

S6-EH1P(12-16)K-L

Solis Single Phase Low Voltage Energy Storage Inverters

Features:

- String current up to 20A, perfectly match large current modules
- Built-in Backup Port with Automatic UPS switching
- 10 second 200% surge power backup overload capability
- 6 customisable charge/discharge time settings
- Generator connectivity with multiple input methods and automatic generator On/Off control
- Supports 1ph and 3ph flexible connection with max 96kW in parallel
- Supports peak shaving control in both "self-use" and "generator" mode
- Intelligent AC coupling scheme, easily upgrade existing grid-connected systems

Models:

S6-EH1P12K-L

S6-EH1P14K-L

S6-EH1P16K-L



DATASHEET

S6-EH1P(12-16)K-L

Models	12K	14K	16K
Input DC (PV side)			
Recommended max. PV array size	24 kW	28 kW	32 kW
Max. usable PV input power	19.2 kW	22.4 kW	22.4 kW
Max. input voltage	550 V		
Rated voltage	380 V		
Start-up voltage	100 V		
MPPT voltage range	80-520 V		
Max. input current	40 A / 40 A / 40 A		
Max. short circuit current	50 A / 50 A / 50 A		
MPPT number/Max. input strings number	3/6		
Battery			
Battery type	Li-ion / Lead-acid		
Battery voltage range	40 - 60 V		
Max. charge / discharge power	12 kW	14 kW	16 kW
Communication	CAN/RS485		
Output AC (Grid side)			
Rated output power	12 kW	14 kW	16 kW
Max. apparent output power	12 kVA	14 kVA	16 kVA
Operation phase	L/N/PE		
Rated grid voltage	220 V / 230 V		
Rated grid frequency	50 Hz		
Rated grid output current	54.5 A / 52.2 A	63.6 A / 60.9 A	72.7 A / 69.6 A
Max. output current	54.5 A / 52.2 A	63.6 A / 60.9 A	72.7 A / 69.6 A
Power factor	1.0		
THDi	<3%		
Input AC (Grid side)			
Input voltage range	187-253 V		
Max. input current	110 A		
Frequency range	45-55 Hz/55-65 Hz		
Output AC (Back-up)			
Rated output power	12 kW	14 kW	16 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		
Rated output current	54.5 A / 52.2 A	63.6 A / 60.9 A	72.7 A / 69.6 A
Max. output over current protection, 10 sec	109 A	127 A	145 A
Max. Continuous AC Passthrough	100 A		
THDv (@linear load)	<3%		
Max. number of parallel	10		
Input Generator			
Max. input power	12 kW	14 kW	16 kW
Max. input current	54.5 A	63.6 A	72.7 A
Rated input frequency	50 Hz		
Efficiency			
Max. efficiency	97.6%		
EU efficiency	97.2%		
BAT charged by PV Max. efficiency	> 94.9%		
BAT charged/discharged to AC Max. efficiency	> 94.33%/93.51%		
Protection			
Surge protection	Yes		
DC reverse-polarity protection	Yes (PV only)		
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)	464*763*282 mm		
Weight	48.5 kg		
Topology	Transformerless		
Operating ambient temperature range	-40 ~ +60°C		
Ingress protection	IP66		
Cooling concept	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		
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		
Interface	LCD + Bluetooth + APP		
Communication	RS485, Optional: Wi-Fi, LAN		

(1) Activation required.