80-125K

SOLARATOR SERIES

Operates Seamlessly with Generator: Experience Uninterrupted Power, Even in Areas with Grid Instability

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

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
- ★ AI integration and VPP readiness enable dynamic tariff optimization, minimizing electricity expenses and unlocking additional revenue
- ★ 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)

AUSTRALIA

t: +61 1800928995 e: sales@solisinverters.com.au w: solisinverters.au
+61 3 8555 9516 service@solisinverters.com.au

DATASHEET

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, 230 V / 400 V	
Rated grid frequency		50 Hz	
Rated grid output current	115.5 A	144.3 A	189.9 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, 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	115.5 A	144.3 A	189.9 A
Rated input voltage		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		AS/NZS 4777.2:2020	
Safety / EMC standard		IEC 62109-1/-2, IEC 61000-6-2/-4	
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	
Country of manufacture		China	

Preliminary