


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)

UK

t: +44 113 328 0870 (sales)
+44 1514 536515 (service)

e: europesales@solisinverters.com
ukservice@solisinverters.com

w: solisinverters.com/uk



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 x 40 A
Max. short circuit current	60 A / 60 A / 60 A		4 x 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 x 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 x H x D)		530 x 880 x 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.