

S6-EH1P(3-8)K-L-PLUS

Solis Single Phase Low Voltage Energy Storage Inverters

New PLUS model provides solutions for demanding power scenarios

Features:

- Generator-compatible to extend backup duration during grid power outage
- Multiple inverters can operate together to form a microgrid
- Supports dual backup ports for intelligent control of critical and non-critical loads
- 10 seconds of 200% overload capability
- Automatic switchover time is <4ms, providing seamless transitions from grid to backup
- Ensures excellent power supply stability, keeping the load unaffected by a weak grid or generator supply fluctuations

Models:

S6-EH1P3K-L-PLUS / S6-EH1P5K-L-PLUS

S6-EH1P6K-L-PLUS / S6-EH1P8K-L-PLUS



DATASHEET

S6-EH1P(3-8)K-L-PLUS

Models	3K	5K	6K	8K
Input DC (PV side)				
Recommended max. PV array size	6 kW	10 kW	12 kW	16 kW
Max. usable PV input power	4.8 kW	8 kW	9.6 kW	12.8 kW
Max. input voltage	500 V			
Rated voltage	330 V			
Start-up voltage	90 V			
MPPT voltage range	90 - 435 V			
Max. input current	16 A / 16 A			32 A / 32 A
Max. short circuit current	20 A / 20 A			40 A / 40 A
MPPT number / Max. input strings number	2 / 2			2 / 4
Battery				
Battery type	Li-ion / Lead-acid			
Battery voltage range	40 - 60 V			
Max. charge / discharge power	3 kW	5 kW	6 kW	8 kW
Max. charge / discharge current	70 A	112 A	135 A	190 A
Communication	CAN / RS485			
Output AC (Grid side)				
Rated output power	3 kW	5 kW	6 kW	8 kW
Max. apparent output power	3 kVA	5 kVA	6 kVA	8 kVA
Operation phase	L/N/PE			
Rated grid voltage	220 V / 230 V			
Rated grid frequency	50 Hz / 60 Hz			
Rated grid output current	13.7 A / 13.1 A	22.8 A / 21.8 A	27.3 A / 26.1 A	36.4 A / 34.8 A
Max. output current	13.7 A / 13.1 A	22.8 A / 21.8 A	27.3 A / 26.1 A	36.4 A / 34.8 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	21 A	32 A	40 A	50 A
Frequency range	45 - 55 Hz / 55 - 65 Hz			
Output AC (Back-up)				
Rated output power	3 kW	5 kW	6 kW	8 kW
Max. apparent output power	2 times of rated power, 10 s			
Back-up switch time	< 4 ms			
Rated output voltage	L/N/PE, 220 V / 230 V			
Rated frequency	50 Hz / 60 Hz			
Rated output current	13.7 A / 13.1 A	22.8 A / 21.8 A	27.3 A / 26.1 A	36.4 A / 34.8 A
Max. AC passthrough current	35 A	40 A	40 A	50 A
THDv (@linear load)	< 2%			
Efficiency				
Max. efficiency	96.2%			
EU efficiency	96.1%			
BAT charged by PV / AC max. efficiency	95.3% / 93.9%			
BAT discharged to AC max. efficiency	93.8%			
Protection				
Ground fault monitoring	Yes			
Residual current detection	Yes			
DC reverse-polarity protection	Yes			
Integrated AFCI 2.0	Optional			
Protection class / Over voltage category	I / II (PV and BAT), III (MAINS and BACKUP and GEN)			
General Data				
Dimensions (W*H*D)	335 × 560 × 227 mm			
Weight	21.6 kg			22.2 kg
Topology	High frequency isolation (for battery)			
Operating ambient temperature range	- 40 ~ +60°C			
Ingress protection	IP66			
Cooling concept	Natural cooling		Intelligent fan-cooling	
Max. operation altitude	3000 m			
Grid connection standard	NRS 097-2-1, IEC 62116, IEC 61727, IEC 60068, IEC 61683, EN 50530, MEA, PEA, NBR 16149, NBR 16150			
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	7.0" LCD display & Bluetooth + APP			
Communication	RS485, CAN, Optional: S3-WiFi-ST, S3-GRPS-ST, LAN			