LITHIUMVALLEY

YOUR SAFE ENERGY

Version:V1.2

15-year Design Lifespan
A+ Grade Lithium Iron Phosphate Cells

SC100A50P-06W **100kWh-50kW**
SC114A60P-06W **114kWh-60kW**

Smart Air-Cooled Battery All-in-One C&I BESS

Integrated Solar-Storage-Diesel Hybrid BESS
Seamless On-grid/Off-grid Switching



Features and Advantages

Safety Technology

- A+ grade lithium iron phosphate
- The system is configured with a multi-level fuse protection
- Built-in aerosol fire extinguishing systems at the package and rack levels

Easy to Install and Use

- Highly integrated for ease of transportation installation and deployment
- Modular design with flexible system capacity configuration

Flexible and Expandable

- 6 units in parallel, system capacity 300 kW/688 kWh
- Supports up to 10 units in parallel, system capacity 500 kW/1146 kWh, >6 pcs recommend Solis power distribution cabinet

Energy Management System

- Emergency power supply
- Peak shaving
- Demand mitigation
- Self-consumption
- Micro-grids
- Price arbitrage

System Technical Parameters

Model	SC100A50P-06W	SC114A60P-06W
Battery Data		
Nominal Energy	100.3kWh	114.6kWh
Nominal Voltage	358.4V	409.6V
Battery Model	LV-IESS-RH14.336Aa-7	LV-IESS-RH14.336Aa-8
Battery Chemistry	Lithium Iron Phosphate(LiFePO4)	
Cycle Life	≥8000 cycles(@25°C, 0.5P/0.5P)	
Cell Specification	3.2V 280Ah	
Battery Pack Energy	14.336kWh	
String Configuration	1P112S	1P128S
Number of Strings	1	
Operating Voltage	313.6V - 408.8V	358.4V - 467.2V
Rated Charging Power	0.5P	
Rated Discharging Power	0.5P	
Safety		
Fire Extinguishing System	Aerosol fire extinguishing	
Inverter Data		
Rated Power	50kW	60kW
Please refer to the inverter section for more details.		
General		
Dimension(WxDxH)	1050 x 1180 x 2250mm	
Weight	Approximately 1380kg	Approximately 1500kg
IP Rating	IP55	
Cooling Method	Smart air cooling	
Operating Temperature	-20°C - +50°C	
Storage Temperature	-20°C - +45°C	
Relative Humidity	15% - 90%(Non-condensing)	
Max. Operating Altitude	≤3000m	
Communication Interfaces	LAN/CAN/RS485	
Compliance	IEC 62619, IEC/EN 61000, UN 38.3, MSDS	

* The actual product may have slight differences from some promotional videos or pictures. Please refer to the actual product. Unless otherwise specified, the data on this page are all from our company's laboratory. The data may have errors due to changes in the objective environment.
* The specifications are subject to change without prior notice.

Hybrid Inverter

Three Phase | High Voltage

- Rated Power:50/60kW



Inverter Features

- 4 Integrated MPPTs with string current capacity of up to 20A.
- Supports peak shaving control in both "self-use" and "generator" mode.
- Generator connectivity with multiple input methods and automatic generator on/of control.
- Support to work as grid-tied inverter without battery connection during on-grid.
- Maximum charge/discharge current of up to 70A+70A on two independently controlled battery ports.
- Backup port supports 1.6 times overload for short durations.
- Allows parallel operation of up to 6 units for both on-grid and of-grid applications.
- Compatible with a wide voltage range to accommodate various batteries.

Inverter Technical Parameters Part 1

Model	S6-EH3P50K-H	S6-EH3P60K-H
Input DC (PV side)		
Recommended max. PV array size	100 kW	
Max. usable PV input power	100 kW	
Max. input voltage	1000 V	
Rated voltage	600 V	
Start-up voltage	180 V	
MPPT voltage range	150-850 V	
Max. input current	4*42 A	
Max. current per DC input	42 A	
Max. short circuit current	4*60 A	

Inverter Technical Parameters Part 2

Model	S6-EH3P50K-H	S6-EH3P60K-H
MPPT number / Max. input strings number	4/8	
Battery		
Battery type	Li-ion	
Battery voltage range	150 - 800 V	
Max. charge / discharge current	80 A × 2	84 A × 2
Number of battery ports	2	
Max. charge / discharge power of each input	35 kW	
Communication	CAN/RS485	
Output AC (Back-up)		
Rated output power	50 kW	60 kW
Max. apparent output power	1.6 times of rated power, 2 s; 1.5 times of rated power, 10 s	
Back-up switch time	< 10 ms	
Rated output voltage	3/N/PE, 220 V / 380 V, 230 V / 400 V	
Rated frequency	50 Hz / 60 Hz	
THDv (@linear load)	< 2%	
Input AC (Grid side)		
Max. input current	152 A / 144 A	152 A / 152 A
Input AC (Generator)		
Max. input power	50 kW	60 kW
Rated input current	76 A / 72.2 A	91.2 A / 86.6 A
Rated input voltage	3/N/PE, 220 V / 380 V, 230 V / 400 V	
Rated input frequency	50 Hz / 60 Hz	
Output AC (Grid side)		
Rated output power	50 kW	60 kW
Max. apparent output power	50 kVA	60 kVA
Rated grid voltage	3/N/PE, 220 V / 380 V, 230 V / 400 V	
Rated grid frequency	50 Hz / 60 Hz	
Rated grid output current	76 A / 72.2 A	91.2 A / 86.6 A
Power factor	> 0.99 (0.8 leading - 0.8 lagging)	
THDi	< 3%	
Eficiency		
Max. eficiency	97.7%	
EU eficiency	97.3%	
Battery charged eficiency	98.5%	
Battery discharged eficiency	97.5%	
Protection		
Surge protection	DC Type II / AC Type II	
Output over current protection	Yes	
Integrated DC switch	Yes	
DC reverse-polarity protection	Yes	
Protection class / Over voltage category	I / PV II, battery II, AC III	
Integrated AFCI 2.0	Optional	
General Data		
Max. allowable phase imbalance (grid & back-up)	100%	
Max. power per phase (grid & back-up)	33%	

Inverter Technical Parameters Part 3

Model	S6-EH3P50K-H	S6-EH3P60K-H
Dimensions (W × H × D)	530 × 880 × 290 mm	
Weight	76 kg	
Topology	Transformerless	
Operating ambient temperature range	-25 ~ +60°C	
Relative humidity	0 - 100%	
Ingress protection	IP66	
Cooling concept	Intelligent fan-cooling	
Max. operation altitude	4000 m	
Grid connection standard	G99, VDE-AR-N 4105/VDE V 0124, EN 50549-1/EN 50549-10, PTPiREE, VDE 0126/XP C15/VFR:2019, NTS 631/RD 1699/RD 244/UNE 217002, CEI 0-21, C10/11, NRS 097-2-1, TOR, EIFS 2018.2, IEC 62116, IEC 61727, DEWA, MEA, PEA, PORTARIA Nº 140/PORTARIA Nº 515	
Safety/EMC standard	IEC/EN 62109-1/-2, IEC/EN 61000-6-2/-4, EN 55011	
Features		
PV connection	MC4 connector	
Battery connection	Terminal connector	
AC connection	OT terminal	
Display	7.0" LCD display & Bluetooth + APP	
Communication	CAN, RS485-115200, Optional: Wi-Fi, Cellular, LAN	

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