~748.8Vdc,

Max Charge / Discharge Current: 50A,

Max Energy Output: 66.56kWh,

Charge Temperature: 0~57°C, Discharge Temperature: -18~57°C, 6000 cycles, Max. 16 clusters in parallel.

### HV48100 1P14S ESS

1 series of batteries HV48100 BMU-14 and

Optional: HV48100 15S Cabinet / HV48100 15S Bracket / Torus Nova Pulse

Battery Type LFP, Battery Voltage Range: 665Vdc~806.4Vdc,

Max Charge / Discharge Current: 50A,

Max Energy Output: 71.68kWh,

Charge Temperature: 0~57°C, Discharge Temperature: -18~57°C, 6000 cycles, Max. 16 clusters in parallel.

### HV48100 1P15S ESS

1 series of batteries HV48100 BMU-15 and

Optional: HV48100 15S Cabinet / HV48100 15S Bracket / Torus Nova Pulse

Battery Type LFP, Battery Voltage Range: 712.5Vdc~864Vdc,

Max Charge / Discharge Current: 50A,

Max Energy Output: 76.8kWh,

Charge Temperature: 0~57°C, Discharge Temperature: -18~57°C, 6000 cycles, Max. 16 clusters in parallel.

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## Additional Information:

HV48100 2P5S ESS

2 series of batteries HV48100 BMU-5 and

Optional: HV48100 12S Cabinet / HV48100 15S Cabinet / HV48100 15S Bracket / Torus Nova Pulse

Battery Type LFP, Battery Voltage Range: 237.5Vdc~288Vdc,

Max Charge / Discharge Current: 50A\*2,

Max Energy Output: 51.2kWh,

Charge Temperature: 0~57°C, Discharge Temperature: -18~57°C, 6000 cycles, Max. 16 clusters in parallel.

HV48100 2P6S ESS

2 series of batteries HV48100 BMU-6 and

Optional: Battery box HV48100 15S Cabinet / HV48100 15S Bracket / Torus Nova Pulse

Battery Type LFP, Battery Voltage Range: 285Vdc~345.6Vdc

Max Charge / Discharge Current: 50A\*2,

Max Energy Output: 61.44kWh,

Charge Temperature: 0~57°C, Discharge Temperature: -18~57°C, 6000 cycles, Max. 16 clusters in parallel.

HV48100 2P7S ESS

2 series of batteries HV48100 BMU-7 and

Optional: Battery box HV48100 15S Cabinet / HV48100 15S Bracket / Torus Nova Pulse

Battery Type LFP, Battery Voltage Range: 332.5Vdc~403.2Vdc

Max Charge / Discharge Current: 50A\*2,

Max Energy Output: 71.68kWh,

Charge Temperature: 0~57°C, Discharge Temperature: -18~57°C, 6000 cycles, Max. 16 clusters in parallel.

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## Certification Body