



30-50K

SOLARATOR SERIES

Works with a wide range of batteries: Experience uninterrupted power supply, even in areas with an unstable grid

S6-EH3P(30-50)K-H-ND

Three Phase | High Voltage

8 Unique Advantages

- ★ Supports up to 2x rated PV input, maximizing the use of solar energy
- ★ Supports a maximum string input current of 20A, ensuring compatibility with high-performance PV modules
- ★ Compatible with 100-280 Ah battery modules, reducing overall system costs
- ★ Supports battery charge/discharge current up to 140A, ideal for peak-valley price arbitrage and frequency regulation
- ★ 160% overload for 2 seconds in off-grid mode, ensuring stable startup of motors and water pumps
- ★ Supports generator input over a wide range (20–100% of rated power), reducing investment costs
- ★ Two independent battery ports for flexible configurations and easy capacity expansion
- ★ AI integration and VPP-ready function enable dynamic tariff optimization, reducing electricity costs and unlocking additional revenue

6 Leading Advantages

- Supports both DC and AC coupling for flexible retrofits and system expansions
- Ensures reliable backup power in various scenarios through battery reserve management
- Extends supply time for critical loads with intelligent load prioritization
- Smart port enables connection of multiple energy sources, including grid-tied inverters, generators and wind turbines
- Performs grid / off-grid transitions in less than 10ms, ensuring an uninterrupted power supply
- Supports up to 10 units in parallel. For systems with more than 6 units, a Solis distribution cabinet is recommended

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Datasheet

Model	30K	40K	50K
DC Input (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	3 × 40 A		4 × 40 A
Max. short-circuit current	3 × 60 A		4 × 60 A
Number of MPPTs / Max. number of strings	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 per input	33 kW	35 kW	35 kW
Communication		CAN / RS485	
AC Output (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%	
AC Input (Grid Side)			
Max. AC pass-through 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	
Generator Input			
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	
AC Output (Backup)			
Rated output power	30 kW	40 kW	50 kW
Peak output power		1.6 times rated power, 2 s	
Backup switching time		< 10 ms	
Rated 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 charge / discharge to AC max. efficiency		97.5%	
Protection			
Anti-islanding protection		Yes	
Output overcurrent 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. operating 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 connector	
Battery connection		Terminal connectors	
AC connection		Terminal block	
Display		LED indicator & Bluetooth + APP	
Communication		CAN, RS485, Ethernet, Optional: Wi-Fi, Cellular, LAN	

① Supports parallel 140A input.