

S6-EH3P(30-50)K-H

Solis Three Phase High Voltage Energy Storage Inverters

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

S6-EH3P40K-H

S6-EH3P50K-H



DATASHEET

S6-EH3P(30-50)K-H

Models	30K		40K		50K	
Input DC (PV side)						
Recommended max. PV array size	60 kW		80 kW		100 kW	
Max. usable PV input power	60 kW		80 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	3*40 A				4*40 A	
Max. short circuit current	3*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		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	
Communication			CAN/RS485			
Output AC (Grid side)						
Rated output power	30 kW		40 kW		50 kW	
Max. apparent output power	30 kVA		40 kVA		50 kVA	
Rated grid voltage			3/N/PE, 220 V / 380 V, 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		76 A / 72.2 A	
Max. output current	45.6 A / 43.3 A		60.8 A / 57.7 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		152 A / 144.4 A	
Rated input voltage			3/N/PE, 220 V / 380 V, 230 V / 400 V			
Rated input frequency			50 Hz / 60 Hz			
Input Generator						
Max. input power	30 kW		40 kW		50 kW	
Rated input current	45.6 A / 43.3 A		60.8 A / 57.7 A		76 A / 72.2 A	
Rated input voltage			3/N/PE, 220 V / 380 V, 230 V / 400 V			
Rated input frequency			50 Hz / 60 Hz			
Output AC (Back-up)						
Rated output power	30 kW		40 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, 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		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			
Insulation resistance monitoring			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 redundant 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	LCD + Bluetooth + APP					
Communication	CAN, RS485, Ethernet, Optional: S3-WiFi-ST, Cellular, LAN					

(1) Supporting parallel 140A input.