



solis

20th
ANNIVERSARY



8-18K

SOLARATOR SERIES

Works with a Wide Range of Batteries: Experience Uninterrupted Power, Even in Areas with Grid Instability

S6-EH3P(8-18)K02-NV-YD-L

Three Phase | Low Voltage

- Supports PV input up to 160% of the inverter's rated DC power, maximising solar utilisation
- Supports up to 21A PV input current, compatible with future higher-power PV modules
- 200% overload for 10s in off-grid mode, ensuring stable startup of motors, water pumps and air conditioners
- Seamless on/off-grid switching in under 10ms, guaranteeing an uninterrupted power supply
- Support three-phase unbalanced output, each phase supports output max. 50% rated inverter power
- Supports both DC and AC coupling—making it easy to expand PV, charge batteries, and power loads reliably, even in off-grid conditions
- Multiple methods of generator connection and auto control, enabling flexible local deployment
- Support max 6 units in parallel, expanding system capacity
- Smart Load management with prioritisation, extending backup time for critical loads
- Customizable battery backup level for uninterrupted power
- Supports PV-only off-grid operation, reducing upfront costs
- AI-Powered & VPP-Ready - maximise savings, unlock additional income
- 7-inch industrial-grade touchscreen, providing a larger, user-friendly interface for local operation
- Ingress protection IP66, for operation in harsh conditions

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DATASHEET

Models	8K	10K	12K	15K	18K
Input DC (PV side)					
Recommended max. PV array size	16 kW	20 kW	24 kW	30 kW	36 kW
Max. usable PV input power	12.8 kW	16 kW	19.2 kW	24 kW	28.8 kW
Max. input voltage			1000 V		
Rated voltage			550 V		
Start-up voltage			160 V		
MPPT voltage range			200 - 850 V		
Max. input current		20 A / 40 A		40 A / 40 A	42 A / 42 A
Max. short circuit current		30 A / 50 A		50 A / 50 A	50 A / 50 A
MPPT number / Max. input strings number		2 / 3			2 / 4
Battery					
Battery type			Li-ion / Lead-acid		
Battery voltage range			40 - 60 V		
Max. charge / discharge current	180 A	220 A	250 A	290 A	320 A
Number of battery ports			2		
Max. charge / discharge current of each port			150 A		
Communication			CAN / RS485		
Output AC (Grid side)					
Rated output power	8 kW	10 kW	12 kW	15 kW	18 kW
Max. apparent output power	8 kVA	10 kVA	12 kVA	15 kVA	18 kVA
Rated grid voltage			3/N/PE, 220 V / 380 V; 3/N/PE, 230 V / 400 V		
Rated grid frequency			50 Hz / 60 Hz		
Rated grid output current	12.2 A / 11.5 A	15.2 A / 14.4 A	18.2 A / 17.3 A	22.8 A / 21.7 A	27.3 A / 26.1 A
Power factor			> 0.99 (0.8 leading - 0.8 lagging)		
THDi			< 3%		
Input AC (Grid side)					
Max. input current	18.3 A / 17.3 A	22.8 A / 21.7 A	27.3 A / 26.0 A	34.2 A / 32.5 A	41 A / 39.2 A
Input Generator					
Max. input power	8 kW	10 kW	12 kW	15 kW	18 kW
Max. input current	12.2 A / 11.5 A	15.2 A / 14.4 A	18.2 A / 17.3 A	22.8 A / 21.7 A	27.3 A / 26.1 A
Rated input voltage			3/N/PE, 220 V / 380 V; 3/N/PE, 230 V / 400 V		
Rated input frequency			50 Hz / 60 Hz		
Output AC (Back-up)					
Rated output power	8 kW	10 kW	12 kW	15 kW	18 kW
Max. apparent output power			2 times of rated power, 10 s		
Back-up switch time			< 10 ms		
Rated output voltage			3/N/PE, 220 V / 380 V; 3/N/PE, 230 V / 400 V		
Rated frequency			50 Hz / 60 Hz		
Rated output current	12.2 A / 11.5 A	15.2 A / 14.4 A	18.2 A / 17.3 A	22.8 A / 21.7 A	27.3 A / 26.1 A
Max. continuous output current	12.2 A / 11.5 A	15.2 A / 14.4 A	18.2 A / 17.3 A	22.8 A / 21.7 A	27.3 A / 26.1 A
Max. continuous AC passthrough current			50 A		
THDv (@linear load)			< 3%		
Efficiency					
Max. efficiency			97.5%		
EU efficiency			96.4%		
BAT charged by PV / AC max. efficiency			95.0% / 94.4%		
BAT discharged to AC max. efficiency			94.5%		
Protection					
Anti-islanding protection			Yes		
Output over current protection			Yes		
Short circuit protection			Yes		
DC reverse-polarity protection			Yes		
Surge protection			DC Type II / AC Type II (Optional)		
Protection class / Over voltage category			I / II (PV and BAT), III (MAINS and BACKUP and GEN)		
Integrated AFCI 2.0			Optional		
Integrated DC switch			Yes		
General Data					
Max. power per phase			50% rated power		40% rated power
Dimensions (W × H × D)			430 × 660 × 305 mm		
Weight			42 kg		
Topology			Non-isolated		
Self-consumption (night)			< 30 W		
Operating ambient temperature range			-25 ~ +60°C		
Relative humidity			0 - 100%		
Ingress protection			IP66		
Noise emission (typical)			< 65 dB(A)		
Cooling concept			Intelligent fan-cooling		
Max. operation altitude			4000 m		
Grid connection standard			EN 50549-1/-10, VDE 4105&VDE 0124, NRS 097-2-1, IEC 62116, IEC 61727, IEC 60068, IEC 61683, EN 50530, SriLanka, EN 50438L, Vietnam, MEA, PEA, CEI 0-21		
Safety / EMC standard			IEC/EN 62109-1/-2, IEC/EN 61000-6-1/-2/-3/-4		
Features					
DC connection			MC4 Quick connection plug (PV) & Screw terminal (Battery)		
AC connection			Screw terminal		
Display			7.0" LCD display & Bluetooth + APP		
Communication			CAN, RS485, Ethernet, Optional: Wi-Fi, Cellular, LAN		