

S6-EH3P(12-20)K-H

Solis Three Phase High Voltage Energy Storage Inverters

Features:

- Integrated 4 MPPTs for multiple array orientations
- Up to 50A max charge/discharge current
- String current up to 20A, perfectly match large current modules
- 10 second 200% surge power backup overload capability
- Supports Max 6 pcs in parallel
- Supports Unbalanced and Half-Wave Loads on both the Grid and Backup Port
- Supports peak shaving control in both "self-use" and "generator" mode
- 6 customisable charge/discharge time settings
- Automatic UPS switching
- Intelligent AC coupling scheme, easily upgrade existing grid-connected systems

Models:

S6-EH3P12K-H

S6-EH3P15K-H

S6-EH3P20K-H



DATASHEET

S6-EH3P(12-20)K-H

Models	12K	15K	20K
Input DC (PV side)			
Recommended max. PV array size	24 kW	30 kW	40 kW
Max. usable PV input power	19.2 kW	24 kW	32 kW
Max. input voltage		1000 V	
Rated voltage		600 V	
Start-up voltage		160 V	
MPPT voltage range		200-850 V	
Max. input current		20 A / 20 A / 20 A / 20 A	
Max. short circuit current		30 A / 30 A / 30 A / 30 A	
Max. input power per MPPT		9 kW	
MPPT number/Max. input strings number		4/4	
Battery			
Battery type		Li-ion	
Battery voltage range		120-800 V	
Max. charge / discharge power	12 kW	15 kW	20 kW
Max. charge / discharge current		50 A	
Communication		CAN/RS485	
Output AC (Grid side)			
Rated output power	12 kW	15 kW	20 kW
Max. apparent output power	12 kVA	15 kVA	20 kVA
Rated grid voltage		3/N/PE, 380 V / 400 V	
Rated grid frequency		50 Hz	
Rated grid output current	18.2 A / 17.3 A	22.8 A / 21.7 A	30.4 A / 28.9 A
Max. output current	18.2 A / 17.3 A	22.8 A / 21.7 A	30.4 A / 28.9 A
Power factor		>0.99 (0.8 leading - 0.8 lagging)	
THDi		<3%	
Input AC (Grid side)			
Max. input power	18 kW	22.5 kW	30 kW
Rated input current	27.3 A / 26 A	34.2 A / 32.5 A	45.6 A / 43.3 A
Rated input voltage		3/N/PE, 380 V / 400 V	
Rated input frequency		50 Hz	
Output AC (Back-up)			
Rated output power	12 kW	15 kW	20 kW
Max. apparent output power		2 times of rated power, 10 s	
Back-up switch time		<10 ms	
Rated output voltage		3/N/PE, 380 V / 400 V	
Rated frequency		50 Hz	
Rated output current	18.2 A / 17.3 A	22.8 A / 21.7 A	30.4 A / 28.9 A
THDv (@linear load)		<3%	
Input Generator			
Max. input power	12 kW	15 kW	20 kW
Max. input current	18.2 A / 17.3 A	22.8 A / 21.7 A	30.4 A / 28.9 A
Rated input frequency		50 Hz	
Efficiency			
Max. efficiency		98.5%	
EU efficiency		97.5%	
BAT charged by PV Max. efficiency		98.5%	
BAT charged/discharged to AC Max. efficiency		97.5%	
Protection			
Anti-islanding protection		Yes	
Output over current protection		Yes	
Short circuit protection		Yes	
Integrated AFCI (DC arc-fault circuit protection)		Yes ⁽¹⁾	
Integrated DC switch		Yes	
DC reverse-polarity protection		Yes	
PV over voltage protection		Yes	
Battery reverse protection		Yes	
General Data			
Dimensions (W*H*D)		599*546*235 mm	
Weight	31 kg		31.7 kg
Topology		Transformerless	
Self-consumption (night)		<25 W	
Operating ambient temperature range		-25 ~ +60°C	
Relative humidity		0-95%	
Ingress protection		IP66	
Cooling concept	Natural convection		Intelligent redundant fan-cooling
Max. operation altitude		2000 m	
Grid connection standard		EN 50549-1, VDE4105 CEI 0-21, CEI 0-16, NC-RFG TypeB, NRS 097-2-1 ED 2.1	
Safety/EMC standard		IEC/EN 62109-1/-2, IEC/EN 61000-6-1/-3, IEC 61000-2	
Features			
PV connection		MC4 connector	
Battery connection		OT terminal	
AC connection		OT terminal	
Display		LED + Bluetooth + APP	
Communication		CAN, RS485, Ethernet, Optional: Wi-Fi, Cellular, LAN	

(1) Activation required.