Industrial Energy Storage System SmartESS1000 1000kW/2000kWh

Smart ESS 1000 is an All-in-one, Containerized ESS designed for small C&I loads. The system integrates Battery, BMS PCS, HVAC, fire extinguishing system and EMS systems. It can meet the battery storage requirements up to 2026kWh.



Integrated

- Modular Hybrid PCS
- 7.68kWh (1C) Safest LiFePO4 Battery modules
- Intelligent BMS
- Energy Management System and MasterSite Controller
- IP54 outdoor cabinet with fire suppression and HVAC system

Flexible

- Wide Battery DC Voltage Range
- Modular design easy expansion up to 10 units in parallel
- Optimized for both on-grid and off-grid (island mode) applications
- Easy installation and maintenance
- Various applications such as peak shaving, frequency regulation, EV Charging, Solar + Storage, Micro-Grid, self Consumption Optimization

Reliable

- Antiseismic and more than 25 years design life
- Maximum safety utilizing Tier 1 lithium battery cells
- Long lifespan with over 10000 cycles and 15 years design life

Technical Specifications

| System Cabinet | |
|---------------------------------------|--|
| Rated Output Power | 1000 kW |
| Battery Capacity of the ESS | 2026 kWh |
| Battery Configuration | 22S12P |
| Dimensions (WxHxD) | 2440 x 2590 x 12190 mm |
| Weight Including Battery Modules | <40000 Kg |
| Operating Range / Storage Temperature | -30°C to +55°C / -40°C to +60°C |
| Operating Humidity Range | 0 - 100 % |
| Maximum Operating Altitude | 4000m |
| IP Degree | IP54, Outdoor |
| Communication Ports and Protocols | RS485 / CAN / TCP, IP |
| Cooling Method | Industrial Air Conditionning |
| DC Lighting Protection | Туре ІІ |
| Battery Pack | |
| Cell Material | LFP |
| Nominal Capacity | 7,68 kWh |
| Nominal Voltage | 25.6 V |
| Rated Capacity | 300A |
| Maximum Charging/Discharging Current | ≤ 1.0 C |
| Power Conversion System | |
| Rated Output Voltage | 230/400 V |
| Maximum PV Input | 1440 kWp |
| Maximum Current | 1444A |
| Rated Grid Frequency | 50/60 Hz |
| Maximum Efficiency | 99.00% |
| Protections | AC Overcurrent Protection, AC Overvoltage Protection, AC Surge Protection, AC Short Circuit Protection Antiisland Protection, DC Reverse Connection Protection, Straight Surge Protection |
| Compliances | EN 62477 ,EN IEC 61000, G99 |
| Grid Support | L/HVRT, Active and Reactive Power Control |
| Certified | CE/TUV |

Highlights





HIGH FLEXIBILITY

EASY INSTALLATION



