

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

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 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
Locked rotor amp rating	120 A	142.5 A	150 A	174.9 A	200.1 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-gird)					
Rated output power	9.6 kW	11.4 kW	12 kW	14 kW	16 kW
Max. apparent output power	3x the rated power for 1 second & 2x the rated power for 10 seconds				
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	24 kW				
Max. input current	100 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)				
Inverter topology	Non-isolated (PV), Isolated (Battery)				
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)				
Safety Certifications	UL 1741 PVRSS, UL 1699B, UL 1998 (US), UL 1741, UL 1741 SB, CSA C22.2107.1-1				
Grid Certifications	IEEE 1547-2018, IEEE1547.1-2020, CA Rule 21, SRD 2.0, Puerto Rico LUMA, Hawaii HECO				
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				