Xtreme HV 1.0

Modular HV Battery System

High Efficiency and Scalability: The high voltage system offers a nominal voltage of 204.8~614.4V, reducing transmission losses, and its modular design provides 2 to 6 module stacking solutions, ensuring high operational reliability with dynamic current equalizing techniques.
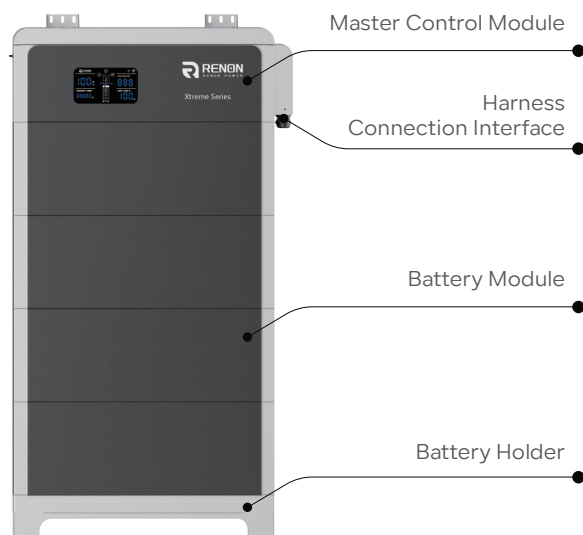
Advanced Smart Management: Wireless design with Wi-Fi connectivity, and the intelligent energy management system (EMS) allow for easy activation, unified management, and real-time monitoring and fault pre-warning.

Superior Safety and Durability: With a built-in battery optimizer, up to 8000 cycle life, IP55 protection rating, and comprehensive certifications, the system ensures long-term stable operation and global safety compliance.
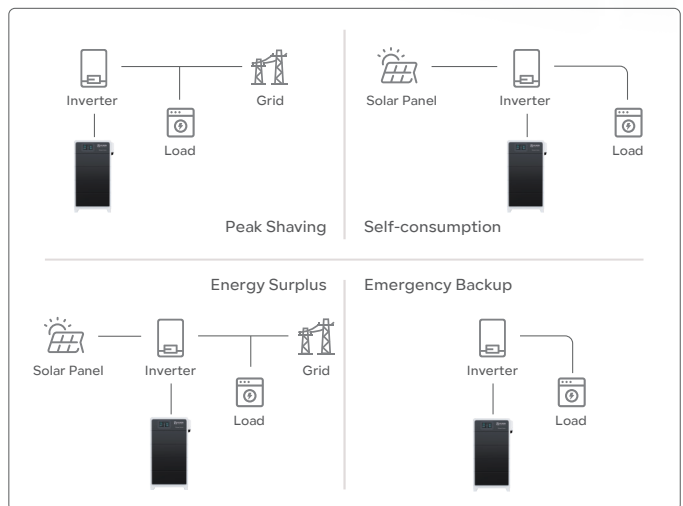
User-Friendly Integrated Solutions: The integration with Renon Flex Inverter eliminates the need for additional third-party inverters, and the 10-year warranty enhances user confidence and satisfaction.

Product Details

Master Control Module

Harness Connection Interface

Battery Module

Battery Holder

System Layout

Inverter — Grid
Load
Peak Shaving

Solar Panel — Inverter
Load
Self-consumption

Energy Surplus

Solar Panel — Inverter — Grid
Load
Energy Surplus

Emergency Backup

Inverter
Load
Emergency Backup

Application Scenario

Battery Energy Storage

Product Model	R-XH009021	R-XH014031	R-XH019041	R-XH024051	R-XH028061
Product Module QTY	2	3	4	5	6
Battery Chemistry			LiFePO4		
Battery Combination	1P60S	1P90S	1P120S	1P120S	1P150S
Cell Capacity (Ah)			50		
Nominal Energy (kWh)	9.6	14.4	19.2	24	28.8
Nominal Power (kW)	9.216	13.824	18.432	230.4	27.648
Nominal Voltage (V)	192	288	384	480	576
Max. Charging Voltage (A)	219	328.2	438	547.5	657
Recommend Discharge Cut-off Voltage	175.8	263.7	351.6	439.5	527.4
Dimensions - W*D (mm/in)	775*270/30.5*10.6	775*270/30.5*10.6	775*270/30.5*10.6	775*270/30.5*10.6	775*270/30.5*10.6
Dimensions - H (mm/in)	854/33.6	1112/43.8	1370/53.9	1628/64	1886/74.1
Total Weight - (kg/lb)	152/335	212/467	272/599	332/731	392/863

General Parameters

Scalability	Max. 5 cluster in parallel
Storage Conditions	−4°F ~ 131°F(32°F ~ 95°F Recommended) Up to 90%RH, non-condensing Initial SoC: 50%
Operating Temperature	Charge: 32°F ~ 122°F Discharge: −4°F ~ 122°F
Cooling	Natural Cooling
Max. Altitude	4000m / 13123ft
Cycle Life	8000 Cycles
Communication	RS485, CAN, WiFi

System Characteristic

Master Control Model	R-MC050-XTH01
Battery Model	R-EM102050-XTH01
Battery Compliances	IEC62619, MSDS, UN38.3 UL 1973, UL 9540, UL 9540A(Coming soon)
Installation Method	Stack Mounting
Installation Scene	Indoor or Outdoor
IP Rating	IP55
Warranty [1]	10 Years

[1] Please refer to the warranty letter for details

■ Packaging & Shipping Details

Master Control & Base
30.51*10.63*10.87 in
~70.55 lb

1Set
34.02*13.15*14.96 in
~72 lb

Battery Module
30.51*10.63*10.16 in
~132.28 lb

1Set
35.20*13.15*12.80 in
~134.48 lb

1+4Set/Box
43.31*37.40*32.28 in
~740.75 lb

20C
28Set
~20,720 lb

40C
74Set
~54,760 lb

RENON - Make Renewable Energy Within Reach