

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



- Supports up to 4 MPPTs, suitable for multi-orientation and occlusion, to improve power generation
- Supports PV input up to 160% of the inverter's rated DC power, maximising solar utilisation
- Supports up to 20A PV input current, compatible with future higher-power PV modules
- 160% overload for 10s in off-grid mode, ensuring stable startup of motors, water pumps and air conditioners
- Seamless on/off-grid switching in under 10ms, guaranteeing an uninterrupted power supply
- Support three-phase unbalanced output, each phase supports output max. 40% rated inverter power
- Supports both DC and AC coupling—making it easy to expand PV, charge batteries, and power loads reliably, even in off-grid conditions
- Multiple methods of generator connection and auto control, enabling flexible local deployment
- Supports SG-Ready heat pump connectivity for smarter home energy applications
- Support max 6 units in parallel, expanding system capacity
- AI-Powered & VPP-Ready - maximise savings, unlock additional income
- 7-inch industrial-grade LCD screen, providing a larger, user-friendly interface for local operation
- Ingress protection IP66, adapting to harsh ambient conditions



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	Non-isolated	
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-Parallelx2, 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.