

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

Solis Single Phase Low Voltage Energy Storage Inverters

PRO model provides solutions for demanding power scenarios

Features:

- Generator connectivity with multiple input methods and automatic generator On/Off control
- Automatic UPS switching
- 10 second 200% surge power backup overload capability
- Supports 1ph and 3ph flexible connection with max 36kW in parallel
- Up to 135A max charge/discharge current
- 6 customisable charge/discharge time settings
- Compatible with lead-acid and lithium batteries, with multiple battery protection features
- Supports peak shaving control in both "self-use" and "generator" mode

Models:

S6-EH1P3K-L-PRO / S6-EH1P3.6K-L-PRO

S6-EH1P5K-L-PRO / S6-EH1P6K-L-PRO



DATASHEET

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

Models	3K	3.6K	5K	6K
Input DC (PV side)				
Recommended max. PV array size	6 kW	7.2 kW	10 kW	12 kW
Max. usable PV input power	4.8 kW	5.76 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	40 - 60 V			
Max. charge / discharge power	3 kW	3.6 kW	5 kW	6 kW
Max. charge / discharge current	70 A	80 A	112 A	135 A
Communication	CAN / RS485			
Output AC (Grid side)				
Rated output power	3 kW	3.6 kW	5 kW	6 kW
Max. apparent output power	3.3 kVA	4 kVA	5.5 kVA	6.6 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 / 13.0 A	16.4 A / 15.7 A	22.7 A / 21.7 A	27.3 A / 26.1 A
Max. output current	15 A	20 A	25 A	30 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	25 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	5 kW	6 kW
Max. apparent output power	2 times of rated power, 10 s			
Back-up switch time	< 4 ms			
Rated output voltage	1/N/PE, 220 V / 230 V			
Rated frequency	50 Hz / 60 Hz			
Rated output current	13.6 A / 13.0 A	16.4 A / 15.7 A	22.7 A / 21.7 A	27.3 A / 26.1 A
Max. output current	15 A	20 A	25 A	30 A
Max. AC passthrough current	35 A		40 A	
THDv (@linear load)	< 2%			
Efficiency				
Max. efficiency	> 96.9%			
EU efficiency	> 96.5%			
Protection				
DC reverse-polarity protection	Yes			
Residual current detection	Yes			
Ground fault monitoring	Yes			
Integrated AFCI	Yes ⁽¹⁾			
Protection class / Over voltage category	I / II (PV and BAT), III (MAINS and BACKUP and GEN)			
General Data				
Dimensions (W × H × D)	406 × 560 × 205 mm			
Weight	24 kg			
Topology	High frequency isolation (for battery)			
Operating ambient temperature range	- 40 ~ +60°C			
Ingress protection	IP66			
Cooling concept	Natural cooling			
Max. operation altitude	4000 m			
Grid connection standard	NRS 097-2-1, IEC 62116, IEC 61727, IEC 60068, IEC 61683, EN 50530, MEA, PEA			
Safety / EMC standard	IEC/EN 62109-1/-2, EN 61000-6-2/-3			
Features				
DC connection	MC4 plug (PV port) / Terminal Block (BAT port)			
AC connection	Terminal Block			
Display	LED indicator & Bluetooth + APP			
Communication	RS485, CAN, Optional: S3-WiFi-ST, S3-GRPS-ST, LAN			

(1) Activation required.