

LPR-CHVL-(154-768)314RH48

48.2kW-241.2kW

LPR-CHVL-(154-768)314RH48 is a rack-mounted liquid-cooled high-voltage battery cluster series for equipment rooms, containers, and integrated C&I storage systems.

Recommended Applications

- Containerized ESS
- Designed For Rack-Based Battery Rooms
- Flexible system integrator configurations

Features

Liquid Cooling

Liquid cooling helps control module temperature more evenly, supporting stable high-voltage operation and better long-term performance in demanding commercial projects.

48S Module

Each system uses 153.6V314Ah liquid-cooled modules, giving customers a clear 48kWh building block for capacity planning and expansion.

High Voltage

The 153.6V to 768V platform supports C&I PCS integration with lower current stress and better suitability for larger storage systems.

Modular Expansion

One to five modules can be configured in series, allowing project capacity to scale from 48kWh to 241 kWh without changing the core module platform.

Smart Monitoring

RS485/CAN communication and BMS monitoring cover system voltage, cell voltage, cell temperature, current, and SOC for easier commissioning and operation.

Long Lifecycle

LFP chemistry, liquid cooling, 90% usable energy, 6000-cycle design, and 10-year design life help reduce lifecycle cost for commercial users.

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Parameter	LPR-CHVL-154314RH48	LPR-CHVL-307314RH48	LPR-CHVL-461314RH48
Nominal Energy	48.2 kWh	96.5 kWh	144.7 kWh
Module Quantity	1 module	2 modules	3 modules
Nominal Voltage	153.6V	307.2V	460.8V
Voltage Range	136.8-170.4V	273.6-340.8V	410.4-511.2V
Cell Specification	3.2V314Ah LFP cell		
Module Configuration	48S1P		
Battery Module	153.6V314Ah / 48.2304kWh liquid-cooled module		
Usable Energy	43.4 kWh	86.8 kWh	130.2 kWh
Depth of Discharge	90% DoD		
Charge/Discharge Rate	0.5C		
Charge/Discharge Current	157A		
Power Consumption	<=10W per module		
Cooling Method	Liquid Cooling		
Communication	RS485 / CAN		
Monitoring	System voltage, cell voltage, cell temperature, system current, SOC		
Operating Temperature	0°C to +40°C		
Storage Temperature	-20°C to +70°C		
Humidity	15-80%		
Cycle Life	>=6000 cycles @25°C		
Design Life	10 years+		
Certification	CE / UN38.3 / MSDS		
Module Dimensions	793*1148*240mm		
Module Weight	340kg		

Parameter	LPR-CHVL-614314RH48	LPR-CHVL-768314RH48
Nominal Energy	192.9 kWh	241.2 kWh
Module Quantity	4 modules	5 modules
Nominal Voltage	614.4V	768V
Voltage Range	547.2-681.6V	684-852V
Cell Specification	3.2V314Ah LFP cell	
Module Configuration	48S1P	
Battery Module	153.6V314Ah / 48.2304kWh liquid-cooled module	
Usable Energy	173.6 kWh	217.0 kWh
Depth of Discharge	90% DoD	
Charge/Discharge Rate	0.5C	
Charge/Discharge Current	157A	
Power Consumption	<=10W per module	
Cooling Method	Liquid Cooling	
Communication	RS485 / CAN	
Monitoring	System voltage, cell voltage, cell temperature, system current, SOC	
Operating Temperature	0°C to +40°C	
Storage Temperature	-20°C to +70°C	
Humidity	15-80%	
Cycle Life	>=6000 cycles @25°C	
Design Life	10 years+	
Certification	CE / UN38.3 / MSDS	
Module Dimensions	793*1148*240mm	
Module Weight	340kg	

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.
Parallel system design should use matching inverter models, shared battery bank and proper AC/DC protection devices.