

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

Solis Three Phase High Voltage Energy Storage Inverters

Smart Energy Management

- AI intelligently manages charging and discharging based on TOU (Time-of-Use) tariffs
- Seamless integration with VPP and EMS platforms for enhanced energy optimization

Flexible & Scalable

- Compatible with mainstream lithium batteries
- Easily expand system capacity using parallel connections and AC coupling

High Performance

- Supports three-phase unbalanced output, allowing up to 50% of rated inverter power per phase ^①
- 160% PV input capacity to maximize solar energy utilization
- Switching time < 10ms

Simple & Fast Configuration

- Bluetooth app support for quick and easy setup

Models:

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



360° View



^① For single system.

DATASHEET

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

Models	5K	6K	8K	10K
Input DC (PV side)				
Recommended max. PV array size	10 kW	12 kW	16 kW	20 kW
Max. usable PV input 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 ^①			
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 kVA	6 kVA	8 kVA	10 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	7.6 A / 7.2 A	9.1 A / 8.7 A	12.2 A / 11.5 A	15.2 A / 14.4 A
Power factor	> 0.99 (0.8 leading - 0.8 lagging)			
THDi	< 3%			
Input AC (Grid side)				
Input voltage range	304 - 437 V / 320 - 460 V			
Max. input current	11.4 A / 10.9 A	13.6 A / 13.0 A	18.2 A / 17.4 A	22.7 A / 21.7 A
Rated grid frequency	50 Hz / 60 Hz			
Frequency range	45 - 55 Hz / 55 - 65 Hz			
Output AC (Back-up)				
Rated output power	5 kW	6 kW	8 kW	10 kW
Max. apparent output power	1.6 times of rated power, 60 s			
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	96.50%	97.00%	97.50%	97.90%
EU efficiency	96.77%	97.10%	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%	97.50%	97.50%
Protection				
Anti-islanding protection	Yes			
Output over current protection	Yes			
Short circuit protection	Yes			
Surge protection	DC Type II / AC Type II (optional)			
Integrated AFCI 2.0	Optional			
Integrated DC switch	Yes			
DC reverse-polarity protection	Yes			
PV over voltage protection	Yes			
Battery reverse protection	Yes			
General Data				
Max. allowable phase imbalance (grid & back-up)	100%			
Max. power per phase (grid & back-up)	50% rated power			
Dimensions (W × H × D)	600 × 500 × 210 mm		600 × 500 × 230 mm	
Weight	27.6 kg		30.2 kg	
Topology	Transformerless			
Self-consumption (night)	< 25 W			
Operating ambient temperature range	-25 ~ +60°C			
Relative humidity	0 - 100%			
Ingress protection	IP66			
Noise emission (typical)	< 46.9 dB(A)			
Cooling concept	Natural cooling			
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, 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 61000-6-1/-3			
Features				
PV connection	MC4 connector			
Battery connection	Quick connection plug			
AC connection	Quick connection plug			
Display	LED indicator & Bluetooth + APP			
Communication	CAN, RS485, Optional: Wi-Fi, Cellular, LAN			

① Supports max. battery voltage to 700 V.