

10-12K

SOLARATOR SERIES

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

S6-EH3P(10-12)K02-NV-YD-L-AU

Three Phase | Low Voltage



- 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
- 200% 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
- 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
- Support max 6 units in parallel, expanding system capacity
- Customizable battery backup level for uninterrupted power
- Supports PV-only off-grid operation, reducing upfront costs
- 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, for operation in harsh conditions

AUSTRALIA

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DATASHEET

Models	10K	12K
Input DC (PV side)		
Recommended max. PV array size	20 kW	24 kW
Max. input voltage		1000 V
Rated voltage		550 V
Start-up voltage		160 V
MPPT voltage range		200 - 850 V
Max. input current		20 A + 40 A
Max. inverter backfeed current to the array		0 A
Max. current per DC input		20 A
Max. short circuit current		30 A + 50 A
MPPT number / Max. input strings number		2 / 3
Battery		
Battery type		Li-ion / Lead-acid
Battery voltage range		40 - 60 V
Max. charge / discharge current	220 A	250 A
Max. short circuit current		500A 2ms
Number of battery port / Number of BMS port		2 / 1
Max. charge / discharge current of each input		175 A
Communication		CAN / RS485
Output AC (Grid side)		
Rated output power	10 kW	12 kW
Max. / Rated apparent output power	10 kVA	12 kVA
Rated grid voltage		3/N/PE, 230 V / 400 V
Rated grid frequency		50 Hz
Rated grid output current	14.4 A	17.3 A
Power factor		> 0.99 (0.8 leading - 0.8 lagging)
THDi		< 3%
Input AC (Grid side)		
Max. input power	15 kW	18 kW
Input voltage range		323 - 460 V
Max. input current	21.7 A	26.0 A
Max. short circuit current		128.4 A, 88.4 ms
Output AC (Back-up)		
Rated output power	10 kW	12 kW
Rated apparent output power	10 kVA	12 kVA
Max. apparent output power		2 times of rated power, 10 s
Back-up switch time ^①		< 10 ms
Rated output voltage		3/N/PE, 230 V/400 V
Rated frequency		50 Hz
Rated output current	14.4 A	17.3 A
Max. AC passthrough current		50 A
THDv (@linear load)		< 3%
Input AC (Generator side)		
Max. input power	10 kW	12 kW
Rated input current	14.4 A	17.3 A
Rated input voltage		3/N/PE, 230 V / 400 V
Rated input frequency		50 Hz
Efficiency		
Max. efficiency		97.5%
EU efficiency		97.0%
BAT charged by PV / AC max. efficiency		95.0% / 94.4%
Battery discharged efficiency		94.5%
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)
Integrated AFCI 2.0		Optional
Active anti-islanding method		Frequency Shift
General Data		
Dimensions (W × H × D)		430 × 660 × 305 mm
Weight		42 kg
Inverter topology		Non-isolated (PV), Isolated (Battery)
Self-consumption		< 30 W
Operating temperature range		-25 ~ +60°C
Relative humidity		0 - 100%
Ingress protection		IP66
Noise emission (typical)		< 65 dB(A)
Cooling concept		Intelligent fan-cooling
Max. operation altitude		4000 m
Grid connection standard		AS/NZS 4777.2:2020 + A1 + A2
Safety / EMC standard		IEC/EN 62109-1/-2, IEC/EN 61000-6-1/-2/-3/-4
Features		
PV connection		MC4 Quick connection plug
Battery connection		Screw terminal
AC connection		Screw 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×4; Optional: 2G/3G/4G	

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.