

# CERTIFICATE OF COMPLIANCE

**Certificate Number:** SGSNA/26/SH/00145X

**Contract Number:** 801410  
**Certificate Project Number:** SH-CERT260201103

**Certified Product:** DC Energy Storage System  
**Trademarks:** PYTES  
**Model(s):** See Page 2  
**Technical Data:** See Page 3-4

**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. The product is certified according to ISO/IEC Guide 17067, Conformity assessment - Fundamentals of product certification, System 3, 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:

Mark Lohmann  
Certifier

Effective date: 12 February 2026



### Certification Body

Connectivity & Products, a division of SGS North America Inc.  
620 Old Peachtree Road, Ste. 100, Suwanee, GA 30024, USA  
t +1 770 570 1800 f +1 770 277 1240 [www.sgs.com](http://www.sgs.com)



# CERTIFICATE OF COMPLIANCE

**Certificate Number:** SGSNA/26/SH/00145X

**Contract Number:** 801410

**Certificate Project Number:** SH-CERT260201103

## Additional Information:

### Model(s):

HV48100 SE 1P8S ESS, HV48100 SE 1P9S ESS,  
HV48100 SE 1P10S ESS, HV48100 SE 1P11S ESS,  
HV48100 SE 1P12S ESS, HV48100 SE 1P13S ESS,  
HV48100 SE 1P14S ESS, HV48100 SE 1P15S ESS,  
HV48100 SE 2P3S ESS, HV48100 SE 2P4S ESS,  
HV48100 SE 2P5S ESS, HV48100 SE 2P6S ESS,  
HV48100 SE 2P7S ESS, HV48100 SE Lite 1P8S ESS,  
HV48100 SE Lite 1P9S ESS, HV48100 SE Lite 1P10S ESS,  
HV48100 SE Lite 1P11S ESS, HV48100 SE Lite 1P12S ESS,  
HV48100 SE Lite 1P13S ESS, HV48100 SE Lite 1P14S ESS,  
HV48100 SE Lite 1P15S ESS, HV48100 SE Lite 2P3S ESS,  
HV48100 SE Lite 2P4S ESS, HV48100 SE Lite 2P5S ESS,  
HV48100 SE Lite 2P6S ESS, HV48100 SE Lite 2P7S ESS

## Certification Body

Connectivity & Products, a division of SGS North America Inc.  
620 Old Peachtree Road, Ste. 100, Suwanee, GA 30024, USA  
t +1 770 570 1800 f +1 770 277 1240 [www.sgs.com](http://www.sgs.com)

# CERTIFICATE OF COMPLIANCE

**Certificate Number:**        **SGSNA/26/SH/00145X**

**Contract Number:**            801410  
**Certificate Project Number:** SH-CERT260201103

**Additional Information:**

**Technical Data:**

HV48100 SE 1P8S~HV48100 SE 1P15S ESS includes:

1 series of batteries HV48100 SE BMU8-BMU15 and Battery box HV48100 SE OC.

Battery Type LFP,

Battery Voltage Range:

- 1P8S 380Vdc~460.8Vdc,
- 1P9S 427.5Vdc~518.4Vdc,
- 1P10S 475Vdc~576Vdc,
- 1P11S 522.5Vdc~633.6Vdc,
- 1P12S 570Vdc~691.2Vdc,
- 1P13S 617.5Vdc~748.8Vdc,
- 1P14S 665Vdc~806.4Vdc,
- 1P15S 712Vdc~864Vdc,

Max Charge / Discharge Current: 50A,

Max Energy Output: 5.12kWh\*n (n=8~15),

Charge Temperature: 0~57°C, Discharge Temperature: -18~57°C, 6000 cycles.

HV48100 SE 2P3S~HV48100 SE 2P7S ESS includes:

2 series of batteries HV48100 SE BMU3-BMU7 and Battery box HV48100 SE OC.

Battery Type LFP,

Battery Voltage Range:

- 2P3S 142.5Vdc~172.8Vdc,
- 2P4S 190Vdc~230.4Vdc,
- 2P5S 237.5Vdc~288Vdc,
- 2P6S 285Vdc~345.6Vdc,
- 2P7S 332.5Vdc~403.2Vdc,

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

Max Energy Output: 5.12kWh\*2\*n (n=3~7),

Charge Temperature: 0~57°C, Discharge Temperature: -18~57°C, 6000 cycles.

**Certification Body**

Connectivity & Products, a division of SGS North America Inc.  
620 Old Peachtree Road, Ste. 100, Suwanee, GA 30024, USA  
t +1 770 570 1800 f +1 770 277 1240 www.sgs.com

# CERTIFICATE OF COMPLIANCE

**Certificate Number:** SGSNA/26/SH/00145X

**Contract Number:** 801410  
**Certificate Project Number:** SH-CERT260201103

**Additional Information:**

**Technical Data:**

HV48100 SE Lite 1P8S~HV48100 SE Lite 1P15S ESS includes:  
 1 series of batteries HV48100 SE BMU8-BMU15 / Battery box HV48100 SE OC Lite.  
 Battery Type LFP,  
 Battery Voltage Range:

- 1P8S 380Vdc~460.8Vdc,
- 1P9S 427.5Vdc~518.4Vdc,
- 1P10S 475Vdc~576Vdc,
- 1P11S 522.5Vdc~633.6Vdc,
- 1P12S 570Vdc~691.2Vdc,
- 1P13S 617.5Vdc~748.8Vdc,
- 1P14S 665Vdc~806.4Vdc,
- 1P15S 712Vdc~864Vdc,

Max Charge / Discharge Current: 50A,  
 Max Energy Output: 5.12kWh\*n (n=8~15),  
 Charge Temperature: 0~57°C, Discharge Temperature: -18~57°C, 6000 cycles.

HV48100 SE Lite 2P3S~ HV48100 SE Lite 2P7S ESS includes:  
 2 series of batteries HV48100 SE BMU3-BMU7 / Battery box HV48100 SE OC Lite.  
 Battery Type LFP,  
 Battery Voltage Range:

- 2P3S 142.5Vdc~172.8Vdc,
- 2P4S 190Vdc~230.4Vdc,
- 2P5S 237.5Vdc~288Vdc,
- 2P6S 285Vdc~345.6Vdc,
- 2P7S 332.5Vdc~403.2Vdc,

Max Charge / Discharge Current: 50A\*2,  
 Max Energy Output: 5.12kWh\*2\*n (n=3~7),  
 Charge Temperature: 0~57°C, Discharge Temperature: -18~57°C, 6000 cycles.

Other Ratings: IP55

**Certification Body**

Connectivity & Products, a division of SGS North America Inc.  
 620 Old Peachtree Road, Ste. 100, Suwanee, GA 30024, USA  
 t +1 770 570 1800 f +1 770 277 1240 www.sgs.com