



Data center Lithium Battery

SHVP80A01



High safety

LFP battery cells, three-level BMS architecture, and certified by authoritative bodies.



Long life

Long calendar life design, lower TCO.

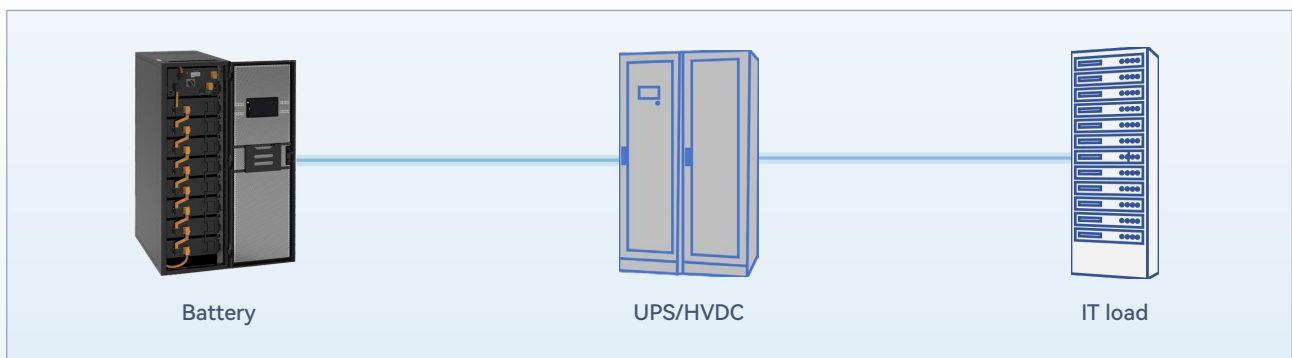


High reliability

Independent charging and discharging circuit, AC & DC dual power supply, ensuring constant connectivity.

Highly resilient data center energy

High-rate lithium batteries are highly compatible with UPS and HVDC equipment.



- High-voltage box with functions such as terminal voltage collection, current collection, control, and protection.



- The battery cell type is lithium iron phosphate, and it comes standard with L1 module-level fire protection.
- Integrated BMU with conventional parameter monitoring and alarm functions such as voltage and temperature, as well as battery balancing management.

Tips

Data centers lithium battery solution

Shoto Data center Lithium Battery Solution. It uses highly safe and reliable lithium iron phosphate battery cells, which have the advantages of integration, intelligence, energy saving and environmental protection. It adopts centralised monitoring, convenient maintenance, unattended operation, standardised cabinet installation and other methods.

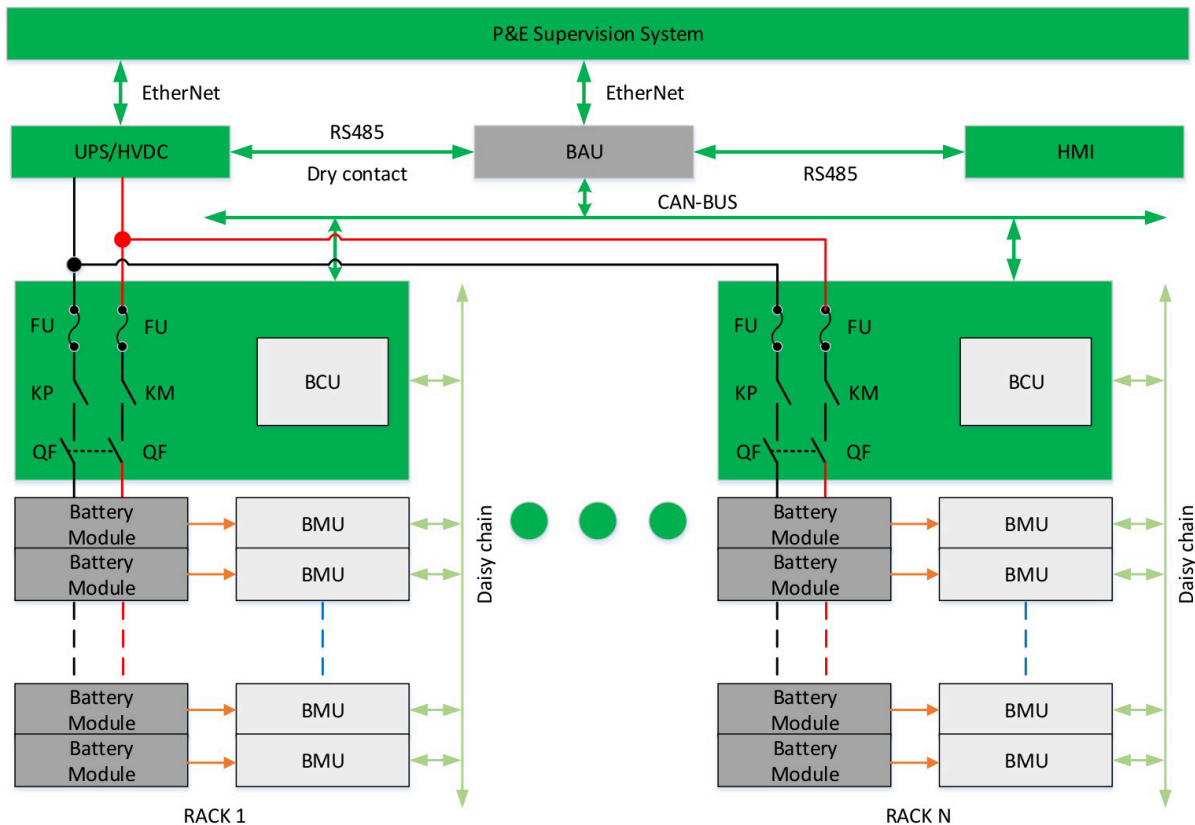


Figure 1 System topology diagram

System features:

- The BMS adopts a three-level management architecture, supporting real-time data collection, status monitoring, and control protection;
- The system has a comprehensive software protection and hardware protection function design and has passed UL certification, ensuring high safety and reliability.
- It has good equipment compatibility, excellent EMC interference resistance, and provides a rich communication interface.

Tips

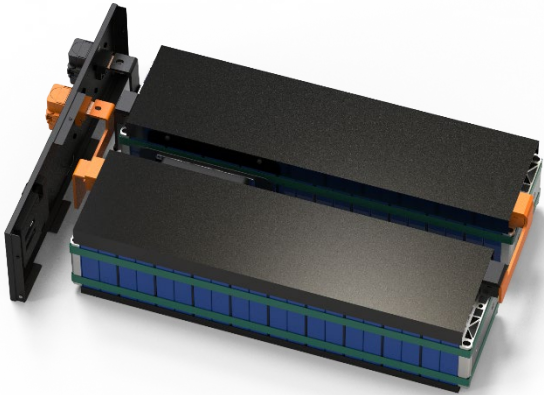
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Item	Parameter
Electrochemical system	LFP
Rated voltage (Vdc)	512
Rated capacity (Ah)	80
Rated energy (kWh)	40.96
Number of battery modules	8
Number of high-voltage boxes	1
Voltage range (Vdc)	432~568
Maximum operating temperature	Charge 0°C to 40°C
	Discharge -20°C to 40°C
Recommended ambient temperature	15°C~35°C
Heat dissipation method	Natural cooling
Charging current	≤0.2C, 0°C < battery temperature < 10°C
	≤1C, 10°C ≤ battery temperature < 40°C
	≤0.5C, 40°C ≤ battery temperature < 65°C
	≤0.2C, 65°C ≤ battery temperature < 70°C
Maximum discharge power	260kW
Battery module type	64V80Ah
Dimensions	600×1000×2000mm
Weight (±3%)	673kg
Parallel number	Supports up to 16 cabinets in parallel
Storage temperature	-20~45°C
Altitude	0~4000 m, above 2500 m, use 3%/500 m derating
Humidity	5%~95%RH
Protection rating	IP20
Protective function	Overvoltage, overtemperature, undervoltage, undertemperature, etc.
Communication interface	RS485, CAN, dry contact, Ethernet port
Communication protocol	Modbus TCP/RTU, CAN2.0B
Compatible device types	UPS、HVDC
Calendar life	10 years, 25±5°C
Firefighting	Perfluorohexane (standard), aerosol (optional)
Certification Information	CE, IEC62619, Rohs, UL9540A, UN38.3, UL1973

Tips Data centers lithium battery solution

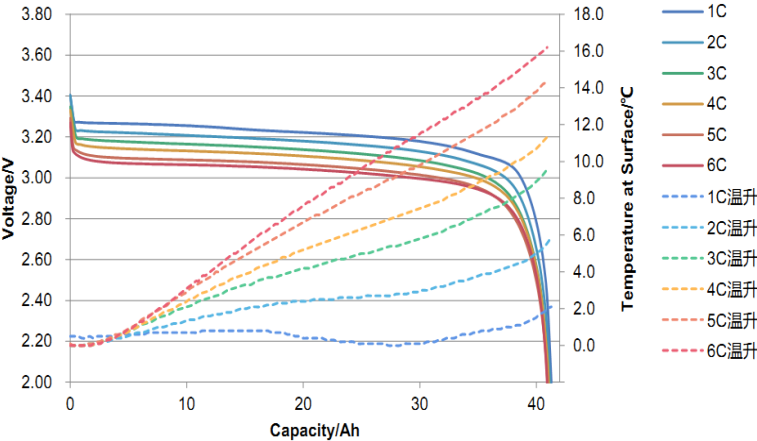
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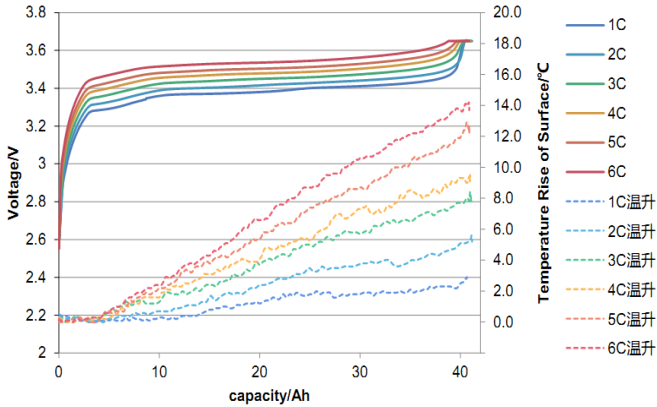
Item	Detail	
Model	SHVP064080M02	
Output power	30min	10.2kW
	15min	20.3kW
	10min	27kW
	5min	32.5kW
Applicable scenario	≥5min backup power supply	

Battery charge-discharge curve

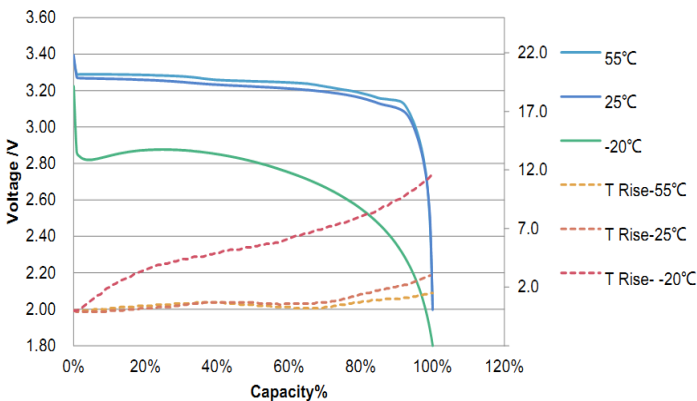
Battery cell discharge characteristic curve



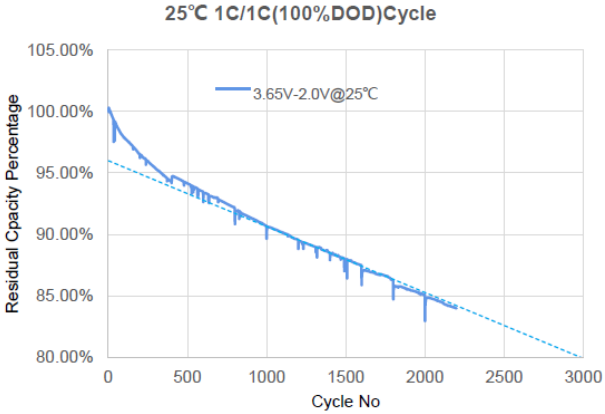
Battery cell charging characteristic curve



Discharge curves at different temperatures



Cycle performance curve



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