



solis

20th
ANNIVERSARY

NEW

30-60K

SOLARATOR SERIES

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

S6-EH3P(30-60)K-NV-YD-H-US

Three Phase | High Voltage



- High input current (40A) supports larger modules, improving power density and eliminating clipping
- More seamless system operation and resiliency with fast and automated battery charge/discharging
- Compatible with 100-280Ah battery modules, driving down system costs and enhancing flexibility, wide range for generator power as well
- Extremely flexible configurations, storage use mode features and battery options
- Supports 200% oversizing for maximizing PV utilization (60K: 166%)
- Easily add inverter capacity, PV or batteries to scale up as you grow thanks to dual input flexibility
- Stability during and after outages with 160% overload capacity

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DATASHEET

S6-EH3P(30-60)K-NV-YD-H-US

Models	30K03	40K04	50K04	60K04
Input DC (PV side)				
Max. usable PV input power	60 kW	80 kW	100 kW	100 kW
Max. input voltage			1000 V	
Rated voltage			600 V	
Start-up voltage			180 V	
MPPT voltage range			150 - 850 V	
Max. input current	40 A / 40 A / 40 A		4 × 40 A	
Max. short circuit current	65 A / 65 A / 65 A		4 × 65 A	
MPPT number / Max. input strings number	3 / 6		4 / 8	
Max input power per MPPT			25 kW (600 V × 40 A)	
Battery				
Battery type			Li-ion	
Battery voltage range			150 - 800 V	
Max. charge / discharge power	33 kW	44 kW	55 kW	60 kW
Max. charge / discharge current			70 A × 2 ^①	
Number of battery ports			2	
Max. charge / discharge power of each input	33 kW	35 kW	35 kW	35 kW
Communication			CAN / RS485	
Output AC (Grid side)				
Rated output power	30 kW	40 kW	50 kW	60 kW
Max. apparent output power	30 kVA	40 kVA	50 kVA	60 kVA
Rated grid voltage			3/(N)/PE, 480 V	
Rated grid frequency			60 Hz	
Rated grid output current	36.1 A	48.1 A	60.1 A	72.2 A
Max. output current	36.1 A	48.1 A	60.1 A	72.2 A
Power factor			> 0.99 (0.8 leading - 0.8 lagging)	
THDi			< 3%	
Input AC (Grid side)				
Max. AC passthrough current	72.2 A	96.2 A	120.2 A	144.4 A
Rated input voltage			3/(N)/PE, 480 V	
Rated input frequency			60 Hz	
Input Generator				
Max. input power	30 kW	40 kW	50 kW	60 kW
Max. input current	36.1 A	48.1 A	60.1 A	72.2 A
Rated input voltage			3/(N)/PE, 480 V	
Rated input frequency			60 Hz	
Output AC (Back-up)				
Rated output power	30 kW	40 kW	50 kW	60 kW
Max. apparent output power			1.6 times of rated power with 2 s	
Back-up switch time			< 10 ms	
Rated output voltage			3/(N)/PE, 480 V	
Rated frequency			60 Hz	
Rated output current	36.1 A	48.1 A	60.1 A	72.2 A
Max. imbalance power per phase			33% rated power	
THDv (@linear load)			< 2%	
Efficiency				
Max. efficiency			97.9%	
CEC efficiency			97.4%	
MPPT efficiency			99.9%	
Protection				
Ground fault detection			Yes	
Residual (leakage) current detection			Yes	
Integrated AFCI			Yes	
DC reverse-polarity protection			Yes	
PV DC switch			Yes	
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)			22 × 41.3 × 13.64 in (560 × 1050 × 346.5 mm)	
Weight			195.77 lbs (88.8 kg)	
Topology			Transformerless	
Self-consumption (night)			< 35 W	
Operating ambient temperature range			-13°F to 140°F (-25°C to 60°C)	
Relative humidity			0 - 100%	
Ingress protection			TYPE 4X	
Cooling concept			Intelligent fan-cooling	
Max. operation altitude			8,202 ft (2500 m)	
Compliance			UL1741SB, IEEE1547-2018, UL1699B, UL1998, FCCPart15ClassB, California Rule21, Hawaii Rule 14H, NEC 690.12-2020, CAN/CSA C22.2107.1-1	
Features				
DC connection			Spring clamp terminals	
Grid AC connection			Screw type terminal block	
Back-up AC connection			Spring clamp terminals	
Battery DC connection			Spring clamp terminals	
Generator AC connection			Spring clamp terminals	
Interface			7.0" LCD display & Bluetooth + APP	
Monitoring platform			SolisCloud (modbus map and API sharing available upon request)	
Revenue grade meter			Integrated ANSI C12.20 option	
Communication			CAN, RS485-115200, Ethernet, Optional: Wi-Fi, Cellular, LAN	

① Supporting parallel 140A input.