



solis

20th
ANNIVERSARY

SOLARATOR SERIES

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

S6-EH3P(80-125)K10-NV-YD-H

Three Phase | High Voltage



8 Unique Advantages

- Supports PV input up to 200% of the inverter's rated DC power, maximising solar utilisation
- Supports up to 21A PV input current, compatible with the latest high-power PV modules
- Compatible with 100-314Ah battery cells, helping reduce energy storage system costs
- Supports battery charge/discharge current up to 200A, ideal for peak-valley arbitrage and frequency regulation applications
- 160% overload for 200ms in off-grid mode, ensuring stable startup of motors and water pumps
- Supports generator input across a wide range (20%–100% of rated power), reducing investment costs
- Two independent battery connections, allowing more flexible system configuration
- 7-inch industrial-grade screen, providing a larger, user-friendly interface for local operation

6 Leading Advantages

- Supports DC and AC coupling for PV, allowing flexible system expansion and retrofitting
- Battery reserve function across multiple scenarios, ensuring reliable backup power
- Smart Load management with prioritisation, extending backup time for critical loads
- Smart port enables multiple energy source inputs, including grid-tied inverters, diesel generators, and wind turbines
- Seamless on/off-grid switching in under 10ms, guaranteeing uninterrupted power supply
- Supports up to 10 units in parallel. For systems with more than 6 units, use of a Solis power distribution cabinet is recommended

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DATASHEET

S6-EH3P(80-125)K10-NV-YD-H

Models	80K	100K	125K
Input DC (PV side)			
Recommended max. PV array size	160 kW	200 kW	250 kW
Max. usable PV input power	160 kW	200 kW	250 kW
Max. input voltage		1000 V	
Rated voltage		600 V	
Start-up voltage		180 V	
MPPT voltage range		150 - 950 V	
Max. input current		10 × 42 A	
Max. short circuit current		10 × 60 A	
MPPT number / Max. input strings number		10 / 20	
Battery			
Battery type		Li-ion	
Battery voltage range		300 - 950 V	
Max. charge / discharge current		200 A / 100 A + 100 A	
Number of battery ports		2	
Max. charge / discharge current of each port		100 A	
Communication		CAN / RS485	
Output AC (Grid side)			
Rated output power	80 kW	100 kW	125 kW
Max. apparent output power	80 kVA	100 kVA	125 kVA
Rated grid voltage		3/N/PE, 220 V / 380 V, 230 V / 400 V	
Rated grid frequency		50 Hz	
Rated grid output current	121.6 A / 115.5 A	152 A / 144.3 A	189.9 A / 180.4 A
Power factor		> 0.99 (0.8 leading - 0.8 lagging)	
THDi		< 3%	
Input AC (Grid side)			
Max. input current		250 A	
Output AC (Back-up)			
Rated output power	80 kW	100 kW	125 kW
Max. apparent output power	1.2 times of rated power, 10 mins; 1.4 times of rated power, 100 s; 1.6 times of rated power, 10 s; 2 times of rated power, 200 ms		1.2 times of rated power, 100 s 1.4 times of rated power, 10 s 1.6 times of rated power, 200 ms
Back-up switch time		< 10 ms	
Rated output voltage		3/N/PE, 220 V / 380 V, 230 V / 400 V	
Rated frequency		50 Hz	
THDv (@linear load)		< 2%	
Input AC (Generator)			
Max. input power	80 kW	100 kW	125 kW
Rated input current	121.6 A / 115.5 A	151.9 A / 144.3 A	189.9 A / 180.4 A
Rated input voltage		3/N/PE, 220 V / 380 V; 3/N/PE, 230 V / 400 V	
Rated input frequency		50 Hz	
Efficiency			
Max. efficiency		97.6%	
EU efficiency		97.2%	
BAT charged / discharged to AC max. efficiency		97.0%	
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	
Protection class / Over voltage category		I / DC II, AC III	
General Data			
Max. allowable phase imbalance (grid & back-up)		100%	
Max. power per phase (grid & back-up)	26.66 kW	33.33 kW	41.66 kW
Dimensions (W × H × D)		1174 × 814 × 400 mm	
Weight		170 kg	
Topology		Transformerless	
Operating ambient temperature range		-25 ~ +60°C	
Relative humidity		0 - 100%	
Ingress protection		IP66	
Cooling concept		Intelligent fan-cooling	
Max. operation altitude		3000 m	
Grid connection standard	G99, VDE-AR-N 4105/VDE V 0124, EN 50549-1&2/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, RS485-115200, Ethernet, Optional: Wi-Fi, Cellular, LAN		