solis

GINLONG TECHNOLOGIES CO.,LTD.

S6-EH3P(30-50)K-H-ND

Solis Three Phase High Voltage Energy Storage Inverters

Applicable only to Nordic countries

Features:

- 2 seconds of 160% overload capability
- Supports a maximum input current of 20A, making it ideal for all high-power PV modules of any brand
- Real-time battery monitoring, remote upgrade, and battery healing function to prolong battery life
- Supports peak shaving features in "self-use" and "generator" modes
- Supports Unbalanced and Half-Wave Loads on both the Grid and Backup Port
- A wide battery voltage range accommodates the prevalent high-voltage lithium batteries found in the market
- Battery charging/discharging current 140A/70A+70A, suitable for 280Ah cell standard 0.5C application condition
- Supports 200% DC/AC ratio and makes full use of PV charging, providing a long backup



Models:

S6-EH3P30K-H-ND

S6-EH3P40K-H-ND

S6-EH3P49K-H-ND

S6-EH3P50K-H-ND

DATASHEET

S6-EH3P(30-50)K-H-ND

Models	30K	40K	49K	50K
Input DC (PV side)				
Recommended max. PV array size	60 kW	80 kW	98 kW	100 kW
Max. usable PV input power	60 kW	80 kW	96 kW	96 kW
Max. input voltage	1000 V			
Rated voltage	600 V			
Start-up voltage	180 V			
MPPT voltage range	150 - 850 V			
Max. input current	40 A / 40 A / 40 A	4 × 40 A		
Max. short circuit current	60 A / 60 A / 60 A	4 × 60 A		
MPPT number / Max. input strings number	3 / 6	4 / 8		
Battery				
Battery type	Li-ion			
Battery voltage range	150 - 800 V			
Max. charge / discharge power	33 kW	44 kW	53.9 kW	55 kW
Max. charge / discharge current	70 A × 2 (1)			
No. of battery inputs	2			
Max. charge / discharge power of each input	33 kW	35 kW	35 kW	35 kW
Communication	CAN / RS485			
Output AC (Grid side)				
Rated output power	30 kW	40 kW	49 kW	50 kW
Max. apparent output power	30 kVA	40 kVA	49 kVA	50 kVA
Rated grid voltage	3/N/PE, 220 V / 380 V; 3/N/PE, 230 V / 400 V			
Rated grid frequency	50 Hz / 60 Hz			
Rated grid output current	45.6 A / 43.3 A	60.8 A / 57.7 A	74.5 A / 70.7 A	76 A / 72.2 A
Max. output current	45.6 A / 43.3 A	60.8 A / 57.7 A	74.5 A / 70.7 A	76 A / 72.2 A
Power factor	> 0.99 (0.8 leading - 0.8 lagging)			
THDi	< 3%			
Input AC (Grid side)				
Max. AC passthrough current	91.2 A / 86.6 A	121.6 A / 115.4 A	149 A / 141.4 A	152 A / 144.4 A
Rated input voltage	3/N/PE, 220 V / 380 V; 3/N/PE, 230 V / 400 V			
Rated input frequency	50 Hz / 60 Hz			
Input Generator				
Max. input power	30 kW	40 kW	49 kW	50 kW
Rated input current	45.6 A / 43.3 A	60.8 A / 57.7 A	74.5 A / 70.7 A	76 A / 72.2 A
Rated input voltage	3/N/PE, 220 V / 380 V; 3/N/PE, 230 V / 400 V			
Rated input frequency	50 Hz / 60 Hz			
Output AC (Back-up)				
Rated output power	30 kW	40 kW	49 kW	50 kW
Max. apparent output power	1.6 times of rated power, 2 s			
Back-up switch time	< 10 ms			
Rated output voltage	3/N/PE, 220 V / 380 V; 3/N/PE, 230 V / 400 V			
Rated frequency	50 Hz / 60 Hz			
Rated output current	45.6 A / 43.3 A	60.8 A / 57.7 A	74.5 A / 70.7 A	76 A / 72.2 A
THDv (@linear load)	< 2%			
Efficiency				
Max. efficiency	97.8%			
EU efficiency	97.4%			
BAT charged by PV max. efficiency	98.5%			
BAT charged / discharged to AC max. efficiency	97.5%			
Protection				
Anti-islanding protection	Yes			
Output over current protection	Yes			
Short circuit protection	Yes			
Integrated DC switch	Yes			
DC reverse-polarity protection	Yes			
Surge protection	DC Type II / AC Type II			
Integrated AFCI 2.0	Optional			
General Data				
Dimensions (W × H × D)	530 × 880 × 290 mm			
Weight	73 kg			
Topology	Transformerless			
Self-consumption (night)	< 35 W			
Operating ambient temperature range	-25 ~ +60°C			
Relative humidity	0 - 95%			
Ingress protection	IP66			
Cooling concept	Intelligent fan-cooling			
Max. operation altitude	4000 m			
Grid connection standard	G99, VDE-AR-N 4105/VDE V 0124, EN 50549-1/EN 50549-10, VDE 0126/UTE C 15/VFR:2019, NTS 631/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,PORTARIA Nº 140, DE 21 DE MARÇO DE 2022			
Safety / EMC standard	IEC/EN 62109-1/-2, IEC/EN 61000-6-2/-4, EN 55011			
Features				
PV connection	MC4 Quick connection plug			
Battery connection	Terminal connector			
AC connection	Terminal Block			
Display	LED indicator & Bluetooth + APP			
Communication	CAN, RS485, Ethernet, Optional: Wi-Fi, Cellular, LAN			

(1) Supporting parallel 140A input.