



8-12K

SOLARATOR SERIES

Experience Uninterrupted Power with Solis Energy Storage Inverters

S6-EH3P(8-12)K-LV-ND-H

Three Phase | High Voltage



Smart Energy Management

- AI intelligently manages charging and discharging based on TOU (Time-of-Use) tariffs
- Seamless integration with VPP and EMS platforms for enhanced energy optimization
- Built-in control for SG-ready heat pumps

High Performance

- Supports three-phase unbalanced output, allowing up to 40% of rated inverter power per phase
- 160% PV input capacity to maximize solar energy utilization
- Switching time < 10ms

Flexible & Scalable

- Compatible with mainstream lithium batteries
- Easily expand system capacity using parallel connections and AC coupling

Simple & Fast Configuration

- Bluetooth app support for quick and easy setup



DATASHEET

Models	8K	10K	12K
Input DC (PV side)			
Recommended max. PV array size	16 kW	20 kW	24 kW
Max. usable PV input power	12.8 kW	16 kW	19.2 kW
Max. input voltage		1000 V	
Rated voltage		600 V	
Start-up voltage		160 V	
MPPT voltage range		200 - 850 V	
Max. input current		4 × 16 A	4 × 20 A
Max. current per DC input		16 A	20 A
Max. short circuit current		4 × 24 A	4 × 30 A
MPPT number / Max. input strings number		4 / 4	
Battery			
Battery type		Li-ion	
Battery voltage range		120 - 800 V	
Max. charge / discharge current		50 A	
Number of battery port / Number of BMS port		1 / 1	
Communication		CAN / RS485	
Output AC (Grid side)			
Rated output power	8 kW	10 kW	12 kW
Max. apparent output power	8 kVA	10 kVA	12 kVA
Rated grid voltage		3/(N)/PE, 133 V / 230 V	
Rated grid frequency		50 Hz / 60 Hz	
Rated grid output current	20.1 A	25.1 A	30.1 A
Power factor		> 0.99 (0.8 leading - 0.8 lagging)	
THDi		< 3%	
Input AC (Grid side)			
Max. input power	12 kW	15 kW	18 kW
Input voltage range		184 - 265 V	
Max. input current	30.1 A	37.7 A	45.2 A
Output AC (Back-up)			
Rated output power	8 kW	10 kW	12 kW
Max. apparent output power		1.6 times of rated power, 10 s	
Back-up switch time ^①		< 10 ms	
Rated output voltage		3/(N)/PE, 133 V / 230 V	
Rated frequency		50 Hz / 60 Hz	
Rated output current	20.1 A	25.1 A	30.1 A
Max. AC passthrough current	30.1 A	37.7 A	45.2 A
THDv (@linear load)		< 3%	
Input AC (Generator side)			
Max. input power	8 kW	10 kW	12 kW
Rated input current	20.1 A	25.1 A	30.1 A
Rated input voltage		3/(N)/PE, 133 V / 230 V	
Rated input frequency		50 Hz / 60 Hz	
Efficiency			
Max. efficiency		96.70%	
EU efficiency		96.4%	
BAT charged by PV / AC max. efficiency		96.2% / 96.4%	
Battery discharged efficiency		96.4%	
Protection			
Surge protection		DC Type III / AC Type III	
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 / II (PV and BAT), III (MAINS and BACKUP and GEN)	
Anti-islanding protection		Yes	
General Data			
Max. power per phase		40% rated power	
Dimensions (W × H × D)		563 × 546 × 235 mm	
Weight		35.2 kg	
Inverter topology		Transformerless	
Self-consumption		< 25 W	
Operating temperature range		-25 ~ +60°C	
Relative humidity		0 - 100%	
Ingress protection		IP66	
Noise emission (typical)		< 65 dB(A)	
Cooling concept		Intelligent redundant fan-cooling	
Max. operation altitude		2000 m	
Grid connection standard		EN 50549-1/-10, VDE4105, REN342	
Safety / EMC standard		IEC/EN 62109-1/-2, IEC/EN 61000-6-1/-2/-3/-4	
Features			
PV connection		MC4 connector	
Battery connection		Lever terminal	
AC connection		OT terminal	
Display		LED indicator & Bluetooth + APP	
Communication interface		Standard: WIFI+LAN+Bluetooth, CAN-BMS, CAN-Parallel×2, RS485-Meter, RS485, DRM, DI, DO×3	

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.