solis

GINLONG TECHNOLOGIES CO.,LTD.

S6-EH3P(3-10)K-H

Solis Three Phase High Voltage Energy Storage Inverters

Unique Advantages

★ Supports up to 4 MPPTs, suitable for multi-orientation and occlusion, to improve power generation

Leading Advantages

- Supports PV input up to 160% of the inverter's rated DC power, maximising solar utilisation
- 160% overload for 60s in off-grid mode, ensuring stable startup of motors, water pumps and air conditioner
- Seamless on/off-grid switching in under 10ms, guaranteeing an uninterrupted power supply
- Support three-phase unbalanced output, each phase supports output max. 50% rated inverter power
- Supports existing PV grid-tied power connection for export control and off-grid use
- Support grid side generator access, adapting to scenarios with insufficient power supply
- Support max 6 units in parallel, for expanding system capacity
- Customizable battery backup level for uninterrupted power
- PV only off grid mode, to reduce the initial investment cost
- SolisCloud: Smart remote control, AI optimisation, and instant troubleshooting - all in one platform
- Ingress protection IP66, adapting to harsh ambient conditions

Models:

S6-EH3P5K2-H / S6-EH3P6K2-H

S6-EH3P8K2-H / S6-EH3P10K2-H

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

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

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



360º View

DATASHEET

Models	5K2	6K2	8K2	10K2	3K-EU	4K-EU	5K-EU	6K-EU	8K-EU	10K-EU
Input DC (PV side)										
Recommended max. PV array size	10 kW	12 kW	16 kW	20 kW	6 kW	8 kW	10 kW	12 kW	16 kW	20 kW
Max. usable PV input power	8 kW	9.6 kW	12.8 kW	16 kW	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 / 16 A / 16 A		4 × 16 A	
Max. short circuit current	24 A / 24 A				24 A / 24 A		24 A / 24 A / 24 A		4 × 24 A	
MPPT number / Max. input strings number	2 / 2				2 / 2		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	3 kW	4 kW	5 kW	6 kW	8 kW	10 kW
Max. charge / discharge current	25 A		50 A		25 A				50 A	
Communication	CAN / RS485									
Output AC (Grid side)										
Rated output power	5 kW	6 kW	8 kW	10 kW	3 kW	4 kW	5 kW	6 kW	8 kW	10 kW
Max. apparent output power	5 kVA	6 kVA	8 kVA	10 kVA	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	7.6 A / 7.2 A	9.1 A / 8.7 A	12.2 A / 11.5 A	15.2 A / 14.4 A	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	7.6 A / 7.2 A	9.1 A / 8.7 A	12.2 A / 11.5 A	15.2 A / 14.4 A	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	11.4 A / 10.9 A	13.6 A / 13.0 A	18.2 A / 17.4 A	22.7 A / 21.7 A	6.8 A / 6.5 A	9.1 A / 8.7 A	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	3 kW	4 kW	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	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	96.50%	97.00%	97.50%	97.90%	95.50%	96.00%	96.50%	97.00%	97.50%	97.90%
EU efficiency	96.77%	97.10%	97.41%	97.51%	95.51%	96.03%	96.77%	97.10%	97.41%	97.51%
BAT charged by PV max. efficiency	98.37%	98.45%	98.22%	98.31%	95.96%	96.57%	98.37%	98.45%	98.22%	98.31%
BAT charged / discharged to AC max. efficiency	97.32%	97.34%	97.50%	97.50%	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									
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		600 × 500 × 210 mm				600 × 500 × 230 mm	
Weight	27.6 kg		30.2 kg		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 - 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, EK18									
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.