

S6-EH1P(3-6)K-L-EU

Solis Single Phase Low Voltage Energy Storage Inverters

Features:

- Integrated 2 MPPTs for multiple array orientations
- Industry leading 125A/6kW max charge/discharge rating
- Automatic UPS switching
- Supports Peak Shaving Mode
- Pre-made Battery, Meter and CAN cabling to reduce installation time
- Supports 1ph and 3ph flexible connection 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-EH1P3K-L-EU / S6-EH1P3.6K-L-EU

S6-EH1P4.6K-L-EU / S6-EH1P5K-L-EU

S6-EH1P6K-L-EU



360° View

DATASHEET

S6-EH1P(3-6)K-L-EU

Models	3K	3.6K	4.6K	5K	6K
Input DC (PV side)					
Recommended max. PV power	4.8 kW	5.7 kW	7 kW	8 kW	9.6 kW
Max. input voltage	600 V				
Rated voltage	330 V				
Start-up voltage	90 V				
MPPT voltage range	90 - 520 V				
Max. input current	16 A / 16 A				
Max. short circuit current	24 A / 24 A				
MPPT number / Max. input strings number	2 / 2				
Battery					
Battery type	Li-ion / Lead-acid				
Battery voltage range	42 - 58 V				
Battery capacity	50 - 2000 Ah				
Max. charge / discharge power	3 kW	3.6 kW	4.6 kW	5 kW	6 kW
Max. charge / discharge current	62.5 A	75 A	100 A	105 A	125 A
Communication	CAN				
Output AC (Grid side)					
Rated output power	3 kW	3.6 kW	4.6 kW	5 kW	6 kW
Max. apparent output power	3 kVA	3.6 kVA	4.6 kVA	5 kVA	6 kVA
Operation phase	1/N/PE				
Rated grid voltage	220 V / 230 V				
Rated grid frequency	50 Hz / 60 Hz				
Rated grid output current	13.6 A / 13 A	16.4 A / 15.7 A	20.9 A / 20 A	22.7 A / 21.7 A	27.3 A / 26.1 A
Max. output current	13.6 A / 13 A	16.4 A / 15.7 A	20.9 A / 20 A	22.7 A / 21.7 A	27.3 A / 26.1 A
Power factor	> 0.99 (0.8 leading - 0.8 lagging)				
THDi	< 2%				
Input AC (Grid side)					
Input voltage range	187 - 253 V				
Max. input current	20 A	24.6 A	31.4 A	32 A	40 A
Frequency range	45 - 55 Hz / 55 - 65 Hz				
Output AC (Back-up)					
Rated output power	3 kW	3.6 kW	4.6 kW	5 kW	6 kW
Max. apparent output power	4.2 kVA, 60 s	5 kVA, 60 s	6.4 kVA, 60 s	7 kVA, 60 s	8 kVA, 60 s
Back-up switch time	< 10 ms				
Rated output voltage	1/N/PE, 220 V / 230 V				
Rated frequency	50 Hz / 60 Hz				
Max. output current	19.1 A	22.7 A	29.1 A	31.8 A	36.4 A
THDv (@linear load)	< 2%				
Efficiency					
Max. efficiency	> 97.0%		> 97.5%		
EU efficiency	> 96.2%				
BAT charged by PV max. efficiency	> 94.9%				
BAT charged / discharged to AC max. efficiency	> 94.33% / 93.51%				
Protection					
DC reverse-polarity protection	Yes				
Ground fault monitoring	Yes				
Integrated AFCI (DC arc-fault circuit protection)	Yes ⁽¹⁾				
Protection class / Over voltage category	I / II				
General Data					
Dimensions (W × H × D)	405 × 480 × 205 mm				
Weight	20.3 kg		22.4 kg		
Topology	High frequency isolation (for battery)				
Operating ambient temperature range	-25 ~ +60°C				
Ingress protection	IP66				
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, EN 61000-6-1/-2/-3/-4				
Features					
DC connection	MC4 connector				
AC connection	Quick connection plug				
Display	LED indicator & Bluetooth + APP				
Communication	RS485. CAN. Optional: Wi-Fi. GPRS. LAN				

(1) Activation required.