

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

Solis Three Phase High Voltage Energy Storage Inverters

Features:

- Provides up to 160% of inverter output power for 2 seconds to support overload
- Allows for maximum DC input current of 20A, ideal for higher-power PV modules of any brand
- Real-time battery monitoring, remote upgrade, and battery healing function to prolong battery life
- Offers peak-shaving, self-use, off-grid, and generator modes which can be customized to fit various use-cases
- Supports 100% three-phase unbalanced output
- Wide range of battery voltages to match mainstream batteries in the market
- Two inputs for separate battery stacks that can each charge/discharge up to 70A, suitable for 280Ah cell standard 0.5C applications
- Up to 200% DC/AC ratio allows the PV to be more effective at supporting loads and charging the battery during backup scenarios

Models:

S6-EH3P30K03-NV-YD-H-US

S6-EH3P60K04-NV-YD-H-US



DATASHEET

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

Models	30K03	60K04
Input DC (PV side)		
Max. usable PV input power	60 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	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
Communication		CAN / RS485
Output AC (Grid side)		
Rated output power	30 kW	60 kW
Max. apparent output power	33 kVA	60 kVA
Rated grid voltage		3/(N)/PE, 480 V
Rated grid frequency		60 Hz
Rated grid output current	36.1 A	72.2 A
Max. output current	39.7 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	144.4 A
Rated input voltage		3/(N)/PE, 480 V
Rated input frequency		60 Hz
Input Generator		
Max. input power	30 kW	60 kW
Max. input current	36.0 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	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
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		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 (optional)
Communication		CAN, RS485-115200, Ethernet, Optional: Wi-Fi, Cellular, LAN

(1) Supporting parallel 140A input.