

Commercial Energy Storage System

SmartESS 200

105kW/215kWh

Compact energy storage solution designed for small C&I loads integrating modular hybrid inverters, high efficiency lithium batteries with intelligent BMS, HVAC, fire suppression system and cloud monitoring.



Integrated

- Modular Hybrid PCS
- 14.33kWh (1C) Safest LiFePO4 Battery modules
- Intelligent BMS
- Remote monitoring
- 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

SmartESS105/215 Parameters

System Cabinet

Rated Output Power	105kW
Battery Capacity of the ESS	215kWh
Battery Configuration	15S1P
Dimensions (WxHxD)	1800x2020x1550
Weight Including Battery Modules (kg)	≈2700kg
Operating Range / Storage Temperature	-30°C to +55°C / -40°C to +60°C
Operating Humidity Range	0-95%
Maximum Operating Altitude	3000m
IP Degree	IP54
Communication Ports and Protocols	CAN, Ethernet / CAN, Modbus TCP, IP
Cooling Method	Industrial Air Conditioning
Fire Suppression	Perfluorohexanone
DC Lighting Protection	Type II

Battery Pack

Cell Material	LiFePO4
Nominal Energy	14.33kWh
Nominal Voltage	51.2V
Rated Capacity	280Ah
Maximum Charging/Discharging Current	≤ 1.0 C

Power Conversion System

Rated Output Voltage	230/400V
Maximum output current (A)	167A
Rated Grid Frequency	50/60Hz
Maximum efficiency (Discharge)	98.50%
Maximum PV Input	100kWp
PV Input Strings	2

Protection	AC Overcurrent Protection, AC Overvoltage Protection, AC Surge Protection, AC Short Circuit Protection, Antiisland Protection, DC Reverse Connection Protection, Straight Surge Protection
Grid Support	L/HVRT, Active and Reactive Power Control
Compliances	EN 62477-1, EN IEC 61000, EN 50549-1/2:2019, VDE-AR-N 4105:2018, G99

Highlights



HIGH FLEXIBILITY



EASY INSTALLATION



SMART MONITORING



STRONG LOAD ADAPTABILITY