

S6-EH3P(3-10)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
- 160% PV input capacity to maximize solar energy utilization

Simple & Fast Configuration

- Bluetooth app support for quick and easy setup

Models:

S6-EH3P3K-H-EU / S6-EH3P4K-H-EU

S6-EH3P5K-H-EU / S6-EH3P6K-H-EU

S6-EH3P8K-H-EU / S6-EH3P10K-H-EU



360° View

DATASHEET

S6-EH3P(3-10)K-H-EU

Models	3K	4K	5K	6K	8K	10K
Input DC (PV side)						
Recommended max. PV array size	6 kW	8 kW	10 kW	12 kW	16 kW	20 kW
Max. usable PV input power	4.8 kW	6.4 kW	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		4 × 16 A	
Max. short circuit current	24 A / 24 A		24 A / 24 A / 24 A		4 × 24 A	
MPPT number / Max. input strings number	2 / 2		3 / 3		4 / 4	
Battery						
Battery type	Li-ion					
Battery voltage range	120 - 600 V ⁽¹⁾					
Max. charge / discharge power	3 kW	4 kW	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	3 kW	4 kW	5 kW	6 kW	8 kW	10 kW
Max. apparent output power	3 kVA	4 kVA	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	4.6 A / 4.3 A	6.1 A / 5.8 A	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	4.6 A / 4.3 A	6.1 A / 5.8 A	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	6.8 A	9.1 A	11.4 A	13.8 A	18.2 A	22.8 A
Rated grid frequency	50 Hz / 60 Hz					
Frequency range	45 - 55 Hz / 55 - 65 Hz					
Output AC (Back-up)						
Rated output power	3 kW	4 kW	5 kW	6 kW	8 kW	10 kW
Max. apparent output power	4.8 kVA, 60 s	6.4 kVA, 60 s	8 kVA, 60 s	9.6 kVA, 60 s	12.8 kVA, 60 s	16 kVA, 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	4.6 A / 4.3 A	6.1 A / 5.8 A	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	95.50%	96.00%	96.50%	97.00%	97.50%	97.90%
EU efficiency	95.51%	96.03%	96.77%	97.10%	97.41%	97.51%
BAT charged by PV max. efficiency	95.96%	96.57%	98.37%	98.45%	98.22%	98.31%
BAT charged / discharged to AC max. efficiency	97.04%	97.29%	97.32%	97.34%	97.50%	97.50%
Protection						
Anti-islanding protection	Yes					
Output over current protection	Yes					
Short circuit protection	Yes					
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	26.4 kg		27.6 kg		30.2 kg	
Topology	Transformerless					
Self-consumption (night)	< 25 W					
Operating ambient temperature range	-25 ~ +60°C					
Relative humidity	0 - 95%					
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.