

**80-125K**

# 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



## 12 Unique Advantages

- ★ Supports up to 2x rated PV input, maximizing solar energy utilization
- ★ Supports a maximum string input current of 21A, ensuring compatibility with high-power PV modules
- ★ Compatible with 100-314Ah battery modules, reducing overall system costs
- ★ Supports fast battery charging with a maximum charging current of 200A
- ★ Two independent battery ports for flexible configurations and easy capacity expansion
- ★ Delivers 160% overload for 200ms in off-grid mode, ensuring stable startup of heavy loads
- ★ Offers flexible control for weak grid and genset-hybrid scenarios, reducing investment costs
- ★ SolisCloud: Smart remote control, AI optimisation, and instant troubleshooting - all in one platform
- ★ Integrates PV and storage for demand management and anti-reverse flow functions
- ★ Provides dynamic reactive power compensation to improve grid power factor and reduce reactive power charges
- ★ Utility bypass function allows direct grid supply to backup loads
- ★ Patented cooling technology ensures reliable operation even under high-temperature conditions

## 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 1.25MW (Solis STS cabinet recommended for systems over 6 units)

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# DATASHEET

Models	80K	100K	125K
<b>Input DC (PV side)</b>			
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. current per DC input		42 A	
Max. short circuit current		10 × 60 A	
MPPT number / Max. input strings number		10 / 20	
<b>Battery</b>			
Battery type		Li-ion	
Battery voltage range		300 - 950 V	
Max. charge / discharge current		100 A × 2 / 100 A × 2	
Number of battery port / Number of BMS port		2	
Max. charge / discharge current of each port		100 A	
Communication		CAN / RS485	
<b>Output AC (Grid side)</b>			
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 / 60 Hz	
Rated grid output current	121.6 A / 115.5 A	151.9 A / 144.3 A	189.9 A / 180.4 A
Power factor		> 0.99 (0.8 leading - 0.8 lagging)	
THDi		< 3%	
<b>Input AC (Grid side)</b>			
Max. input power	160 kW	164.5 kW / 173.2 kW	164.5 kW / 173.2 kW
Input voltage range		304 - 460 V	
Max. input current		250 A	
<b>Output AC (Back-up)</b>			
Rated output power	80 kW	100 kW	125 kW
Max. apparent output power		80-100K: 1.6 times of rated power, 10 s; 2 times of rated power, 200 ms; 125K: 1.4 times of rated power, 10 s; 1.6 times of rated power, 200 ms	
Back-up switch time <sup>①</sup>		< 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	121.6 A / 115.5 A	151.9 A / 144.3 A	189.9 A / 180.4 A
Max. AC passthrough current	121.6 A / 115.5 A	151.9 A / 144.3 A	189.9 A / 180.4 A
THDv (@linear load)		< 3%	
<b>Input AC (Generator side)</b>			
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, 230 V / 400 V	
Rated input frequency		50 Hz / 60 Hz	
<b>Efficiency</b>			
Max. efficiency		97.5%	
EU efficiency	96.9%	97.1%	97.2%
BAT charged by PV / AC max. efficiency		98.2% / 97.0%	
Battery discharged efficiency		97.0%	
<b>Protection</b>			
Surge protection		DC Type II / AC Type II	
Output over current protection		Yes	
Insulation resistance monitoring		Yes	
Residual current detection		Yes	
Integrated PV switch		Yes	
DC reverse-polarity protection		Yes	
Protection class / Over voltage category		I / DC II, AC III	
Integrated AFCI 2.0		Optional	
Anti-islanding protection		Yes	
<b>General Data</b>			
Max. power per phase (grid & back-up)		33% rated power	
Dimensions (W × H × D)		1174 × 814 × 400 mm	
Weight		170 kg	
Inverter topology		Transformerless	
Self-consumption		< 45 W	
Operating temperature range		-25 ~ +60°C	
Relative humidity		0 - 100%	
Ingress protection		IP66	
Cooling concept		Intelligent redundant fan-cooling	
Max. operation altitude		3000 m	
Grid connection standard <sup>②</sup>	G99, VDE-AR-N 4105/VDE V 0124, EN 50549-1&2/EN 50549-10, VDE 0126/UTE C 15/VFR:2019, NTS 631/UNE 217001, CEI 0-21, C10/11, NRS 097-2-1, TOR, IEC 62116, IEC 61727, IEC 60068, IEC 61683, EN 50530, MEA, PEA, PORTARIA N° 140, PORTARIA N° 515		
Safety / EMC standard	IEC/EN 62109-1/-2, IEC/EN 61000-6-2/-4, EN 55011		
<b>Features</b>			
PV connection		MC4 connector	
Battery connection		Terminal connector	
AC connection		Terminal block	
Display		7.0" LCD display & Bluetooth + APP	
Communication interface	Standard: WIFI+LAN+Bluetooth, CAN-BMS×2, CAN-Parallel×2, LAN, RS485-Meter, RS485, DRM, DI×5, DO×4; Optional: 4G		

① From On-Grid Mode to Off-Grid Mode: For a single inverter system, switchover time <10ms.

For a parallel system which consists of up to 6 inverters, switchover time <20ms.  
If customer wishes to connect more than 6 inverters in parallel, please contact Solis Technical Team.

② This column only shows the planned certification standards.

Please confirm the specific time of obtaining the standards with the local team.