



15-20K

SOLARATOR SERIES

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

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

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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.