10-16K

S6-EH1P(10-16)K03-NV-YD-L-AU

S6 Series | Single Phase | Low Voltage

- 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
- More battery options, compatible with any battery (between 40V-60V)
- Supports existing PV grid-tied power connection for export control and off-grid use
- Multiple methods of generator connection and auto control, enabling flexible local deployment
- Support max 6 units in parallel, expanding system capacity
- Smart Load management, extending backup time for critical loads
- Customizable battery backup level for uninterrupted power
- Supports PV-only off-grid operation, reducing upfront costs
- AI-Powered & VPP-Ready - maximise savings, unlock additional incomem
- 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	S6-EH1P10K03 -NV-YD-L-AU	S6-EH1P12K03 -NV-YD-L-AU	S6-EH1P14K03 -NV-YD-L-AU	S6-EH1P16K03 -NV-YD-L-AU
Input DC (PV side)				
Recommended max. PV array size	20 kW	24 kW	28 kW	32 kW
Max. input voltage	550 V			
Rated voltage	380 V			
Start-up voltage	100 V			
MPPT voltage range	100 - 450 V			
Max. input current per MPPT	40 A / 40 A / 40 A			
Max. current per DC input	20 A			
Max. short circuit current	50 A / 50 A / 50 A			
MPPT number / Max. input strings number	3 / 6			
Battery				
Battery type	Li-ion / Lead-acid			
Battery voltage range	40 - 60 V			
Max. charge / discharge current	207 A	250 A	290 A	290 A
Number of battery port / Number of BMS Port	1 / 1			
Communication	CAN / RS485			
Output AC (Grid side)				
Rated output power	9.999 kW	12 kW	14 kW	16 kW
Max. / Rated apparent output power	9.999 kVA	12 kVA	14 kVA	16 kVA
Rated grid voltage	L/N/PE, 230 V			
Rated grid frequency	50 Hz			
Rated grid output current	43.5 A	52.2 A	60.9 A	69.6 A
Power factor	> 0.99 (0.8 leading - 0.8 lagging)			
THDi	< 3%			
Input AC (Grid side)				
Max. input power	14.49 kW	18 kW	21 kW	24 kW
Input voltage range	187 - 253 V			
Max. input current	63 A	78.3 A	91.3 A	104.3 A
Frequency range	45 - 55 Hz			
Power factor	> 0.99 (0.8 leading - 0.8 lagging)			
Output AC (Back-up)				
Rated output power	9.999 kW	12 kW	14 kW	16 kW
Rated apparent output power	9.999 kVA	12 kVA	14 kVA	16 kVA
Max. apparent output power	2 times of rated power, 10 s			
Back-up switch time ①	< 10 ms			
Rated output voltage	L/N/PE, 230 V			
Rated frequency	50 Hz			
Rated output current	43.5 A	52.2 A	60.9 A	69.6 A
Power factor	> 0.99 (0.8 leading - 0.8 lagging)			
THDv (@linear load)	< 3%			
Input AC (Generator side)				
Max. input power	9.999 kW	12 kW	14 kW	16 kW
Max. input current	43.5 A	52.2 A	60.9 A	69.6 A
Rated input voltage	L/N/PE, 230 V			
Rated input frequency	50 Hz			
Power factor	> 0.99 (0.8 leading - 0.8 lagging)			
Efficiency				
Max. efficiency	97.60%			
EU efficiency	97.00%			
BAT charged by PV/AC max. efficiency	> 94.90% / > 94.33%			
Battery discharged efficiency	93.51%			
Protection				
Surge protection	Yes			
Output over current protection	Yes			
Insulation resistance monitoring	Yes			
Residual current detection	Yes			
Integrated PV switch	Yes			
DC reverse-polarity protection	Yes (PV only)			
Protection class / Over voltage category	I / II (PV and BAT), III (MAINS and BACKUP and GEN)			
Active anti-islanding method	Frequency Shift			
General Data				
Dimensions (W × H × D)	459 × 845 × 313 mm			
Weight	55.5 kg			
Inverter topology	Non-isolated (PV), Isolated (Battery)			
Self-consumption	< 40 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	4000 m			
Grid connection standard	AS 4777			
Safety / EMC standard	IEC/EN 62109-1/-2, EN 61000-6-2/-3			
Features				
PV connection	MC4 connector			
Battery connection	Terminal Block			
AC connection	Terminal Block			
Display	7.0" LCD display & Bluetooth + APP			
Communication interface	Standard: WIFI+Bluetooth, CAN-BMS, CAN-Parallel×2, RS485-Meter, RS485, DRM, DI, DO×2; Optional: 4G, LAN			

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.