

High Voltage Lithium Ion Battery Energy Storage System

POWMr

Multiple modules connected in series



Enhanced Safety and Extended Lifespan

- Utilizes LiFePO₄ battery for enhanced safety and extended lifespan.
- Incorporates a three-layer architecture with BMU+RBMS+SBMS for comprehensive protection.
- Features air conditioning in cabinet, fans, and fire extinguishing device in battery module.

Convenient Installation and Maintenance

- Standard 19-inch rack design facilitates easy installation and maintenance.
- User-friendly touch screen interface allows selection of various communication protocols.
- Supports USB upgrade software for added convenience.

Flexible Configuration Options

- Adopts a standard modular design with 5.12kWh per battery module.
- Offers flexibility with configurations ranging from 4 to 14 battery modules in series.
- Scalable capacity and power with support for up to 8 clusters in parallel.

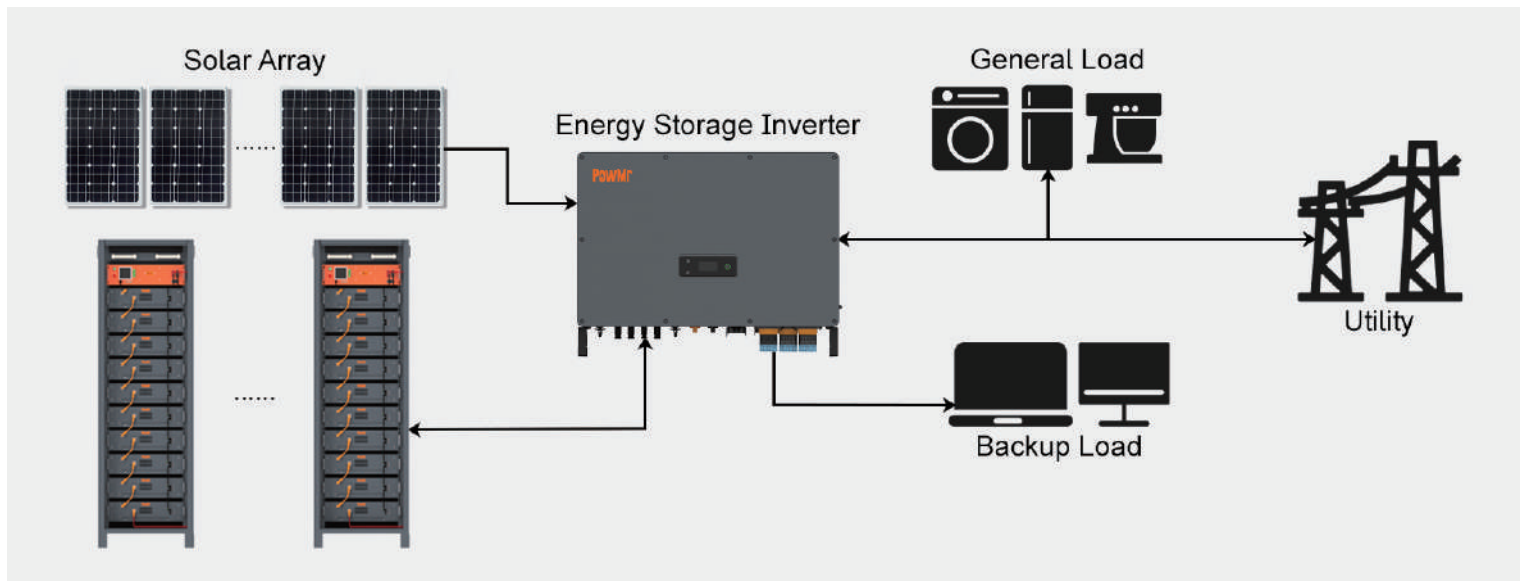
Technical Specification

Battery Model	POW-HVC-20	POW-HVC-30	POW-HVC-50	POW-HVC-100
Nominal Voltage	204.8V	307.2V	512V	1024V
Rated Capacity	100Ah			
Battery Module Qty in Series	4	6	10	20
Nominal Energy	20.48kWh	30.72kWh	51.2kWh	102.4kWh
Charging Voltage	220.8~230.4V	331.2~345.6V	552~576V	1104~1152V
Discharge Cut-off Voltage	172.8V	259.2V	432V	608.4V
Float Charging Voltage	217.6~220.8V	326.4~ 331.2V	544~552V	1088~ 1104V
Max. Charging Current	100A			
Recommended Charging Current	20A			
Max. Discharging Current	100A			
Recommended Discharging Current	20A			
Status Indicator	RUN-Green Light; Alarm-Red Light			
Operating Temperature	Charge: 0~55°C ; Discharge: -20~60°C			
Storage Temperature	0°C~45°C			
Communication Interface	CAN/RS485			
Cycle Life	≥4000 cycles at 0.5C/0.5C, 25°C			
IP Rating	IP20			
Certification	IEC62619,UN38.3,MSDS			
Warranty	5 years			



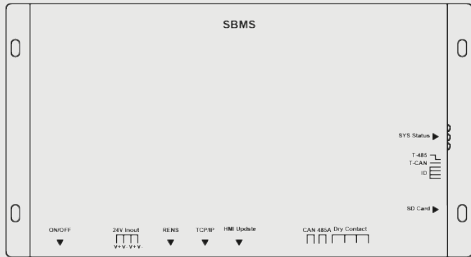
General Parameter of System Components

RBMS	
Dimension(W/D/H)	482x500x182mm
Weight Approx.	22kg
LiFePO4 Battery Module-51.2V100Ah	
Dimension(W/D/H)	442x560x134.5mm
Weight Approx.	43kg
SBMS	
Dimension(W/D/H)	272x160x62mm

High-voltage Energy Storage System



System Components

Item	Parameters	Reference Picture
RBMS		
Operating Voltage Range(V)	120~175	
Nominal Charge/Discharge Current(A)	100/100	
Max. Charge/Discharge Current(A)	125/125	
AC Input Rating	85~264Vac 1A max.	
Operating Temperature Range(°C)	-20~60	
Ingress Protection	IP20	
Weight Approx.(kg)	22	
LiFePO4 Battery Module-51.2V 100Ah		
Battery Type	LiFePO4	
Nominal Voltage(V)	51.2	
Rated Capacity(Ah)	100	
Rated Energy(kWh)	5.12	
Nominal Charge/Discharge Current(A)	100	
Peak Discharge Current(A) @2s	150	
Charge Temperature	0~55°C	
Storage Temperature	-20~55°C	
Ingress Protection	IP20	
Weight Approx.	43	
SBMS		
Communication Interface with RBMS	CAN/RS485	
Communication Interface with PCS/UPS/Inverter	CAN/RS485	
Support IAP upgrade	YES	
Support HMI Display & Parameters Setting	YES	
Dry Contact Output	YES	
Dry Contact Input	YES	
Qty of RBMS in Parallel	4	
Powered By	24VDC(18~28V)	
Power Consumption	15W MAX,4.8W Normal	

System Operation Topology

