

9.6-16K

SOLARATOR SERIES

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

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

Split Phase | Low Voltage



- 48V hybrid can function on-grid, off-grid or act as a microgrid
- High input current (20A) supports larger modules, improving power density and eliminating clipping
- Integrated 200A pass-through and bypass function fully integrated to limit external hardware, save costs and streamline storage
- The battery's DC side can handle a maximum charge/discharge current of up to 290A, allowing it to store more surplus energy generated by PV systems for better efficiency
- Smart port for supporting flexible configurations like AC coupling or generator

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DATASHEET

Models	9.6K	11.4K	12K	14K	16K
Input DC (PV side)					
Recommended max. PV power	15.36 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	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	11.4 kW	12 kW	14 kW	16 kW
Max. apparent output power	9.6 kVA	11.4 kVA	12 kVA	14 kVA	16 kVA
Rated output voltage			240 V		
Rated grid frequency			60 Hz		
Rated grid output current	40 A	47.5 A	50 A	58.3 A	66.7 A
Max. output current	40 A	47.5 A	50 A	58.3 A	66.7 A
THDi			< 3%		
Input AC (Grid side)					
Input voltage range			211 - 264 V		
Max. input current			200 A		
Frequency range			58.8 - 61.2 Hz		
Output AC (Back-up and Off-grid)					
Rated output power	9.6 kW	11.4 kW	12 kW	14 kW	16 kW
Max. apparent output power			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)			240 V		
AC output voltage range			211 - 264 V		
Rated frequency			60 Hz		
Rated output current	40 A	47.5 A	50 A	58.3 A	66.7 A
Max. output over current protection, 10 sec	80 A	95 A	100 A	116.7 A	133.3 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			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			
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 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			