

# Integrated Liquid-cooled Energy Storage System



## Product Introduction

The integrated liquid-cooled energy storage system adopts the All-In-One design concept, integrating the power supply and distribution system, power conversion system, battery system, EMS system, temperature control system, fire protection system and so on. This system can be widely applied in scenarios such as industrial and commercial parks, charging and discharging stations, and distributed photovoltaic power stations.

## Product Features



### Intelligent and Efficient

- The maximum efficiency of PCS  $\geq 99\%$ , and the system round-trip efficiency (RTE)  $\geq 91\%$ .
- Large-area cooling and balanced heat dissipation, supporting 1P charging and discharging applications.
- Intelligent optimal energy dispatch strategy to enhance system revenue.



### Safe and Reliable

- AI-based pre-diagnosis of battery cell faults helps to reduce the risk of thermal runaway.
- Three-level over-current protection at the pack level, cluster level, and PCS level is provided.
- A four-level fire safety design enables timely fire control and management.



### Flexible Configuration

- The integrated system design and transportation reduce the workload of on-site debugging.
- Multiple machines can be seamlessly paralleled side by side, back to back.



### Intelligent Operation & Maintenance

- Remote desktop operation and maintenance, as well as cloud-based intelligent operation and maintenance are available.
- Digital and intelligent management of the entire data life cycle is carried out.

| Classification          |                               | ICB120K241D                                                                                                  | ICB218K218D           |
|-------------------------|-------------------------------|--------------------------------------------------------------------------------------------------------------|-----------------------|
| Battery Side Parameters | Cell Type                     | LFP (314Ah)                                                                                                  | LFP (285Ah)           |
|                         | PACK Configuration            | 48kWh                                                                                                        | 43.5kWh               |
|                         | Battery Configuration         | 1P240S                                                                                                       |                       |
|                         | Rated Capacity                | 241kWh                                                                                                       |                       |
|                         | Voltage Range                 | 672V~876V                                                                                                    |                       |
|                         | Charge and Discharge Ratio    | ≤0.5P                                                                                                        | ≤1P                   |
|                         | Depth of Discharge            | 95%DOD                                                                                                       |                       |
|                         | Cooling Method                | liquid cooled                                                                                                |                       |
| AC Side Parameters      | Maximum Power                 | 125kW                                                                                                        | 218kW(MPPT selective) |
|                         | Rated grid voltage            | 380V/400V                                                                                                    |                       |
|                         | Rated grid frequency          | 50/60Hz                                                                                                      |                       |
|                         | THD (rated power)             | <3%                                                                                                          |                       |
|                         | Cooling Method                | Air cooled                                                                                                   |                       |
| System Parameters       | Combined cycle efficiency     | ≥91%                                                                                                         |                       |
|                         | Protection level              | IP55                                                                                                         |                       |
|                         | Noises                        | ≤70dB, low noise version ≤60dB                                                                               |                       |
|                         | Operation Temperature Range   | -30~+50℃                                                                                                     |                       |
|                         | Altitude of non-degradation   | 3000m                                                                                                        |                       |
|                         | Communication Interface       | Ethernet/WIFI/4G                                                                                             |                       |
|                         | Parallel Function             | Maximum 9 units                                                                                              |                       |
|                         | Certification Standards       | T34120, T36276, T34131, EN50549, CEI 0-16, NTS V2.1, UNE217001, UNE217002, RfG, NA/EEA-NE7-CH, VDE-AR-N 4110 |                       |
|                         | Other Options                 | Grid-connected cabinet, and off-grid switching cabinet                                                       |                       |
|                         | System Dimensions (W x D x H) | 1100mm*1350mm*2400mm                                                                                         |                       |
|                         | Weight                        | ≤2700kg                                                                                                      | ≤2800kg               |
|                         | Fire Fighting Methods         | Active warning/PACK level immersion/water spray/aerosol                                                      |                       |