

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-EH1P4.6K-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	4.6K	5K	6K	8K
Input DC (PV side)						
Recommended max. PV array size	6 kW	7.2 kW	9.2 kW	10 kW	12 kW	16 kW
Max. usable PV input power	4.8 kW	5.76 kW	7.36 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	4.6 kW	5 kW	6 kW	8 kW
Max. charge / discharge current	70 A	80 A	105 A	112 A	135 A	190 A
Communication	CAN/RS485					
Output AC (Grid side)						
Rated output power	3 kW	3.6 kW	4.6 kW	5 kW	6 kW	8 kW
Max. apparent output power	3 kVA	3.6 kVA	4.6 kVA	5 kVA	6 kVA	8 kVA
Operation phase	L/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	20.9 A / 20 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	20.9 A / 20 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	29 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	4.6 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	L/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	20.9 A / 20 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	40 A	50 A
THDv (@linear load)	<2%					
Efficiency						
Max. efficiency	96.2%					
EU efficiency	96.1%					
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 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)	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	3000 m					
Grid connection standard	NRS 097-2-1, IEC 62116, IEC 61727, IEC 60068, IEC 61683, EN 50530, MEA, PEA, NBR 16149, NBR 16150					
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					