

S6-EH3P(5-10)K-H-EU

Solis Energy Storage Inverters

>> Models:

- S6-EH3P5K-H-EU
- S6-EH3P6K-H-EU
- S6-EH3P8K-H-EU
- S6-EH3P10K-H-EU



Highly Flexible

- Integrated 2 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 up to 10 units in parallel on Grid and Backup. Suitable for small to medium level commercial energy storage systems
- Supports pure off grid applications with generator communication support
- Multiple working modes to meet different use case scenarios
- Controllable and Upgradable 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/210mm 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

DATASHEET
S6-EH3P(5-10)K-H-EU

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				4*16 A			
Max. short circuit current	24 A / 24 A / 24 A				4*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	
Max. 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	98.2%							
EU efficiency	97.5%							
BAT charged by PV Max. efficiency	98.2%							
BAT charged/discharged to AC Max. efficiency	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	Optional							
DC reverse-polarity protection	Yes							
PV over voltage protection	Yes							
Battery reverse protection	Yes							
General Data								
Dimensions (W*H*D)	596*496*230 mm							
Weight	31.8 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.