

## S6-EH3P(30-50)K-H

# Solis Three Phase High Voltage Energy Storage Inverters

### Features:

- 4 MPPTs, 8 strings at 20A, and up to 96kW usable PV input
- 140A/70A+70A max charge/discharge on two independently controlled ports
- Supports 1.6 times rated output for 2 seconds on the backup port
- Supports parallel operation of up to 6 units for on and off-grid use
- Operates as a grid-tied inverter without batteries when on-grid
- Multi-input generator connectivity with automatic on/off control
- Supports peak shaving control in both "self-use" and "generator" mode

### Models:

S6-EH3P30K-H

S6-EH3P40K-H

S6-EH3P50K-H



# DATASHEET

# S6-EH3P(30-50)K-H

Models	30K	40K	50K
<b>Input DC (PV side)</b>			
Recommended max. PV array size	60 kW	80 kW	100 kW
Max. usable PV input power	60 kW	80 kW	96 kW
Max. input voltage		1000 V	
Rated voltage		600 V	
Start-up voltage		180 V	
MPPT voltage range		150-850 V	
Max. input current	3*40 A		4*40 A
Max. short circuit current	3*60 A		4*60 A
MPPT number/Max. input strings number	3/6		4/8
<b>Battery</b>			
Battery type		Li-ion	
Battery voltage range		150-800 V	
Max. charge / discharge power	33 kW	44 kW	55 kW
Max. charge / discharge current		70 A <sup>(1)</sup>	
No. of battery inputs		2	
Max. charge / discharge power of each input	33 kW	40 kW	40 kW
Communication		CAN/RS485	
<b>Output AC (Grid side)</b>			
Rated output power	30 kW	40 kW	50 kW
Max. apparent output power	30 kVA	40 kVA	50 kVA
Rated grid voltage		3/N/PE, 220 V / 380 V, 230 V / 400 V	
Rated grid frequency		50 Hz / 60 Hz	
Rated grid output current	45.6 A / 43.3 A	60.8 A / 57.7 A	76 A / 72.2 A
Max. output current	45.6 A / 43.3 A	60.8 A / 57.7 A	76 A / 72.2 A
Power factor		>0.99 (0.8 leading - 0.8 lagging)	
THDi		< 3%	
<b>Input AC (Grid side)</b>			
Max. AC passthrough current	91.2 A / 86.6 A	121.6 A / 115.4 A	152 A / 144.4 A
Rated input voltage		3/N/PE, 220 V / 380 V, 230 V / 400 V	
Rated input frequency		50 Hz / 60 Hz	
<b>Input Generator</b>			
Max. input power	30 kW	40 kW	50 kW
Rated input current	45.6 A / 43.3 A	60.8 A / 57.7 A	76 A / 72.2 A
Rated input voltage		3/N/PE, 220 V / 380 V, 230 V / 400 V	
Rated input frequency		50 Hz / 60 Hz	
<b>Output AC (Back-up)</b>			
Rated output power	30 kW	40 kW	50 kW
Max. apparent output power		1.6 times of rated power, 2 s	
Back-up switch time		< 10 ms	
Rated output voltage		3/N/PE, 220 V / 380 V, 230 V / 400 V	
Rated frequency		50 Hz / 60 Hz	
Rated output current	45.6 A / 43.3 A	60.8 A / 57.7 A	76 A / 72.2 A
THDv (@linear load)		< 2%	
<b>Efficiency</b>			
Max. efficiency		97.8%	
EU efficiency		97.4%	
BAT charged by PV Max. efficiency		98.5%	
BAT charged/discharged to AC Max. efficiency		97.5%	
<b>Protection</b>			
Anti-islanding protection		Yes	
Output over current protection		Yes	
Short circuit protection		Yes	
Integrated DC switch		Optional	
DC reverse-polarity protection		Yes	
Surge protection		DC Type II / AC Type II	
Integrated AFCI (DC arc-fault circuit protection)		Yes <sup>(2)</sup>	
<b>General Data</b>			
Dimensions (W*H*D)		530*880*290 mm	
Weight		73 kg	
Topology		Transformerless	
Self-consumption (night)		<25 W	
Operating ambient temperature range		-25 ~ +60°C	
Relative humidity		0-95%	
Ingress protection		IP66	
Cooling concept		Intelligent redundant fan-cooling	
Max. operation altitude		4000 m	
Grid connection standard	G99, VDE-AR-N 4105 / VDE V 0124, EN 50549-1/EN 50549-10, VDE 0126 / UTE C 15/VFR:2019, NTS 631/RD 1699/RD 244 / UNE 206006 / UNE 206007-1, CEI 0-21, C10/11, NRS 097-2-1, TOR, EIFS 2018.2, IEC 62116, IEC 61727, IEC 60068, IEC 61683, EN 50530, MEA, PEA		
Safety/EMC standard	IEC/EN 62109-1/-2, IEC/EN 61000-6-2/-4		
<b>Features</b>			
PV connection		MC4 Quick connection plug	
Battery connection		Terminal connector	
AC connection		Terminal Block	
Display		LCD + Bluetooth + APP	
Communication		CAN, RS485, Ethernet, Optional: Wi-Fi, Cellular, LAN	

(1) Supporting parallel 140A input. (2) Activation required.