



30-50K

SOLARATOR SERIES

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

S6-EH3P(30-50)K-H

Three Phase | High Voltage

9 Unique Advantages

- ★ Supports up to 2x rated PV input, maximizing solar energy utilization
- ★ Supports a maximum string input current of 20A, ensuring compatibility with high-power PV modules
- ★ Compatible with 100–280Ah battery modules, reducing overall system costs
- ★ Supports fast battery charging with a maximum charging current of 140A
- ★ Two independent battery ports for flexible configurations and easy capacity expansion
- ★ Delivers 160% overload for 2s in off-grid mode, ensuring stable startup of heavy loads
- ★ Supports generator input across a wide range (20%–100% of rated power), reducing investment costs
- ★ AI integration and VPP readiness enable dynamic tariff optimization, minimizing electricity expenses and unlocking additional revenue
- ★ 7-inch industrial-grade screen, providing a larger, user-friendly interface for local operation

6 Leading Advantages

- Supports both DC and AC coupling, for flexible retrofits and system expansions
- Ensures reliable backup power across diverse scenarios through battery reserve management
- Extends supply time for critical loads with intelligent load prioritization
- Offers a versatile three-in-one interface for seamless integration of on-grid PV, wind power, and diesel generators
- Achieves on- and off-grid transitions in less than 10ms, ensuring an uninterrupted power supply
- Supports multi-unit parallel operation up to 500kW (Solis STS cabinet recommended for systems over 6 units)

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DATASHEET

Models	30K		40K		50K	
Input DC (PV side)						
Recommended max. PV array size	60 kW		80 kW		100 kW	
Max. usable PV input power	60 kW		80 kW		96 kW	
Max. input voltage			1000 V			
Rated voltage			600 V			
Start-up voltage			180 V			
MPPT voltage range			150 - 850 V			
Max. input current	40 A / 40 A / 40 A				4 × 40 A	
Max. short circuit current	60 A / 60 A / 60 A				4 × 60 A	
MPPT number / Max. input strings number	3 / 6				4 / 8	
Battery						
Battery type			Li-ion			
Battery voltage range			150 - 800 V			
Max. charge / discharge power	33 kW		44 kW		55 kW	
Max. charge / discharge current			70 A × 2 ^①			
Number of battery ports			2			
Max. charge / discharge power of each input	33 kW		35 kW		35 kW	
Communication			CAN / RS485			
Output AC (Grid side)						
Rated output power	30 kW		40 kW		50 kW	
Max. apparent output power	30 kVA		40 kVA		50 kVA	
Rated grid voltage			3/N/PE, 220 V / 380 V, 230 V / 400 V			
Rated grid frequency			50 Hz / 60 Hz			
Rated grid output current	45.6 A / 43.3 A		60.8 A / 57.7 A		76 A / 72.2 A	
Max. output current	45.6 A / 43.3 A		60.8 A / 57.7 A		76 A / 72.2 A	
Power factor			> 0.99 (0.8 leading - 0.8 lagging)			
THDi			< 3%			
Input AC (Grid side)						
Max. AC passthrough current	91.2 A / 86.6 A		121.6 A / 115.4 A		152 A / 144.4 A	
Rated input voltage			3/N/PE, 220 V / 380 V, 230 V / 400 V			
Rated input frequency			50 Hz / 60 Hz			
Input Generator						
Max. input power	30 kW		40 kW		50 kW	
Rated input current	45.6 A / 43.3 A		60.8 A / 57.7 A		76 A / 72.2 A	
Rated input voltage			3/N/PE, 220 V / 380 V, 230 V / 400 V			
Rated input frequency			50 Hz / 60 Hz			
Output AC (Back-up)						
Rated output power	30 kW		40 kW		50 kW	
Max. apparent output power			1.6 times of rated power, 2 s			
Back-up switch time			< 10 ms			
Rated output voltage			3/N/PE, 220 V / 380 V, 230 V / 400 V			
Rated frequency			50 Hz / 60 Hz			
Rated output current	45.6 A / 43.3 A		60.8 A / 57.7 A		76 A / 72.2 A	
THDv (@linear load)			< 2%			
Efficiency						
Max. efficiency			97.8%			
EU efficiency			97.4%			
BAT charged by PV max. efficiency			98.5%			
BAT charged / discharged to AC max. efficiency			97.5%			
Protection						
Anti-islanding protection			Yes			
Output over current protection			Yes			
Short circuit protection			Yes			
Integrated DC switch			Yes			
DC reverse-polarity protection			Yes			
Surge protection			DC Type II / AC Type II			
Integrated AFCI 2.0			Optional			
General Data						
Dimensions (W × H × D)			530 × 880 × 290 mm			
Weight			73 kg			
Topology			Transformerless			
Self-consumption (night)			< 35 W			
Operating ambient temperature range			-25 ~ +60°C			
Relative humidity			0 - 100%			
Ingress protection			IP66			
Cooling concept			Intelligent fan-cooling			
Max. operation altitude			4000 m			
Grid connection standard			G99, VDE-AR-N 4105/VDE V 0124, EN 50549-1/EN 50549-10, VDE 0126/UTE C 15/VFR:2019, NTS 631/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,PORTARIA Nº 140, DE 21 DE MARÇO DE 2022			
Safety / EMC standard			IEC/EN 62109-1/-2, IEC/EN 61000-6-2/-4, EN 55011			
Features						
PV connection			MC4 Quick connection plug			
Battery connection			Terminal connector			
AC connection			Terminal Block			
Display			7.0" LCD display & Bluetooth + APP			
Communication			CAN, RS485, Ethernet, Optional: Wi-Fi, Cellular, LAN			

① Supporting parallel 140A input.