



15-20K

SOLARATOR SERIES

Experience Uninterrupted Power with Solis Energy Storage Inverters

S6-EH3P(15-20)K-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

- 7-inch large screen uses U.S.-made ZEITLER industrial-grade components
- Bluetooth app support for quick and easy setup



DATASHEET

Models	15K	20K
Input DC (PV side)		
Recommended max. PV array size	30 kW	40 kW
Max. usable PV input power	24 kW	32 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 × 20 A
Max. current per DC input		20 A
Max. short circuit current		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	15 kW	20 kW
Max. apparent output power	15 kVA	20 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	22.8 A / 21.7 A	30.4 A / 28.9 A
Power factor		> 0.99 (0.8 leading - 0.8 lagging)
THDi		< 3%
Input AC (Grid side)		
Max. input power	22.5 kW	30 kW
Input voltage range		304 - 437 V / 320 - 460 V
Max. input current	34.2 A / 32.5 A	45.6 A / 43.3 A
Output AC (Back-up)		
Rated output power	15 kW	20 kW
Max. apparent output power		1.6 time of rated power, 10 s
Back-up switch time ^①		< 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	22.8 A / 21.7 A	30.4 A / 28.9 A
Max. AC passthrough current	34.2 A / 32.5 A	45.6 A / 43.3 A
THDv (@linear load)		< 3%
Input AC (Generator side)		
Max. input power	15 kW	20 kW
Rated input current	22.8 A / 21.7 A	30.4 A / 28.9 A
Rated input voltage		3/N/PE, 220 V / 380 V, 230 V / 400 V
Rated input frequency		50 Hz / 60 Hz
Efficiency		
Max. efficiency		97.7%
EU efficiency		97.5%
BAT charged by PV / AC max. efficiency		98.5% / 97.2%
Battery discharged efficiency		97.2%
Protection		
Surge protection		DC Type II / AC Type II (Optional)
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 × 250 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, CEI 0-21, CEI 0-16, NC-RFG TypeB, NRS 097-2-1, LTU-1, G99, PEA
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		7.0" LCD display & 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.