

# SHUANG DENG GROUP

双登集团

大数据时代领先的  
绿色储能集成服务供应商



国际化 高科技 新能源 生态型



# Liquid-cooled High-voltage LFP Battery Energy Storage System



## High voltage battery cluster

### : SDC-ESS-S1228V3047kWh

SDC-ESS-R1228V3047kWh It is a LFP battery container designed for high-capacity energy storage systems, mainly used in large-scale renewable energy generation consumption, power grid peak regulation and frequency regulation, emergency backup, delayed distribution network upgrade, distributed generation and microgrid systems.

Modular design, strong scalability, can meet the power and energy needs of different user scenarios. The battery module has a rated voltage of 1228V and a rated capacity of 310Ah.



**SDC-ESS-S1228V3047kWh**

## Product features

- ◆ **High Security:** The use of LFP material system, with high safety, long life, stable and reliable characteristics; The protection level of the battery module is IP65 or above, which can effectively prevent condensation and salt spray erosion.
- ◆ **High Performance Liquid-cooling Technology:** Adopt intelligent temperature control and balanced design, single PACK temperature difference  $\leq 2.5$  °C.
- ◆ **Multi-dimensional Fire Protection Design:** Equipped with cell level, PACK level, cabin class three-level fire protection design, equipped with temperature sensitivity, combustible gas detection and other detection sensors, water fire, cabin gas fire and PACK level gas fire compatible design, flexible selection.
- ◆ **Standardized Modules:** The standardized module design is adopted, which is highly extensible and can meet the power and energy requirements of different scenarios. All components are pre-installed in the factory, saving on-site installation and commissioning workload and meeting the overall marine transportation.



**SDC-ESS-R1228V380kWh**



**SDC-ESS-M153V47.6kWh**

# High-voltage Energy Storage System

## SDC-ESS-R1228V380kWh LFP Battery Cluster Parameters

|                             |                     |
|-----------------------------|---------------------|
| Rated Voltage               | 1228.8V             |
| Rated Power                 | 380.928kWh          |
| Operating Voltage Range     | 1075.2VDC~1401.6VDC |
| Rated Charging Current      | 155A                |
| Rated Discharge Current     | 155A                |
| Maximum Charge Current      | 177A                |
| Maximum Discharge Current   | 177A                |
| Communication Interface     | CAN/RS485           |
| Operating Temperature Range | 0~45°C              |
| Storage Temperature Range   | -20°C~55°C          |
| Relative Humidity           | 5%~95%RH            |

## High-voltage Energy Storage System

## SDC-ESS-S1228V3.047MWh

|                                          |                                          |
|------------------------------------------|------------------------------------------|
| Rated Power                              | 1.5MW                                    |
| Rated Capacity                           | 3.047MWh                                 |
| Rated Charge And Discharge Magnification | 0.5C                                     |
| Operating Ring Temperature               | -30-50°C ( > 45°C Power Down Operation)  |
| Mode Of Communication                    | Modbus RTU、 Modbus TCP/IP、 CAN、 IEC61850 |
| Elevation                                | <3000m                                   |
| Protection Class                         | IP54                                     |
| Size                                     | 20ft(6058*2438*2896mm)                   |
| Weight                                   | 28T                                      |
| Mode Of Transport                        | Overall Sea And Land Transport           |

Remark:

- \* Indicates that certification is in progress;
- 20 square feet is the standard product, 40 square feet can be customized according to actual needs.