Solis Energy Storage Inverters

» S6-EH1P(3-6)K-L-EU



Highly Flexible

- Integrated 2 MPPTs, suitable for residential rooftop installations with multiple array orientations
- Compatible with multiple brands of battery models and offer customer more battery options

Intelligent Function

- Easy to expand system capacity and support up to 10 units of Grid or Backup parallel connection
- Support pure off grid application with generator as backup source
- Multiple working modes to meet different using scenarios
- Built in energy management system to enhance management efficiency and maximize the system profit
- APP Remote control & upgrade function to avoid site visit

Safe and Reliable

- Safety protection with integrated AFCI function, actively detect arc fault in PV array
- Natural convection design without external fans, reliably working with low failure rate

Outstanding Performance

- Up to 16A of MPPT current input to support 182mm/210mm solar panels
- Support 1.6DC:AC ratio to connect more PV capacity to the energy storage system
- Up to 125A/6kW max charge/discharge rating with industry highest level 6kW of backup loads support capability
- UPS level switching time (<10ms) supporting critical loads all the time
- High PV charge efficiency to prevent excess PV loss

Model:

S6-EH1P3K-L-EU S6-EH1P3.6K-L-EU S6-EH1P4.6K-L-EU S6-EH1P5K-L-EU S6-EH1P6K-L-EU

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Datasheet

Model Name	S6-EH1P3K-L-EU	S6-EH1P3.6K-L-EU	S6-EH1P4.6K-L-EU	S6-EH1P5K-L-EU	S6-EH1P6K-L-EU
Input DC (PV side)					
Recommended max. PV power	4.8 kW	5.7 kW	7 kW	8 kW	9.6 kW
Max. input voltage	600 V				
Rated voltage	330 V				
Start-up voltage	90 V				
MPPT voltage range	90-520 V				
Max. input current	16 A / 16 A				
Max. short circuit current	24 A / 24 A				
MPPT number/Max. input strings number	2/2				
Battery					
Battery type	Li-ion / Lead-acid				
Battery voltage range	40 - 60 V				
Battery capacity	50 - 2000 Ah				
Max. charge / discharge power	3 kW	3.6 kW	4.6 kW	5 kW	6 kW
Max. charge / discharge current	62.5 A	75 A	100 A	105 A	125 A
Communication	CAN/RS485				
Output AC (Back-up)					
Rated output power	3 kW	3.6 kW	4.6 kW	5 kW	6 kW
Max. apparent output power	4.2 kW, 60sec	5 kW, 60sec	6.4 kW, 60sec	7 kW, 60sec	8 kW, 60sec
Back-up switch time	<10 ms				
Rated output voltage	1/N/PE, 220 V / 230 V				
Rated frequency	50 Hz / 60 Hz				
Rated output current	21.8 A	26.2 A	33.4 A	36.5 A	40 A
THDv (@linear load)	<2%				
Input AC (Grid side)					
Input voltage range	187-265 V				
Max. input current	20.4 A	24.6 A	31.4 A	34.2 A	40 A
Frequency range	45-55 Hz / 55-65 Hz				
Output AC (Grid side)					
Rated output power	3 kW	3.6 kW	4.6 kW	5 kW	6 kW
Max. apparent output power	3.3 kVA	4 kVA	4.6 kVA	5.5 kVA	6.6 kVA
Operation phase	1/N/PE				
Rated grid voltage	220 V / 230 V				
Rated grid frequency	50 Hz / 60 Hz				
Rated grid output current	13.6 A / 13.1 A	16.4 A / 15.7 A	20.9 A / 20 A	22.8 A / 21.8 A	27.3 A / 26.1 A
Max. output current	15 A	18.2 A	21 A	25 A	30 A
Power Factor	>0.99 (0.8 leading - 0.8 lagging)				
THDi	<2%				
Efficiency					
Max. efficiency	>97.9%				
EU efficiency	>97.2%				
BAT charged by PV Max. efficiency	> 97.5%				
BAT charged/discharged to AC Max. efficiency	> 97.5%				
Protection					
DC reverse-polarity protection	Yes				
Ground fault monitoring	Yes				
Integrated AFCI (DC arc-fault circuit protection)	Yes (1)				
Protection class/Over voltage category	I/II				
General Data					
Dimensions (W*H*D)	380*480*190 mm				
Weight	TBD				
Topology	High frequency isolation (for battery)				
Operating ambient temperature range	-25 ~ +60°C				
Ingress protection	IP66				
Cooling concept	Natural convection				
Max. operation altitude	4000 m				
Grid connection standard	G98 or G99, VDE-AR-N 4105 / VDE V 0124, EN 50549-1, VDE 0126 / UTE C 15 / VFR:2019, RD 1699 / RD 244 / UNE 206006 / UNE 206007-1, CEI 0-21, C10/11, NRS 097-2-1, TOR, EIFS 2018.2, IEC 62116, IEC 61727, IEC 60068, IEC 61683, EN 50530, MEA, PEA				
Safety/EMC standard	IEC/EN 62109-1/-2, EN 61000-6-2/-3				
Features					
DC connection	MC4 connector				
AC connection	Quick connection plug				
Display	LED + APP				
Communication	RS485, Ethernet, CAN, Optional: Wi-Fi, GPRS				

Preliminary

(1) Activation required.