



High-pressure liquid cooling energy storage system

Sunplus's liquid-cooled battery energy storage system (BESS) adopts the world's leading clean technology to improve power quality, energy efficiency and environmental protection performance. BESS systems can be installed in a variety of electrical systems to improve operational performance and reliability. It provides a cost-effective way to store excess energy generated by renewable energy sources such as wind and solar farms. BESS can provide backup power during power outages or extreme weather events, reducing the need for expensive distribution upgrades or emergency generators. Not only does it enable smooth integration of renewable energy, but it also helps balance power supply and demand.

Safe and reliable



- Advanced battery technology
- Factory pre-installation and debugging, shortening construction time and reducing construction costs
- Using liquid cooling to reduce system energy consumption by 20% and extend battery cycle life

Safe and reliable Excellent quality assurance



- Quality assurance and control is involved at all stages to ensure our products are of the highest quality and are safe and reliable

Intelligent BMS



- Integrated intelligent battery management system, optional cloud EMS
- Rapid status monitoring and fault recording to achieve early warning and fault location

Comprehensive service



- Global 10 year warranty
- One-stop shop with local support

Technical Parameters	SPEC-3727KWH	SPEC-4179KWH
Battery Type (V)	LFP(LiFeP04)	LFP(LiFeP04)
Battery Capacity(AH)	280	314
Battery pack configuration	1P52S	1P52S
Battery cluster configuration	1P416S(8PACK)	1P416S(8PACK)
Nominal voltage	1331.2V	1331.2V
voltage range	1123.2V~1518.4V (battery core voltage:2.7V~3.65V)	1123.2V~1518.4V (battery core voltage:2.7V~3.65V)
Number of clusters	10	10
Charge and discharge rate	0.5P/1P*	0.5P/1P*
Rated capacity	3727.36kWh	4179.96kWh
Short circuit current	45KA	45KA
Communication method	Ethernet/RS485/CAN	Ethernet/RS485/CAN
Communication protocol	Modbus TCP / Modbus RTU / CAN 2.0	Modbus TCP / Modbus RTU / CAN 2.0
Auxiliary power supply	AC400V/50Hz	AC400V/50Hz
Backup power	Online(30min, adjustable)	Online(30min, adjustable)
Working temperature	-20°C to 55°C(-4°to 131°F)	-20°C to 55°C(-4°to 131°F)
Working altitude	<2000m (2000m~4000m, Reduce power operation)	<2000m (2000m~4000m, Reduce power operation)
Thermal management	Liquid cooling+air cooling	Liquid cooling+air cooling
Dimension W*D*H (mm)	6058*2700*3100mm	6058*2700*3100mm
Weight	36 ton	37 ton
Protection level	IP55	IP55
Color	RAL9010	RAL9010
Earthquake load intensity	Zone 4	Zone 4
Noise Level	≤75 dB @1m(3.28ft)	≤75 dB @1m(3.28ft)
Fire protection system	fm200	fm200
Emergency braking on site	include	include
Remote emergency braking	include	include
Fire-smoke detection	Cluster+Container	Cluster+Container
Unbalanced Load Capacity	100%	100%
Wiring	3L+N+PE	3L+N+PE
General Data		
Protection level	IP54	IP54
Operation Temperature	Charging:0°C~55°C Discharging:-10°C~50°C	Charging:0°C~55°C Discharging:-10°C~50°C
Operation Humidity	0~95%	0~95%
Noise Level	≤75dB	≤75dB
Operating Altitude	≤3000m	≤3000m
Shutdown Self-consumption (W)	<10%	<10%
Cooling System	Air Conditioner/Fan	Air Conditioner/Fan
Installation Environment	Outdoor	Outdoor
Installation Method	Landing	Landing
Communication	RS485 / CAN /4G / LAN (Optional)	RS485 / CAN /4G / LAN (Optional)
Humidity range	5%~85%RH (No condensation)	5%~85%RH (No condensation)
Warranty	5 Years (10 Years Optional)	5 Years (10 Years Optional)
Certification	UN38.3,IEC62619,IEC61000,IEC62477	UN38.3,IEC62619,IEC61000,IEC62477