



SolBank

Energy Storage System

S-2967-2h | S-2967-4h

Canadian Solar SolBank is a modular, flexible, and cost-effective MWh-scale battery energy storage system. Multiple SolBanks could be connected in parallel. This product is designed to meet energy storage needs for today and for the future.

KEY FEATURES



Cost-effective and long service life



280Ah LFP cell leads to high energy density



Active balancing BMS on pack and rack level, releases more energy and extends the life of the system



Liquid cooling technology with cell temperatures being controlled within the optimal operating range



Battery pack IP65 seal grade, avoid dust, moisture, and water condensation



Multi-stage thermal spread technology, effectively prevents battery heat spread and improves safety



Multi-level fire detection, monitor early thermal runaway of cells



All internal components including battery packs assembled in factory, reducing on-site installation costs

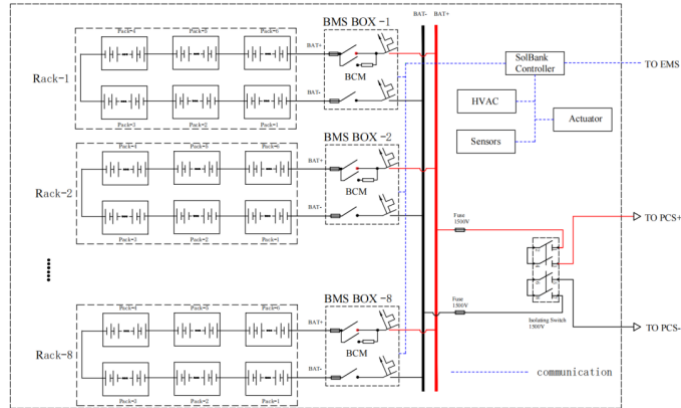
PRODUCT CERTIFICATES*

UL1973, UL9540, UL9540A, UN38.3 / UN3536

*The specific certificates applicable to each market, and not all certifications listed herein will simultaneously apply to the products you order or use. Please contact your local Canadian Solar sales representative to confirm the specific certificates applicable in the regions in which the products will be used.

CSI Solar Co., Ltd. is committed to providing high quality solar photovoltaic modules, solar energy and battery storage solutions to customers. The company was recognized as the No. 1 module supplier for quality and performance/price ratio in the IHS Module Customer Insight Survey. Over the past 20 years, it has successfully delivered over 67 GW of premium-quality solar modules across the world.

CIRCUIT DIAGRAM



SYSTEM PARAMETER

	S1K51K3A01 (CSI-SolBank-S-2967-2h-US)	S1K5650A01 (CSI-SolBank-S-2967-4h-US)
Battery Chemistry	Lithium Iron Phosphate (LFP)	
Pack Configuration	1P69S (69 Cells)	
Rack Configuration	1P414S (6 Packs)	
System Configuration	8P414S (8 Racks)	
DC Voltage (Nominal)	1324.8 V	
DC Voltage Range ¹	1159.2 V ~ 1490.4 V	
Rated DC Power ²	1375 kW	700 kW
Usable Energy Capacity (FAT) ³	2750 kWh	2800 kWh
Max. Short Circuit Current	75 kA	70 kA
Charging/Discharging Mode	0.5 P / 0.5 P	0.25 P / 0.25 P
Duration @Rated Power	2 hrs	4 hrs
DC Round Trip Efficiency (RTE) ⁴	≥ 92%	≥ 94%
Aux Load (Standby/Peak)	1.25 kVA / 30 kVA	1.25 kVA / 20 kVA
Auxiliary Power Interface	AC480 V / 60 Hz, 3P5W	
Thermal Management System	Liquid cooling/heating for battery system, air cooling for electrical components and humidity control	
Control Backup	2-hrs UPS for control system including BMS, installed in the container	
Operating Temperature (Ambient)	-30 °C to 55 °C	
Relative Humidity	≤95% (non-condensing)	
Communication Interface	Ethernet / RS485 / CAN	
Communication Protocol	Modbus TCP / Modbus RTU / CAN 2.0	
Certifications	UL1973, UL9540, UL9540A, UN38.3 / UN3536	
Design Standards/Codes	NFPA69, NFPA70, NFPA855,, IEC62619	
Enclosure	20ft. high-cube container	
Dimensions (L*W*H)	6058*2438*2896 mm (238.50*95.98*114.02 in)	
Weight (Battery Included)	29,800 kg (65,700 lbs)	
Altitude	< 2000 m (derating between 2000 m ~ 4000 m)	
Enclosure Ingress Rating	IP55 / NEMA 3R	
Painting/Coating	RAL9003	
Seismic Parameter	Zone 4	
Noise @1m distance	≤ 75 dB	
Fire Detection and Alarm	Heat and smoke detection, alarm panel, bell and strobe with up to 24 hours UPS backup	
Explosion Prevention	Gas detection with active ventilation	
Fire Suppression	Aerosol-based fire suppression system option available	
Emergency Stop/Shut-off	Local and remote	

1. Unit is rated at 1159.2V~1490.4V for optimized product performance, maximum voltage range value for battery system is 1055.7V~1490.4V

2. The rated operating power of a single unit subject to a maximum of 3 units connected in parallel

3. Usable Energy Capacity is measured at FAT, Contact CSI for an estimate of Usable Energy Capacity at COD

4. RTE is measured with rated DC Power for full cycle at BOL, refer to the warranty document for complete procedure

* The technical parameters contained in this technical data document may deviate slightly, and Canadian Solar does not guarantee that they are completely accurate. Due to continuous innovation, research and development and product improvement, Canadian Solar reserves the right to adjust the information in this technical parameter document at any time without prior notice. The customer should obtain the latest version of the technical parameter document when signing the contract and make it an integral part of the binding contract signed by both parties.

PARTNER SECTION



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