

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:

- Built-in Backup Port with Automatic UPS switching
- Up to 190A max charge/discharge current
- 6 customisable charge/discharge time settings
- 10 second 200% surge power backup overload capability
- Generator connectivity with multiple input methods and automatic generator On/Off control
- Supports 1ph and 3ph flexible connection with max 48kW in parallel
- Intelligent AC coupling scheme, easily upgrade existing grid-connected systems
- Supports peak shaving control in both "self-use" and "generator" mode
- Compatible with lead-acid and lithium batteries, with multiple battery protection features

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				32A / 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	97.5%				
EU efficiency	96.5%				
BAT charged by PV/AC Max. efficiency	95.3% / 93.9%				
BAT discharged to AC Max. efficiency	93.8%				
Protection					
Ground fault monitoring	Yes				
DC reverse-polarity protection	Yes				
Integrated AFCI (DC arc-fault circuit protection)	Yes ⁽¹⁾				
Protection class/Over voltage category	I / II (PV and BAT), III (MAINS and BACKUP and GEN)				
General Data					
Dimensions (W*H*D)	335*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	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.