

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

Solis Three Phase High Voltage Energy Storage Inverters

Features:

- Integrated 3 or 4 MPPTs for multiple array orientations
- Industry leading 50A/10kW max charge/discharge rating
- Automatic UPS switching
- Supports Peak Shaving Mode
- Pre-made Battery, Meter and CAN cabling to reduce installation time
- Supports Unbalanced and Half-Wave Loads on both the Grid and Backup Port
- Compatible with multiple brands of lithium battery models
- Increased battery protection and operation features to extend battery life

Models:

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

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



360° View



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			
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			
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		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	5 kW		6 kW		8 kW		10 kW	
Max. apparent output power	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			
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			
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 - 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			