LITHIUMVALLEY

YOUR SAFE ENERGY

Version:V1.1

15-year Design Lifespan
A+ Grade Lithium Iron Phosphate Cells

Model: LV-IESS- RH16Ca- n (n=6,7...15)



Active Balancing Technology

Indoor installation
Smart Air-Cooled Battery

Supports 6-15 battery packs

Energy Capacity: 96.46–241.15 kWh
Battery Voltage: 268.8–876 V

Features and Advantages

Safety Technology

- A+ grade lithium iron phosphate
- The system is configured with a multi-level fuse protection
- Built-in aerosol fire extinguishing systems at the package levels

Easy to Install and Use

- Highly integrated for ease of transportation installation and deployment
- Modular design with flexible system capacity configuration

More Reliable

- The system is rigorously designed and tested to operate stably under various conditions
- Equipped with protections against overcharge over-discharge and over-temperature to prevent accidents

Energy Management System

- Emergency power supply
- Peak shaving
- Demand mitigation
- Self-consumption
- Micro-grids
- Price arbitrage

System Technical Parameters

Model	LV-IESS- RH16Ca- 15
Battery Data	
Nominal Energy	241.15 kWh
Nominal Voltage	768 V
Battery Model	LV-IESS- RH16Ca- 15
Battery Chemistry	Lithium Iron Phosphate(LiFePO4)
Cycle Life	≥8000 cycles(@25°C, 0.5P/0.5P)
Cell Specification	3.2 V 314 Ah
Battery Pack Energy	16.0768 kWh
String Configuration	1P240S
Number of Strings	1
Operating Voltage	672V - 876V
Rated Charging Power	0.5P
Rated Discharging Power	0.5P
Safety	
Fire Extinguishing System	Aerosol fire extinguishing
General	
Dimension(WxDxH)	2100 x 800 x 1200 mm
Weight	Approximately 2000 kg
IP Rating	IP20
Cooling Method	Smart air cooling
Operating Temperature	-20°C to +50°C
Storage Temperature	-30°C to +60°C
Relative Humidity	15% to 90% (Non-condensing)
Max. Operating Altitude	≤3000m
Communication Interfaces	LAN/CAN/RS485
Compliance	IEC/EN 62619, IEC 61000, UN 38.3, MSDS

* The actual product may have slight differences from some promotional videos or pictures. Please refer to the actual product. Unless otherwise specified, the data on this page are all from our company's laboratory. The data may have errors due to changes in the objective environment.

* The specifications are subject to change without prior notice.

[1]Test Conditions: Charge/discharge at 0.2C, 25℃, 95% depth of discharge (DOD), 70% end-of-life (EOL)

System Technical Parameters (6–10 Battery Packs)

Model	LV-IESS- RH16Ca- 6	LV-IESS- RH16Ca- 7	LV-IESS- RH16Ca- 8	LV-IESS- RH16Ca- 9	LV-IESS- RH16Ca- 10
Battery Data					
Number of battery packs	6	7	8	9	10
Nominal Energy	96.46kWh	112.53kWh	128.61kWh	144.69kWh	160.76kWh
Nominal Voltage	307.2V	358.4V	409.6V	460.8V	512V
Battery Chemistry	Lithium Iron Phosphate(LiFePO4)				
Cycle Life[1]	≥8000 cycles				
Cell Specification	3.2V 314Ah				
Battery Pack Energy	16.076 kWh				
Number of Clusters	1				
Cluster Configuration	1P96S	1P112S	1P128S	1P144S	1P160S
Operating Voltage	268.8V - 350.4V	313.6V - 408.8V	358.4V - 467.2V	403.2V - 525.6V	448V - 584V
Rated Charging Power	0.5P				
Rated Discharging Power	0.5P				
Safety					
Fire Extinguishing System	Aerosol fire extinguishing				
General					
Weight	Approx. 750kg	Approx. 870kg	Approx. 990kg	Approx. 1110kg	Approx. 1230kg
IP Rating	IP20				
Cooling Method	Smart air cooling				
Discharging Temperature	-20°C to +55°C				
Storage Temperature	-20°C to +45°C				
Relative Humidity	15%~90%(Non-condensing)				
Max. Operating Altitude	≤2000m				
Communication Interfaces	LAN/CAN/RS485				
Compliance	IEC/EN 62619, IEC 61000, UN 38.3, MSDS				

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System Technical Parameters (11–14 Battery Packs)

Model	LV-IESS- RH16Ca- 11	LV-IESS- RH16Ca- 12	LV-IESS- RH16Ca- 13	LV-IESS- RH16Ca- 14
Battery Data				
Number of battery packs	11	12	13	14
Nominal Energy	176.84kWh	192.92kWh	208.99kWh	225.07kWh
Nominal Voltage	563.2V	614.4V	665.6V	716.8V
Battery Chemistry	Lithium Iron Phosphate(LiFePO4)			
Cycle Life[1]	≥8000 cycles			
Cell Specification	3.2V 314Ah			
Battery Pack Energy	16.076 kWh			
Number of Clusters	1			
Cluster Configuration	1P176S	1P192S	1P208S	1P224S
Operating Voltage	492.8V - 642.2V	537.6V - 700.8V	582.4V - 759.2V	627.2V - 817.6V
Rated Charging Power	0.5P			
Rated Discharging Power	0.5P			
Safety				
Fire Extinguishing System	Aerosol fire extinguishing			
General				
Weight	Approx. 1350kg	Approx. 1470kg	Approx. 1590kg	Approx. 1710kg
IP Rating	IP20			
Cooling Method	Smart air cooling			
Discharging Temperature	-20°C to +55°C			
Storage Temperature	-20°C to +45°C			
Relative Humidity	15%~90%(Non-condensing)			
Max. Operating Altitude	≤2000m			
Communication Interfaces	LAN/CAN/RS485			
Compliance	IEC/EN 62619, IEC 61000, UN 38.3, MSDS			

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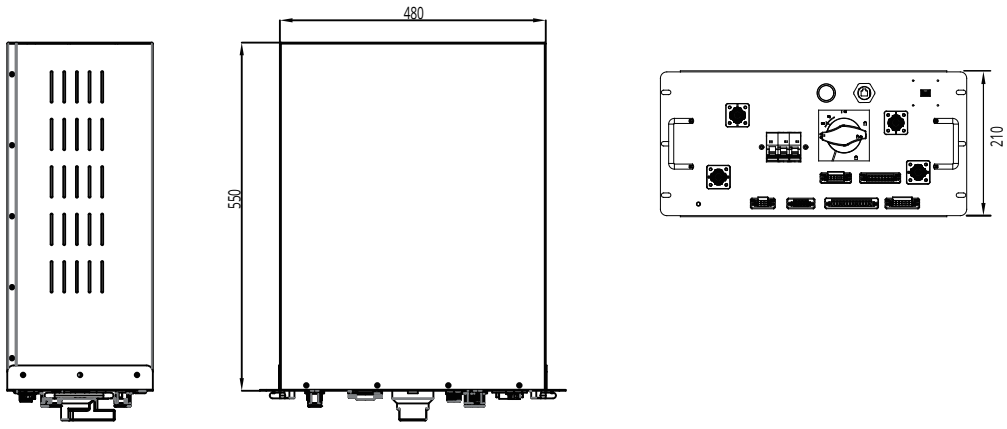
High Voltage Box

Features and Advantages

- Supports dual power supply from AC220V and DC/DC at the battery pack end (grid power prioritized).
- Supports DC24V power supply for battery box fans to meet thermal management requirements of the battery cluster.
- Provides power supply to the Energy Management Unit (EMU) of the energy storage battery, with configurable power output based on the number of EMU modules.

Dimensions(WxDxH mm)

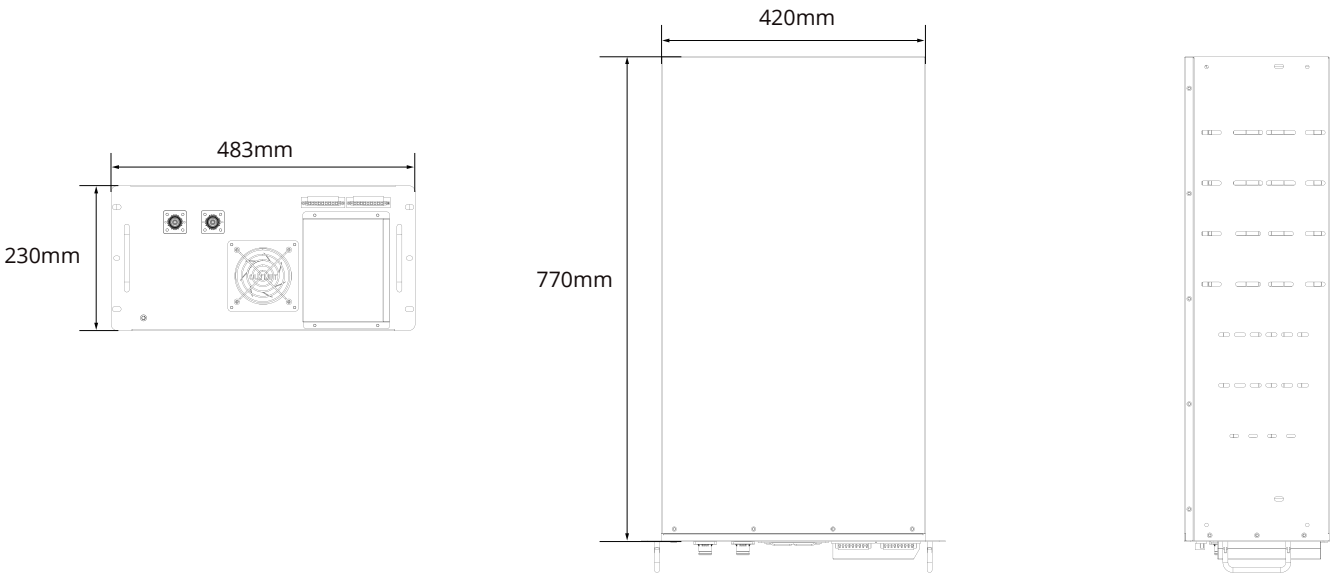


High Voltage Box Technical Parameters

Model	LV-IESS-RH16Ca-HBox
Rated Voltage	DC1000 V
Rated Current	200 A
Insulation	DC1000V, Insulation Resistance > 10MΩ
Dielectric Withstand Voltage	DC3390V, Leakage Current < 1mA, No breakdown or flashover
Operating Temperature	-20 to 65°C
Storage Temperature	-25 to 65°C
Humidity	≤95%(Non-condensing)
Cooling Method	Natural Convection
Altitude	≤5000m, Derating required above 2000m
Dimensions (W×D×H)	550(±2) x 480(±2) x 210(±2) mm
Net Weight	24 ± 2 kg
Communication Methods	CAN / RS485 / Ethernet
Protection Rating	IP20

Battery Pack

Dimensions(WxDxH mm)



Battery Pack Technical Parameters

Model	LV-IESS-RH16Ca-Unit
Nominal voltage	51.2 V
Rated capacity	314 Ah
Battery impedance	≤50mΩ
Shipment voltage	51.2 V to 58.4 V
Charge Cut-off Voltage	58.4 V
Recommended Charging	157 A
Recommendation Discharging Current	157 A
Max. Charge Current	157 A
Max. Discharging Current	157 A
Discharge cut-off voltage	40 V
Operating Temperature Range	Charge 0°C to 55°C Discharge –20 to 55°C
Storage Environment (50% State of Charge)	-20°C ~ 45°C in three months 25±3°C over three months Humidity: 65±20%RH
Dimensions(WxDxH mm)	770 x 420 x 230 mm
Approx. Battery Weight	115 Kg

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