

S6-EH3P(30-60)K04-NV-YD-H-US

Solis Three Phase High Voltage Energy Storage Inverters

40K and 50K models, applicable only to LATAM

Features:

- 10 seconds of 160% overload capability
- Supports a maximum input current of 20A, making it ideal for all high-power PV modules of any brand
- Real-time battery monitoring, remote upgrade, and battery healing function to prolong battery life
- Supports peak shaving features in "self-use" and "generator" modes
- Supports Unbalanced and Half-Wave Loads on both the Grid and Backup Port
- A wide battery voltage range accommodates the prevalent high-voltage lithium batteries found in the market
- Battery charging/discharging current 140A/70A+70A, suitable for 280Ah cell standard 0.5C application condition
- Supports 200% DC/AC ratio and makes full use of PV charging, providing a long backup

Models:

S6-EH3P30K03-NV-YD-H-US

S6-EH3P40K04-NV-YD-H-US

S6-EH3P50K04-NV-YD-H-US

S6-EH3P60K04-NV-YD-H-US



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	96 kW	96 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			24 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⁾	
No. of battery input			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	33 kVA	44 kVA	55 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	39.7 A	52.9 A	66.1 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	36.0 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 10 s, 2 times of rated power with 100 ms		
Back-up switch time			< 10 ms	
Rated output voltage			3/(N)/PE, 480 V	
Rated frequency			60 Hz	
THDv (@linear load)			< 2%	
Efficiency				
Max. efficiency			97.8%	
CEC efficiency			97.0%	
Protection				
Ground fault detection			Yes	
Residual (leakage) current detection			Yes	
Integrated AFCI			Yes	
DC reverse-polarity protection			Yes	
PV DC switch			Yes	
Bypass box			Optional	
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 × 36.6 × 12.6 in (560 × 930 × 320 mm)		
Weight		187.4 lbs (85 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 - 95%		
Ingress protection		TYPE 4X		
Cooling concept		Intelligent fan-cooling		
Max. operation altitude		13,120 ft (4000 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		
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 (optional)		
Communication		CAN, RS485-115200, Ethernet, Optional: Wi-Fi, Cellular, LAN		

(1) Supporting parallel 140A input.