

## 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
<b>Input DC (PV side)</b>			
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		
<b>Battery</b>			
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		
<b>Output AC (Grid side)</b>			
Rated output power	12 kW	14 kW	16 kW
Max. apparent output power	13.2 kVA	15.4 kVA	17.6 kVA
Operation phase	L/N/PE		
Rated grid voltage	220 V / 230 V		
Rated grid frequency	50 Hz / 60 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	60 A / 57.4 A	70 A / 67 A	80 A / 76.5 A
Power factor	1.0		
THDi	<3%		
<b>Input AC (Grid side)</b>			
Input voltage range	187-253 V		
Max. input current	81.8 A / 78.3 A	95.5 A / 91.3 A	109.1 A / 104.3 A
Frequency range	45-55 Hz/55-65 Hz		
<b>Output AC (Back-up)</b>			
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 / 60 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		
<b>Input Generator</b>			
Max. input power	12 kW	14 kW	16 kW
Max. input current	54.5 A / 52.2 A	63.6 A / 60.9 A	72.7 A / 69.6 A
Rated input frequency	50 Hz / 60 Hz		
<b>Efficiency</b>			
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%		
<b>Protection</b>			
Surge protection	Yes		
DC reverse-polarity protection	Yes (PV only)		
Ground fault monitoring	Yes		
Integrated AFCI (DC arc-fault circuit protection)	Yes <sup>(1)</sup>		
Protection class/Over voltage category	DC type II / AC type III		
<b>General Data</b>			
Dimensions (W*H*D)	464*763*282 mm		
Weight	48.5 kg		
Topology	Transformerless		
Operating ambient temperature range	-25 ~ +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		
<b>Features</b>			
DC connection	MC4 plug (PV port) / Terminal Block (BAT port)		
AC connection	Terminal Block		
Display	LCD + Bluetooth + APP		
Communication	RS485, Optional: Wi-Fi, LAN		

(1) Activation required.