

9.9-18K

# SOLARATOR SERIES

Experience Uninterrupted Power with Solis Energy Storage Inverters

## S6-EH1P(9.9-18)K03-NV-YD-L

Single 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
- 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
- SolisCloud: Smart remote control, AI optimisation, and instant troubleshooting - all in one platform
- 7-inch industrial-grade touchscreen, providing a larger, user-friendly interface for local operation
- Ingress protection IP66, for operation in harsh conditions

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## DATASHEET

Models	9.9K	12K	14K	16K	18K
<b>Input DC (PV side)</b>					
Recommended max. PV array size	19.8 kW	24 kW	28 kW	32 kW	36 kW
Max. usable PV input power	15.8 kW	19.2 kW	22.4 kW	25.6 kW	28.8 kW
Max. input voltage	550 V				
Rated voltage	380 V				
Start-up voltage	100 V				
MPPT voltage range	80 - 520 V				
Max. input current	40 A / 40 A / 40 A				42 A / 42 A / 42 A
Max. short circuit current	50 A / 50 A / 50 A				
MPPT number / Max. input strings number	3 / 6				
<b>Battery</b>					
Battery module models	SolisStor-5/10kWh-L-WM-20-SE; SolisStor-5/10/16kWh-L-WM-20; SolisStor-5/10/16kWh-L-WM-66; SolisStor-(5-40)kWh-L-ST-66				
Number of battery modules	1 ~ 8				
Battery voltage range	40 - 60 V				
Battery type	Li-ion / Lead-acid				
Max. charge / discharge current	208 A	250 A	290 A	290 A	320 A
Communication	CAN / RS485				
<b>Output AC (Grid side)</b>					
Rated output power	9.9 kW	12 kW	14 kW	16 kW	18 kW
Operation phase	L/N/PE				
Rated grid voltage	220 V / 230 V				
Rated grid frequency	50 Hz / 60 Hz				
Rated grid output current	45 A / 43.1 A	54.5 A / 52.2 A	63.6 A / 60.9 A	72.7 A / 69.6 A	81.8 A / 78.2 A
Power factor	> 0.99 (0.8 leading - 0.8 lagging)				
THDi	< 3%				
<b>Input AC (Grid side)</b>					
Input voltage range	187 - 253 V				
Max. input current	67.5 A / 64.5 A	81.8 A / 78.3 A	95.5 A / 91.3 A	109.1 A / 104.3 A	122.7 A / 117.4 A
Frequency range	45 - 55 Hz / 55 - 65 Hz				
<b>Output AC (Back-up)</b>					
Rated output power	9.9 kW	12 kW	14 kW	16 kW	18 kW
Max. apparent output power	2 times of rated power, 10 s				
Back-up switch time	< 10 ms				
Rated output voltage	L/N/PE, 220 V / 230 V				
Rated frequency	50 Hz / 60 Hz				
Rated output current	45 A / 43.1 A	54.5 A / 52.2 A	63.6 A / 60.9 A	72.7 A / 69.6 A	81.8 A / 78.2 A
THDv (@linear load)	< 3%				
<b>Input Generator</b>					
Max. input power	9.9 kW	12 kW	14 kW	16 kW	18 kW
Max. input current	45 A / 43.1 A	54.5 A / 52.2 A	63.6 A / 60.9 A	72.7 A / 69.6 A	81.8 A / 78.2 A
Rated input frequency	50 Hz / 60 Hz				
<b>Efficiency</b>					
Max. efficiency	97.6%				
EU efficiency	97.0%				
BAT charged by PV max. efficiency	> 94.9%				
BAT charged / discharged to AC max. efficiency	> 94.33% / 93.51%				
<b>Protection</b>					
Surge protection	Yes				
DC reverse-polarity protection	Yes (PV only)				
Ground fault monitoring	Yes				
Integrated AFCI	Optional				
Protection class / Over voltage category	I / II (PV and BAT), III (MAINS and BACKUP and GEN)				
<b>General Data</b>					
Dimensions (W × H × D)	459 × 845 × 313 mm				
Weight	55.5 kg				
Topology	Transformerless				
Operating ambient 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	NRS 097-2-1, IEC 62116, IEC 61727, IEC 60068, IEC 61683, EN 50530, EN50549-1				
Safety / EMC standard	IEC/EN 62109-1/-2, EN 61000-6-2/-3				
<b>Features</b>					
DC connection	MC4 plug (PV port) / Terminal Block (BAT port)				
AC connection	Terminal Block				
Display	7.0" LCD display & Bluetooth + APP				
Communication	RS485, Optional: Cellular, Wi-Fi, LAN				