

**5-12K****Energy Storage Inverters****S6-EH3P(5-10)K-H-EU****S6-EH3P12K-H-EU(21A)**

Three Phase | High Voltage



### Unique Advantages

- ★ Supports up to 4 MPPTs, suitable for multi-orientation and occlusion, to improve power generation

### Leading Advantages

- Supports PV input up to 160% of the inverter's rated DC power, maximising solar utilisation
- Supports up to 21A PV input current, compatible with future higher-power PV modules
- 160% overload for 60s in off-grid mode, ensuring stable startup of motors, water pumps and air conditioner
- Seamless on/off-grid switching in under 10ms, guaranteeing an uninterrupted power supply
- Support three-phase unbalanced output, each phase supports output max. 50% rated inverter power
- Supports existing PV grid-tied power connection for export control and off-grid use
- Support grid side generator access, adapting to scenarios with insufficient power supply
- Support max 6 units in parallel, for expanding system capacity
- Customizable battery backup level for uninterrupted power
- PV only off grid mode, to reduce the initial investment cost
- SolisCloud: Smart remote control, AI optimisation, and instant troubleshooting - all in one platform
- Ingress protection IP66, adapting to harsh ambient conditions

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# DATASHEET

Models	5K	6K	8K	10K	12K-EU(21A)
<b>Input DC (PV side)</b>					
Recommended max. PV array size	10 kW	12 kW	16 kW	20 kW	24 kW
Max. usable PV input power	8 kW	9.6 kW	12.8 kW	16 kW	19.2 kW
Max. input voltage	1000 V				
Rated voltage	600 V				
Start-up voltage	160 V				
MPPT voltage range	200 - 850 V				
Max. input current	16 A / 16 A / 16 A		4 × 16 A		4 × 21 A
Max. short circuit current	24 A / 24 A / 24 A		4 × 24 A		4 × 31.5 A
MPPT number / Max. input strings number	3 / 3				4 / 4
<b>Battery</b>					
Battery type	Li-ion				
Battery voltage range	120 - 600 V <sup>①</sup>				120 - 700 V
Max. charge / discharge power	5 kW	6 kW	8 kW	10 kW	12 kW
Max. charge / discharge current	25 A		50 A		
Communication	CAN / RS485				
<b>Output AC (Grid side)</b>					
Rated output power	5 kW	6 kW	8 kW	10 kW	12 kW
Max. apparent output power	5 kVA	6 kVA	8 kVA	10 kVA	12 kVA
Rated grid voltage	3/N/PE, 380 V / 400 V				
Rated grid frequency	50 Hz / 60 Hz				
Rated grid output current	7.6 A / 7.2 A	9.1 A / 8.7 A	12.2 A / 11.5 A	15.2 A / 14.4 A	18.2 A / 17.3 A
Max. output current	7.6 A / 7.2 A	9.1 A / 8.7 A	12.2 A / 11.5 A	15.2 A / 14.4 A	18.2 A / 17.3 A
Power factor	> 0.99 (0.8 leading - 0.8 lagging)				
THDi	< 3%				
<b>Input AC (Grid side)</b>					
Input voltage range	304 - 437 V / 320 - 460 V				
Max. input current	11.4 A / 10.9 A	13.6 A / 13.0 A	18.2 A / 17.4 A	22.7 A / 21.7 A	27.3 A / 26.0 A
Rated grid frequency	50 Hz / 60 Hz				
Frequency range	45 - 55 Hz / 55 - 65 Hz				
<b>Output AC (Back-up)</b>					
Rated output power	5 kW	6 kW	8 kW	10 kW	12 kW
Max. apparent output power	1.6 times of rated power, 60 s				
Back-up switch time	< 10 ms				
Rated output voltage	3/N/PE, 380 V / 400 V				
Rated frequency	50 Hz / 60 Hz				
Rated output current	7.6 A / 7.2 A	9.1 A / 8.7 A	12.2 A / 11.5 A	15.2 A / 14.4 A	18.2 A / 17.3 A
THDv (@linear load)	< 2%				
<b>Efficiency</b>					
Max. efficiency	96.50%	97.00%	97.50%	97.90%	97.85%
EU efficiency	96.77%	97.10%	97.41%	97.51%	97.51%
BAT charged by PV max. efficiency	98.37%	98.45%	98.22%	98.31%	98.31%
BAT charged / discharged to AC max. efficiency	97.32%	97.34%	97.50%	97.50%	97.50%
<b>Protection</b>					
Anti-islanding protection	Yes				
Output over current protection	Yes				
Short circuit protection	Yes				
Surge protection	DC Type II / AC Type II (optional)				
Integrated DC switch	Yes				
DC reverse-polarity protection	Yes				
Battery reverse protection	Yes				
<b>General Data</b>					
Max. power per phase	50% rated power				
Dimensions (W × H × D)	600 × 500 × 210 mm		600 × 500 × 230 mm		563 × 412 × 230 mm
Weight	27.6 kg		30.2 kg		34.5 kg
Topology	Transformerless				
Self-consumption (night)	< 25 W				
Operating ambient temperature range	-25 ~ +60°C				
Relative humidity	0 - 100%				
Ingress protection	IP66				
Noise emission (typical)	< 46.9 dB(A)				
Cooling concept	Natural cooling				
Max. operation altitude	4000 m				
Grid connection standard	G98 or G99, VDE-AR-N 4105/VDE V 0124, EN 50549-1, VDE 0126/UTE C 15/VFR:2019, RD 1699/RD 244/UNE 206006/UNE 206007-1, CEI 0-21, C10/11, NRS 097-2-1, TOR, EIFS 2018.2, IEC 62116, IEC 61727, IEC 60068, IEC 61683, EN 50530, MEA, PEA				
Safety / EMC standard	IEC/EN 62109-1/-2, IEC/EN 61000-6-1/-3				
<b>Features</b>					
PV connection	MC4 connector				
Battery connection	Quick connection plug				
AC connection	Quick connection plug				
Display	LED indicator & Bluetooth + APP				
Communication	CAN, RS485, Optional: Wi-Fi, Cellular, LAN				

① Supports max. battery voltage to 700 V.