



9.6-16K

SOLARATOR SERIES

Experience Uninterrupted Power with Solis Energy Storage Inverters

S6-EH2P(9.6-16)K03-SV-YD-L-US

Split Phase | Low Voltage



- Supports PV input up to 160% of the inverter's rated DC power, maximising solar utilisation
- Support max 20A PV input current, compatible with future higher-power PV modules
- 300% overload for 1s in off-grid mode, ensuring stable startup of motors and air conditioner
- Seamless on/off-grid switching in under 10ms, guaranteeing an uninterrupted power supply
- Supports generator input across a wide range (20%–100% of rated power), reducing investment costs
- Supports both DC and AC coupling—making it easy to expand PV, charge batteries, and power loads reliably, even in off-grid conditions
- Battery reserve function across multiple scenarios, ensuring reliable backup power
- Smart Load management with prioritisation, extending backup time for critical loads
- Smart port enables multiple energy source inputs, including grid-tied inverters, diesel generators, and wind turbines
- Support max 6 units in parallel, for expanding system capacity
- Integrated Arc Fault Protection and Rapid Shutdown Transmitter, ensuring system safety

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DATASHEET

Models	9.6K	10K	11.4K	12K	14K	16K
Input DC (PV side)						
Recommended max. PV power	15.36 kW	16 kW	18.24 kW	19.2 kW	22.4 kW	25.6 kW
Max. input voltage			550 V			
Rated voltage			380 V			
Start-up voltage			100 V			
MPPT voltage range			100-450 V			
Full load MPPT voltage range		160-450 V			186-450 V	
Max. input current per MPPT			40 A			
Max. short circuit current per MPPT			50 A			
Number of MPPTs / Number of strings per MPPT			3 / 2			
Battery						
Battery type			Li-ion / Lead-acid			
Battery voltage range			40 - 60 V			
Max. charge / discharge current	200 A	208 A	237.5 A	250 A	290 A	
Communication			CAN / RS485			
Number of batteries per inverter			See Battery Compatibility Sheet			
Output AC (Grid side)						
Rated output power	9.6 kW	10 kW	11.4 kW	12 kW	14 kW	16 kW
Max. apparent output power	9.6 kVA	10 kVA	11.4 kVA	12 kVA	14 kVA	16 kVA
Rated output voltage			220 V / 240 V			
Rated grid frequency			50 Hz / 60 Hz			
Rated grid output current	43.6 A / 40 A	45.5 A / 41.7 A	51.8 A / 47.5 A	54.5 A / 50 A	63.6 A / 58.3 A	72.7 A / 66.7 A
Max. output current	43.6 A / 40 A	45.5 A / 41.7 A	51.8 A / 47.5 A	54.5 A / 50 A	63.6 A / 58.3 A	72.7 A / 66.7 A
THDi			< 3%			
Input AC (Grid side)						
Input voltage range			193.6 - 242 V / 211 - 264 V			
Max. input current			200 A			
Frequency range			59.5 - 60.5 Hz / 58.8 - 61.2 Hz			
Output AC (Back-up and Off-grid)						
Rated output power	9.6 kW	10 kW	11.4 kW	12 kW	14 kW	16 kW
Max. apparent output power			2 time of rated power, 10 s; 3 times of rated power, 1 s			
Back-up switch time			< 10 ms			
Phase power			L1/L2/N(PE), 120 V / 240 V (split phase)			
Rated output voltage (L1-L2)			220 V / 240 V			
AC output voltage range			193.6-242 V / 211-264 V			
Rated grid frequency			50 Hz / 60 Hz			
Rated output current	43.6 A / 40 A	45.5 A / 41.7 A	51.8 A / 47.5 A	54.5 A / 50 A	63.6 A / 58.3 A	72.7 A / 66.7 A
Max. output over current protection, 10 sec	87.2 A / 80 A	91 A / 83.4 A	103.6 A / 95 A	109 A / 100 A	127.2 A / 116.6 A	145.4 A / 133.4 A
Max. continuous AC passthrough			200 A			
Max. allowable phase imbalance			50%			
Backup support configurations			Dedicated loads and whole-home			
Power factor			> 0.99 (0.8 leading - 0.8 lagging)			
THDv (@linear load)			< 3%			
Input Generator						
Max. input power			30 kW			
Max. input current			125 A			
Rated input frequency			50 Hz / 60 Hz			
Efficiency						
Max. efficiency			96.02%			
CEC efficiency			95.45%			
Battery charged by PV max. efficiency			96.21%			
Battery charged / discharged to AC max. efficiency			94.16%/94.22%			
Protection						
Ground fault monitoring			Yes			
Integrated AFCI			Yes			
DC reverse-polarity protection			Yes (PV only)			
Rapid shutdown NEC 2017			Integrated SunSpec-certified Transmitter			
Compatible RSD receivers			See MLRSD compatibility Sheet			
Protection class / Over voltage category			I / II			
General Data						
Dimensions (W × H × D)			21.02 × 36.61 × 11.69 in (534 × 930 × 297 mm)			
Weight			145.06 lbs (65.8 kg)			
Topology			Transformerless			
Operating ambient temperature range			-13°F to 140°F (-25°C to 60°C)			
Ingress protection			TYPE 4X (IP66)			
Self-consumption (night)			< 35 W			
Noise emission (typical)			<65 dB(A)			
Cooling concept			Intelligent fan-cooling			
Relative humidity range			0 - 100%			
Mounting type			Wall Bracket			
Max. operation altitude			13120 ft (4000 m)			
Grid Certifications			IEEE 1547-2018, IEEE1547.1-2020, CA Rule 21, SRD 2.0			
Safety Certifications			UL 1741 PVRSS, UL 1699B, UL 1998 (US), UL 1741, UL 1741 SB, CSA C22.2107.1-1			
Emissions			FCC Part 15 Class B			
Features						
DC connection			Terminal Block (PV port) / Terminal Block (BAT port)			
AC connection			Terminal Block			
Interface			7.0" LCD display & Bluetooth + APP			
Revenue grade meter			Optional			
Monitoring platform			SolisCloud (modbus map and API sharing available upon request)			
Communication			RS485, Optional: Cellular, Wi-Fi, LAN			