

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.

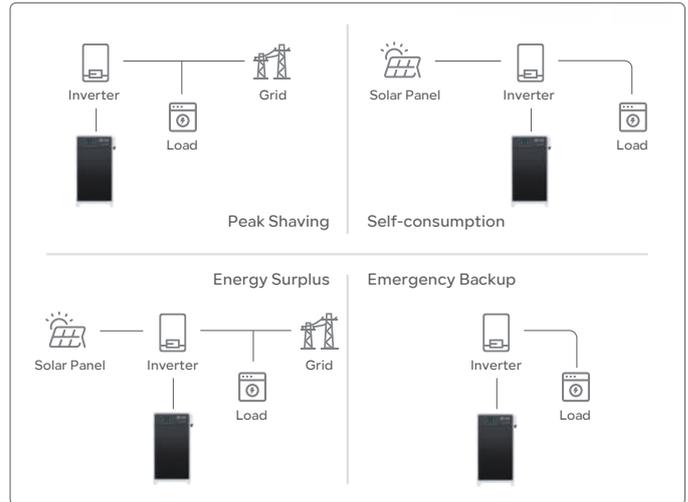
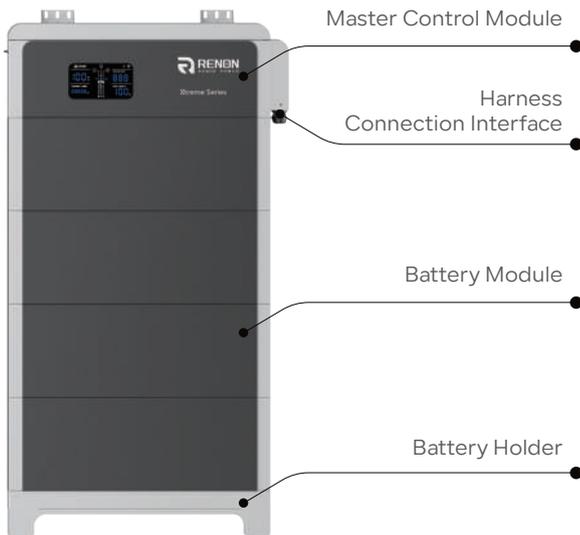
Superior Safety and Durability: With a built-in battery optimizer, up to 8000 cycle life, IP55 protection rating, and comprehensive certifications, the system ensures long-term stable operation and global safety compliance.

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.



System Layout

Product Details



Application Scenario



Battery Energy Storage	2 Modules	3 Modules	4 Modules	5 Modules	6 Modules
Battery Chemistry	LiFePO4				
Battery Combination	1P32S				
Cell Capacity (Ah)	50				
Nominal Energy (kWh)	10.24	15.36	20.48	25.6	30.72
Nominal Power (kW)	9.83	14.75	19.66	24.58	29.5
Nominal Voltage (V)	204.8	307.2	409.6	512	614.4
Max. Operating Current (A)	48				
Max. Current (A)@2S	60				
Operating Voltage Range (V)	172.8~233.6	259.2~350.4	345.6 ~ 467.2	432 ~ 584	518 ~ 700.8
Dimensions (W*D*H)	775*270*854mm 30.5*10.6*33.6in	775*270*1112mm 30.5*10.6*43.8in	775*270*1370mm 30.5*10.6*53.9in	775*270*1628mm 30.5*10.6*64.1in	775*270*1886mm 30.5*10.6*74.3in
Total Weight	152kg 335lb	212kg 467lb	272kg 600lb	332kg 731lb	392kg 862lb

General Parameters	
Scalability	Max. 3 cluster in parallel
Storage Conditions	-20°C ~ 55°C(0°C ~ 35°C Recommended) Up to 90%RH, non-condensing Initial SoC: 50%
Operating Temperature	Charge: 0°C ~ 50°C Discharge: -20°C ~ 50°C
Cooling	Natural Cooling
Max. Altitude	2000m / 6561ft
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 CEI 0-21, EN62477
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

