



Solis Solarator Series

Experience Uninterrupted Power with Solis Energy Storage Inverters

Off-Grid Inverters

S6-EO1P(4-5)K-48

Single Phase | Low Voltage



- Compatible with generator as backup power supply for off grid system

- 10 seconds of 200% overload capability

- Support parallel and AC coupling function to extend the system capacity

- Multiple battery options including fast configuration for non-communicating batteries

- Support one click fast charging mode

- Supports dual backup load for intelligent load prioritizing

- Supports six different battery charging and discharging TOU (Time of Use) settings to lower your electricity bill

DATASHEET

S6-EO1P(4-5)K-48

Models	4K	5K
Solar Charger		
Max. usable PV input power	5.5 kW	6.5 kW
Max. input voltage	500 V	
Rated voltage	360 V	
Start-up voltage	90 V	
MPPT voltage range	90 - 430 V	
Max. input current	16 A / 16 A	
Max. short circuit current	40 A	
Max. solar charge current	100 A	
MPPT number / Max. input strings number	1 / 2	
Battery		
Battery type	Li-ion / Lead-acid	
Rated battery voltage	40 - 60 V	
Max. charge / discharge power	5 kW / 5 kW	
Max. charge / discharge current	100 A	
Communication	CAN	
Inverter Output		
Rated output power	4 kVA / 4 kW	5 kVA / 5 kW
Operation phase	L/N/PE	
Rated grid voltage	230 V ± 1%	
Rated grid frequency	50 Hz / 60 Hz ± 0.1%	
Surge capacity	8 kVA	10 kVA
Max. output current	20 A	25 A
Output voltage waveform	Pure sine wave	
Transfer time	10 ms typical, 20 ms Max	
THDv (@linear load)	< 3%	
Peak efficiency (PV-AC)	96.6%	
AC Charger (grid port and generator port)		
Max. input power	6 kW	7 kW
Rated input voltage	L/N/PE, AC 230 V	
Selectable voltage range	90 - 280 V	
AC frequency range	50 Hz / 60 Hz	
Max. input current	26 A	30 A
Max. AC charge current	60 A	80 A
Protection		
Output over voltage protection	Yes	
Output over current protection	Yes	
Short circuit protection	Yes	
Surge protection	Yes	
Temperature protection	Yes	
Integrated AFCI 2.0	Optional	
General Data		
Dimensions (W × H × D)	340 × 480 × 170 mm	
Weight	13.8 kg	
Topology	High frequency non-isolation	
Relative humidity	5% - 95% (Non-condensing)	
Operating ambient temperature range	-10 ~ +60°C	
Storage temperature range	-25 ~ +60°C	
Ingress protection	IP21	
Max. operation altitude	2000 m	
Parallel capability	6 units	
Safety standard	IEC 62109, IEC 61000, 55011	
Features		
DC connection	Terminal connectors	
AC connection	Terminal connectors	
Display	LCD	
Communication	CAN, BMS, Dry-contact, Bluetooth, Optional: Wi-Fi	

S6-EH1P(3-8)K-L-PLUS

Solis Single Phase Low Voltage Energy Storage Inverters

New PLUS model provides solutions for demanding power scenarios

Features:

- Generator-compatible to extend backup duration during grid power outage
- Multiple inverters can operate together to form a microgrid
- Supports dual backup ports for intelligent control of critical and non-critical loads
- 10 seconds of 200% overload capability
- Automatic switchover time is <4ms, providing seamless transitions from grid to backup
- Ensures excellent power supply stability, keeping the load unaffected by a weak grid or generator supply fluctuations

Models:

S6-EH1P3K-L-PLUS / S6-EH1P3.6K-L-PLUS

S6-EH1P5K-L-PLUS / S6-EH1P6K-L-PLUS

S6-EH1P8K-L-PLUS



DATASHEET

S6-EH1P(3-8)K-L-PLUS

Models	3K	3.6K	5K	6K	8K
Input DC (PV side)					
Recommended max. PV array size	6 kW	7.2 kW	10 kW	12 kW	16 kW
Max. usable PV input power	4.8 kW	5.76 kW	8 kW	9.6 kW	12.8 kW
Max. input voltage	500 V				
Rated voltage	330 V				
Start-up voltage	90 V				
MPPT voltage range	90-435 V				
Max. input current	16 A / 16 A				32 A / 32 A
Max. short circuit current	20 A / 20 A				40 A / 40 A
MPPT number/Max. input strings number	2/2				2/4
Battery					
Battery type	Li-ion / Lead-acid				
Battery voltage range	40-60 V				
Max. charge / discharge power	3 kW	3.6 kW	5 kW	6 kW	8 kW
Max. charge / discharge current	70 A	80 A	112 A	135 A	190 A
Communication	CAN/RS485				
Output AC (Grid side)					
Rated output power	3 kW	3.6 kW	5 kW	6 kW	8 kW
Max. apparent output power	3 kVA	3.6 kVA	5 kVA	6 kVA	8 kVA
Operation phase	1/N/PE				
Rated grid voltage	220 V / 230 V				
Rated grid frequency	50 Hz / 60 Hz				
Rated grid output current	13.7 A / 13.1 A	16.4 A / 15.7 A	22.8 A / 21.8 A	27.3 A / 26.1 A	36.4 A / 34.8 A
Max. output current	13.7 A / 13.1 A	16.4 A / 15.7 A	22.8 A / 21.8 A	27.3 A / 26.1 A	36.4 A / 34.8 A
Power factor	>0.99 (0.8 leading - 0.8 lagging)				
THDi	<2%				
Input AC (Grid side)					
Input voltage range	187-253 V				
Max. input current	21 A	25 A	32 A	40 A	50 A
Frequency range	45-55 Hz / 55-65 Hz				
Output AC (Back-up)					
Rated output power	3 kW	3.6 kW	5 kW	6 kW	8 kW
Max. apparent output power	2 times of rated power, 10 s				
Back-up switch time	<4 ms				
Rated output voltage	1/N/PE, 220 V / 230 V				
Rated frequency	50 Hz / 60 Hz				
Rated output current	13.7 A / 13.1 A	16.4 A / 15.7 A	22.8 A / 21.8 A	27.3 A / 26.1 A	36.4 A / 34.8 A
Max. AC Passthrough current	35 A	35 A	40 A	40 A	50 A
THDv (linear load)	<2%				
Efficiency					
Max. efficiency	96.2%				
EU efficiency	94.7%				
BAT charged by PV/AC Max. efficiency	95.3%/94.5%				
BAT discharged to AC Max. efficiency	94.9%				
Protection					
Ground fault monitoring	Yes				
DC reverse-polarity protection	Yes				
Integrated AFCI 2.0	Optional				
Protection class/Over voltage category	I / II (PV and BAT), III (MAINS and BACKUP and GEN)				
General Data					
Dimensions (W*H*D)	385*560*227 mm				
Weight	21.6 kg				22.2 kg
Topology	High frequency isolation (for battery)				
Operating ambient temperature range	-40 ~ +60°C				
Ingress protection	IP66				
Cooling concept	Natural convection			Intelligent redundant fan-cooling	
Max. operation altitude	3000 m				
Grid connection standard	NRS 097-2-1, 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 plug (PV port) / Terminal Block (BAT port)				
AC connection	Terminal Block				
Display	LCD + Bluetooth + APP				
Communication	RS485, CAN, Optional: Wi-Fi, GPRS, LAN				

S6-EH1P(3-6)K-L-PRO

Solis S6 Advanced Power Hybrid Inverter

New PRO model provides solutions for demanding power scenarios

Features:

- Generator connectivity with multiple input methods and automatic generator On/Off control
- Automatic UPS switching
- 10 second 200% surge power backup overload capability
- Supports 1ph and 3ph flexible connection with max 36kW in parallel
- Up to 135A max charge/discharge current
- 6 customisable charge/discharge time settings
- Compatible with lead-acid and lithium batteries, with multiple battery protection features
- Supports peak shaving control in both "self-use" and "generator" mode

Models:

S6-EH1P3K-L-PRO / S6-EH1P3.6K-L-PRO

S6-EH1P5K-L-PRO / S6-EH1P6K-L-PRO



Models	3K	3.6K	5K	6K
Input DC (PV side)				
Recommended max. PV power	4.8 kW	5.76 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	
Max. charge / discharge power	3 kW	3.6 kW	5 kW	6 kW
Max. charge / discharge current	70 A	80 A	112 A	135 A
Communication			CAN/RS485	
Output AC (Grid side)				
Rated output power	3 kW	3.6 kW	5 kW	6 kW
Max. apparent output power	3.3 kVA	4 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 / 13.0 A	16.4 A / 15.7 A	22.7 A / 21.7 A	27.3 A / 26.1 A
Max. output current	15 A	20 A	25 A	30 A
Power factor		>0.99 (0.8 leading - 0.8 lagging)		
THDi		<2%		
Input AC (Grid side)				
Input voltage range			187-253 V	
Max. input current	20 A	25 A	32 A	40 A
Frequency range			45-55 Hz / 55-65 Hz	
Output AC (Back-up)				
Rated output power	3 kW	3.6 kW	5 kW	6 kW
Max. apparent output power		2 times of rated power, 10 s		
Back-up switch time		<4 ms		
Rated output voltage			1/N/PE, 220 V / 230 V	
Rated frequency			50 Hz / 60 Hz	
Rated output current	13.6 A / 13.0 A	16.4 A / 15.7 A	22.7 A / 21.7 A	27.3 A / 26.1 A
Max. output current	20 A	25 A	32 A	40 A
Max. AC Passthrough current	35 A	35 A	40 A	40 A
THDv (linear load)		<2%		
Efficiency				
Max. efficiency		> 97.5%		
EU efficiency		> 96.2%		
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)		406*560*205 mm		
Weight		24 kg		
Topology		High frequency isolation (for battery)		
Operating ambient temperature range		-40 ~ +60°C		
Ingress protection		IP66		
Cooling concept		Natural convection		
Max. operation altitude		4000 m		
Grid connection standard		NRS 097-2-1, 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 plug (PV port) / Terminal Block (BAT port)		
AC connection		Terminal Block		
Display		LED + APP		
Communication		RS485, CAN, Optional: Wi-Fi, GPRS, LAN		

(1) Activation required.