

SOLARATOR SERIES

Experience Uninterrupted Power with Solis Energy Storage Inverters

S6-EH3P(30-50)K-H-ND

Three Phase | High Voltage



6 Leading Features

- Supports flexible PV connection through DC and AC coupling for retrofitting and expanding
- Supports battery reserve function in multiple scenarios
- Smart Load Prioritizing – Extending support for critical loads
- SmartLoad/GEN/INV port - Flexible connection of multiple energy sources such as Grid-tied inverter, diesel generator, wind turbines, etc.
- Seamless on grid/off grid switching time <10ms
- Support max 10 pcs in parallel mode, >6 pcs recommend Solis power distribution cabinet

8 Unique Features

- Usable PV power up to 200% inverter rated power, to improve the utilization of PV generation
- Supports max 20A PV input current, perfect match for high power PV modules
- Compatible with 100-280Ah battery modules
- Supports faster charging with battery current up to 140A
- Powerful backup overload capability – 160% overload
- Supports a wide power range of generator connections from 10kVA to 50kVA
- Supports 2 independent battery connections for flexible configuration
- 7-inch large screen uses U.S.-made ZEITLER industrial-grade components

AUSTRALIA

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INVERTERS

S6-EH3P(5-10)K-H-AU

S6-EH3P(30-50)K-H-AU

Models	5K	10K	30K	50K
Input DC (PV side)				
Recommended max. PV array size	10 kW	20 kW	60 kW	100 kW
Max. input voltage	1000 V		1000 V	
Rated voltage	600 V		600 V	
Start-up voltage	160 V		180 V	
MPPT voltage range	200 - 850 V		150 - 850 V	
Max. input current	3 × 16 A	4 × 16 A	3 × 40 A	4 × 40 A
Max. short circuit current	3 × 24 A	4 × 24 A	3 × 45 A	4 × 45 A
MPPT number / Max. input strings number	3 / 3	4 / 4	3 / 6	4 / 8
Battery				
Battery type	Li-ion		Li-ion	
Battery voltage range	120 - 600 V		150 - 800 V	
Max. charge / discharge power	5 kW	10 kW	33 kW	55 kW
Max. charge / discharge current	25 A	50 A	70 A × 2 ⁽¹⁾	
Number of battery ports	/		2	
Max. charge / discharge power of each input	/		33 kW	35 kW
Communication	CAN / RS485		CAN / RS485	
Output AC (Grid side)				
Rated output power	5 kW	10 kW	30 kW	50 kW
Max. apparent output power	5 kVA	10 kVA	30 kVA	50 kVA
Rated grid voltage	3/N/PE, 380 V / 400 V		3/N/PE, 230 V / 400 V	
Rated grid frequency	50 Hz		50 Hz	
Rated grid output current	7.6 A / 7.2 A	15.2 A / 14.4 A	43.3 A	72.2 A
Max. output current	7.6 A / 7.2 A	15.2 A / 14.4 A	43.3 A	72.2 A
Power factor	> 0.99 (0.8 leading - 0.8 lagging)		> 0.99 (0.8 leading - 0.8 lagging)	
THDi	< 3%		< 3%	
Input AC (Grid side)				
Input voltage range	304 - 437 V		/	
Max. input current	11.4 A / 10.9 A	22.7 A / 21.7 A	/	
Rated grid frequency	50 Hz		/	
Frequency range	45 - 55 Hz		/	
Max. AC passthrough current	/		86.6 A	144.4 A
Rated input voltage	/		3/N/PE, 230 V / 400 V	
Rated input frequency	/		50 Hz	
Input Generator				
Max. input power	/		30 kW	50 kW
Rated input current	/		43.3 A	72.2 A
Rated input voltage	/		3/N/PE, 230 V / 400 V	
Rated input frequency	/		50 Hz	
Output AC (Back-up)				
Rated output power	5 kW	10 kW	30 kW	50 kW
Max. apparent output power	8 kVA, 60 s	16 kVA, 60 s	1.6 times of rated power, 2 s	
Back-up switch time	< 10 ms		< 10 ms	
Rated output voltage	3/N/PE, 380 V / 400 V		3/N/PE, 230 V / 400 V	
Rated frequency	50 Hz		50 Hz	
Rated output current	7.6 A / 7.2 A	15.2 A / 14.4 A	43.3 A	72.2 A
THDv (@linear load)	< 2%		< 2%	
Efficiency				
Max. efficiency	96.50%	97.90%	97.8%	
EU efficiency	96.77%	97.51%	97.4%	
BAT charged by PV max. efficiency	98.37%	98.31%	98.5%	
BAT charged / discharged to AC max. efficiency	97.32%	97.50%	97.5%	
Protection				
Anti-islanding protection	Yes		Yes (Active frequency shifting)	
Output over current protection	Yes		Yes	
Short circuit protection	Yes		Yes	
Integrated AFCI 2.0	Optional		Optional	
Integrated DC switch	Yes		Yes	
DC reverse-polarity protection	Yes		Yes	
PV over voltage protection	Yes		/	
Battery reverse protection	Yes		/	
Surge protection	/		DC Type II / AC Type II	
Protection class / Over voltage category	/		PV II, battery II, AC III	
General Data				
Max. allowable phase imbalance (grid & back-up)	100%		100%	
Max. power per phase (grid & back-up)	50% rated power		33.3% rated power	
Dimensions (W × H × D)	600 × 500 × 210 mm	600 × 500 × 230 mm	530 × 880 × 290 mm	
Weight	27.6 kg	30.2 kg	73 kg	
Topology	Transformerless		Transformerless	
Self-consumption (night)	< 25 W		< 35 W	
Operating ambient temperature range	-25 ~ +60°C		-25 ~ +60°C	
Relative humidity	0 - 95%		0 - 95%	
Ingress protection	IP66		IP66	
Cooling concept	Natural cooling		Intelligent fan-cooling	
Max. operation altitude	4000 m		4000 m	
Grid connection standard	AS 4777.2:2020		AS/NZS 4777.2:2020	
Safety / EMC standard	IEC/EN 62109-1/-2, IEC/EN 61000-6-1/-3		IEC 62109-1/-2, IEC 61000-6-2/-4	
Features				
PV connection	MC4 connector		MC4 Quick connection plug	
Battery connection	Quick connection plug		Terminal connector	
AC connection	Quick connection plug		Terminal Block	
Display	LED indicator & Bluetooth + APP		7.0" LCD display & Bluetooth + APP	
Communication	CAN, RS485, Optional: Wi-Fi, Cellular, LAN		CAN, RS485, Ethernet, Optional: Wi-Fi, Cellular, LAN	
Country of manufacture	China		China	

(1) Supporting parallel 140A input.

BATTERY

Force-H3

Models	FH10050
Basic Parameters	
Battery Module Voltage	102.4 Vdc
Battery Module Capacity	48.5 Ah
Battery Module Capacity	4.97 kWh
Battery Module Qty.	2~7pcs (Optional)
Battery system	7pcs
Battery System Capacity	34.79 kWh
Battery System Voltage	716 V
Dimension (W × D × H)	540 × 350 × 1373 mm (21.26 × 13.78 × 54.06 in)
Weight	300 kg (661.38 lb)
Depth of Discharge	100%
Charge/ Discharge Current	50 A (Recommend) 52 A (Max.)
Multi-group	Max. 6 systems in parallel
Communication	RS485, CAN
IP rating	IP55
Working Temperature	0 ~ 50°C (32 ~ 122°F)
Shelf Temperature	-20 ~ 60°C (-4 ~ 140°F)
Humidity	5% ~ 95% (w/o condensing)
Altitude	< 2000 m (6562 ft)
Design Life	15+ Years 25°C (77°F)
Cycle Life	>8000, @25°C (77°F)
Certification	UL9540A, UL1973, IEC62619, IEC63056, IEC62040-1, VDE-AR-E2510-50, UN38.3