

LPR-CHVA-(230-845)314RN24

24.12kW

- LPR-CHVA-(230-845)314RN24 is a rack-mounted high-voltage battery system for commercial hybrid solar storage, backup power, and scalable energy expansion.

Recommended Applications

- Designed For Commercial Buildings
- Factories, and microgrid projects requiring higher-capacity modular backup
- Peak shaving, and hybrid solar storage

Features

Higher Module Energy
24kWh battery modules reduce system module count while supporting larger commercial storage capacity with a cleaner rack-based configuration.

Scalable Capacity
Flexible 3-11 module configurations cover medium and larger C&I storage projects from 72kWh to 265kWh.

High-Voltage Design
The high-voltage architecture supports efficient energy transfer, lower current stress, and better matching with commercial hybrid inverter systems.

Smart BMS
Integrated battery management monitors voltage, current, temperature, SOC, alarms, and balancing to support stable operation and long-term battery health.

Hybrid Ready
CAN, RS485, and WiFi monitoring support high-voltage hybrid inverter integration for solar storage, grid backup, and mixed energy applications.

Rack Installation
The rack-mounted structure simplifies indoor installation, maintenance access, and capacity expansion for project-based commercial deployment.

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Parameter	LPR-CHVA-230314RN24	LPR-CHVA-307314RN24	LPR-CHVA-384314RN24	LPR-CHVA-461314RN24	LPR-CHVA-538314RN24
Battery Module Quantity	3 modules	4 modules	5 modules	6 modules	7 modules
Cell Chemistry	LiFePO4				
Module Energy	24.12 kWh				
Module Nominal Voltage	76.8 V				
Module Capacity	314 Ah				
Module Dimension (W/D/H)	528 x 1042 x 268 mm				
Module Weight	177 kg				
System Nominal Voltage	230.4 V	307.2 V	384 V	460.8 V	537.6 V
System Operating Voltage	208.8-259.2 V	278.4-345.6 V	348-432 V	417.6-518.4 V	487.2-604.8 V
System Energy	72.35 kWh	96.46 kWh	120.58 kWh	144.69 kWh	168.81 kWh
Usable Energy at 90% DOD	65.11 kWh	86.81 kWh	108.52 kWh	130.22 kWh	151.93 kWh
Max. Power	46.08 kW	61.44 kW	76.8 kW	92.16 kW	107.52 kW
Recommended Charge / Discharge Current	160 A				
Max. Charge / Discharge Current	200 A				
Cooling Method	Fan cooling				
Communication	CAN, RS485, WiFi				
Parallel Capability	Up to 4 sets				
Installation Method	Indoor rack mounting				
IP Rating	IP20				
Working Temperature	Discharge: -20°C to 60°C; Charge: 0°C to 60°C				
Storage Temperature	12 months: ≤25°C; 6 months: ≤35°C; 3 months: ≤45°C				
Operating Humidity	≤85% RH				
Storage Humidity	≤85% RH				
Operating Altitude	<2000 m				
Recommended Depth of Discharge	90% DOD				
Cycle Life	≥8000 cycles				
Warranty	5 years				
Certification	CE, UN38.3, MSDS				
System Dimension (W/D/H)	528 x 1042 x 954 mm	528 x 1042 x 1490 mm	528 x 1042 x 1758 mm	1056 x 1042 x 1222 mm	
System Weight	561 kg	738 kg	915 kg	1092 kg	1269 kg
BMS Functions	Voltage, current, temperature, SOC, alarm, balancing and protection management				
Protection Functions	Overcharge, over-discharge, overcurrent, high temperature and low temperature protection				
Display and Monitoring	Touch screen, status indicators, SOC display and WiFi monitoring				
Hybrid Inverter Compatibility	Compatible with high-voltage hybrid inverter systems via CAN / RS485 communication				
Application	Commercial backup power, hybrid solar storage, peak shaving and microgrid energy storage				

Parameter	LPR-CHVA-614314RN24	LPR-CHVA-691314RN24	LPR-CHVA-768314RN24	LPR-CHVA-845314RN24
Battery Module Quantity	8 modules	9 modules	10 modules	11 modules
Cell Chemistry	LiFePO4			
Module Energy	24.12 kWh			
Module Nominal Voltage	76.8 V			
Module Capacity	314 Ah			
Module Dimension (W/D/H)	528 x 1042 x 268 mm			
Module Weight	177 kg			
System Nominal Voltage	614.4 V	691.2 V	768 V	844.8 V
System Operating Voltage	556.8-691.2 V	626.4-777.6 V	696-864 V	765.6-950.4 V
System Energy	192.92 kWh	217.04 kWh	241.15 kWh	265.27 kWh
Usable Energy at 90% DOD	173.63 kWh	195.33 kWh	217.04 kWh	238.74 kWh
Max. Power	122.88 kW	138.24 kW	153.6 kW	168.96 kW
Recommended Charge / Discharge Current	160 A			
Max. Charge / Discharge Current	200 A			
Cooling Method	Fan cooling			
Communication	CAN, RS485, WiFi			
Parallel Capability	Up to 4 sets			
Installation Method	Indoor rack mounting			
IP Rating	IP20			
Working Temperature	Discharge: -20°C to 60°C; Charge: 0°C to 60°C			
Storage Temperature	12 months: ≤25°C; 6 months: ≤35°C; 3 months: ≤45°C			
Operating Humidity	≤85% RH			
Storage Humidity	≤85% RH			
Operating Altitude	<2000 m			
Recommended Depth of Discharge	90% DOD			
Cycle Life	≥8000 cycles			
Warranty	5 years			
Certification	CE, UN38.3, MSDS			
System Dimension (W/D/H)	1056 x 1042 x 1490 mm		1584 x 1042 x 1222 mm	
System Weight	1446 kg	1623 kg	1800 kg	1977 kg
BMS Functions	Voltage, current, temperature, SOC, alarm, balancing and protection management			
Protection Functions	Overcharge, over-discharge, overcurrent, high temperature and low temperature protection			
Display and Monitoring	Touch screen, status indicators, SOC display and WiFi monitoring			
Hybrid Inverter Compatibility	Compatible with high-voltage hybrid inverter systems via CAN / RS485 communication			
Application	Commercial backup power, hybrid solar storage, peak shaving and microgrid energy storage			

- Specifications are subject to change without prior notice.
- Product images are for reference only. Actual product appearance may vary depending on configuration.
- Battery compatibility should be confirmed according to BMS protocol and system configuration.
- PV string design must follow the maximum PV open-circuit voltage, MPPT voltage range and maximum PV input current limits.
- Rack/tilt system design should use matching inverter models, shared battery bank and proper AC/DC protection devices.