

S6-EH3P(5-10)K-H

Solis Energy Storage Inverters

Highly Flexible

- Integrated 3 to 4 MPPTs, suitable for residential rooftop installations with multiple array orientations
- Supports Unbalanced and Half-Wave Loads on the Grid Port and on the Backup Port
- Compatible with multiple brands of battery models giving customers multiple battery options

Intelligent Function

- Supports pure off grid applications with generator communication support
- Multiple working modes to meet different use case scenarios
- Controllable and Upgradeable via the SolisCloud App to avoid site visits

Safe and Reliable

- Safety protection with integrated AFCI function, which actively detects arc faults in the PV Array
- Natural convection design without external fans

Outstanding Performance

- Up to 16A of MPPT current input to support 182mm solar panels
- Supports 1.6 DC:AC ratio to connect more PV capacity to the energy storage system
- Up to 50A/10kW max charge/discharge rating with industry highest level 10kW of backup loads support capability
- UPS level switching time (<10ms) supporting critical loads all the time
- High PV charge efficiency to prevent excess PV loss

Models:

S6-EH3P5K-H / S6-EH3P6K-H

S6-EH3P8K-H / S6-EH3P10K-H



360° View

DATASHEET

S6-EH3P(5-10)K-H

Models	5K	6K	8K	10K
Input DC (PV side)				
Recommended max. PV power	8 kW	9.6 kW	12.8 kW	16 kW
Max. input voltage	1000 V			
Rated voltage	600 V			
Start-up voltage	160 V			
MPPT voltage range	200-850 V			
Max. input current	16 A / 16 A / 16 A		16 A / 16 A / 16 A / 16 A	
Max. short circuit current	24 A / 24 A / 24 A		24 A / 24 A / 24 A / 24 A	
MPPT number/Max. input strings number	3/3		4/4	
Battery				
Battery type	Li-ion			
Battery voltage range	120-600 V			
Max. charge / discharge power	5 kW	6 kW	8 kW	10 kW
Max. charge / discharge current	25 A		50 A	
Communication	CAN/RS485			
Output AC (Grid side)				
Rated output power	5 kW	6 kW	8 kW	10 kW
Max. apparent output power	5.5 kVA	6.6 kVA	8.8 kVA	11 kVA
Rated grid voltage	3/N/PE, 380 V / 400 V			
Rated grid frequency	50 Hz / 60 Hz			
Rated grid output current	7.6 A / 7.2 A	9.1 A / 8.7 A	12.2 A / 11.5 A	15.2 A / 14.4 A
Max. output current	8.4 A / 7.9 A	10 A / 9.6 A	13.4 A / 12.7 A	16.7 A / 15.8 A
Power factor	>0.99 (0.8 leading - 0.8 lagging)			
THDi	<3%			
Input AC (Grid side)				
Max. input power	7.5 kW	9 kW	12 kW	15 kW
Rated input current	11.4 A	13.8 A	18.2 A	22.8 A
Rated input voltage	3/N/PE, 380 V / 400 V			
Rated input frequency	50 Hz / 60 Hz			
Output AC (Back-up)				
Rated output power	5 kW	6 kW	8 kW	10 kW
Max. apparent output power	8 kVA, 60 sec	9.6 kVA, 60 sec	12.8 kVA, 60 sec	16 kVA, 60 sec
Back-up switch time	<10 ms			
Rated output voltage	3/N/PE, 380 V / 400 V			
Rated frequency	50 Hz / 60 Hz			
Rated output current	7.6 A / 7.2 A	9.1 A / 8.7 A	12.2 A / 11.5 A	15.2 A / 14.4 A
THDv (@linear load)	<2%			
Efficiency				
Max. efficiency	97.87%	97.91%	98.03%	98.04%
EU efficiency	96.77%	97.1%	97.41%	97.51%
BAT charged by PV Max. efficiency	98.37%	98.45%	98.22%	98.31%
BAT charged/discharged to AC Max. efficiency	97.32%	97.34%	97.5%	97.5%
Protection				
Anti-islanding protection	Yes			
Output over current protection	Yes			
Short circuit protection	Yes			
Integrated AFCI (DC arc-fault circuit protection)	Yes ⁽¹⁾			
Integrated DC switch	Yes			
DC reverse-polarity protection	Yes			
PV over voltage protection	Yes			
Battery reverse protection	Yes			
General Data				
Dimensions (W*H*D)	600*500*230 mm			
Weight	32.6 kg			
Topology	Transformerless			
Self-consumption (night)	<25 W			
Operating ambient temperature range	-25 ~ +60°C			
Ingress protection	IP66			
Cooling concept	Natural convection			
Max. operation altitude	4000 m			
Grid connection standard	G98 or G99, VDE-AR-N 4105 / VDE V 0124, EN 50549-1, VDE 0126 / UTE C 15/VFR:2019, RD 1699/RD 244 / UNE 206006 / UNE 206007-1, CEI 0-21, C10/11, NRS 097-2-1, 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 61000-6-1/-3			
Features				
PV connection	MC4 connector			
Battery connection	Quick connection plug			
AC connection	Quick connection plug			
Display	LED + Bluetooth + APP			
Communication	CAN, RS485, Ethernet, Optional: Wi-Fi, Cellular, LAN			

(1) Activation required.