



**29.9-50K**

# SOLARATOR SERIES

Operates Seamlessly with Generator: Experience Uninterrupted Power, Even in Areas with Grid Instability

## S6-EH3P(29.9-50)K-H-AU

Three Phase | High Voltage

### 9 Unique Advantages

- ★ Supports up to 2x rated PV input, maximizing solar energy utilization
- ★ Supports a maximum string input current of 20A, ensuring compatibility with high-power PV modules
- ★ Compatible with 100–280Ah battery modules, reducing overall system costs
- ★ Supports fast battery charging with a maximum charging current of 140A
- ★ Two independent battery ports for flexible configurations and easy capacity expansion
- ★ Delivers 160% overload for 2s in off-grid mode, ensuring stable startup of heavy loads
- ★ Supports generator input across a wide range (20%–100% of rated power), reducing investment costs
- ★ AI integration and VPP readiness enable dynamic tariff optimization, minimizing electricity expenses and unlocking additional revenue
- ★ 7-inch industrial-grade screen, providing a larger, user-friendly interface for local operation

### 6 Leading Advantages

- Supports both DC and AC coupling, for flexible retrofits and system expansions
- Ensures reliable backup power across diverse scenarios through battery reserve management
- Extends supply time for critical loads with intelligent load prioritization
- Offers a versatile three-in-one interface for seamless integration of on-grid PV, wind power, and diesel generators
- Achieves on- and off-grid transitions in less than 10ms, ensuring an uninterrupted power supply
- Supports multi-unit parallel operation up to 500kW (Solis STS cabinet recommended for systems over 6 units)

AUSTRALIA

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# DATASHEET

Models	29.9K	30K	40K	50K
<b>Input DC (PV side)</b>				
Recommended max. PV array size	59.8 kW	60 kW	80 kW	100 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	45 A / 45 A / 45 A			4 × 45 A
MPPT number / Max. input strings number	3 / 6			4 / 8
<b>Battery</b>				
Battery type			Li-ion	
Battery voltage range			150 - 800 V	
Max. charge / discharge power	32.1 kW	33 kW	44 kW	55 kW
Max. charge / discharge current			70 A × 2 <sup>①</sup>	
Number of battery ports			2	
Max. charge / discharge power of each input	32.1 kW	33 kW	35 kW	35 kW
Communication			CAN / RS485	
<b>Output AC (Grid side)</b>				
Rated output power	29.9 kW	30 kW	40 kW	50 kW
Max. apparent output power	29.9 kVA	30 kVA	40 kVA	50 kVA
Rated grid voltage			3/N/PE, 230 V / 400 V	
Rated grid frequency			50 Hz	
Rated grid output current	43.2 A	43.3 A	57.7 A	72.2 A
Max. output current	43.2 A	43.3 A	57.7 A	72.2 A
Power factor			> 0.99 (0.8 leading - 0.8 lagging)	
THDi			< 3%	
<b>Input AC (Grid side)</b>				
Max. AC passthrough current	86.4 A	86.6 A	115.4 A	144.4 A
Rated input voltage			3/N/PE, 230 V / 400 V	
Rated input frequency			50 Hz	
<b>Input Generator</b>				
Max. input power	29.9 kW	30 kW	40 kW	50 kW
Rated input current	43.2 A	43.3 A	57.7 A	72.2 A
Rated input voltage			3/N/PE, 230 V / 400 V	
Rated input frequency			50 Hz	
<b>Output AC (Back-up)</b>				
Rated output power	29.9 kW	30 kW	40 kW	50 kW
Max. apparent output power			1.6 times of rated power, 2 s	
Back-up switch time			< 10 ms	
Rated output voltage			3/N/PE, 230 V / 400 V	
Rated frequency			50 Hz	
Rated output current	43.2 A	43.3 A	57.7 A	72.2 A
THDv (@linear load)			< 2%	
<b>Efficiency</b>				
Max. efficiency			97.8%	
EU efficiency			97.4%	
BAT charged by PV max. efficiency			98.5%	
BAT charged / discharged to AC max. efficiency			97.5%	
<b>Protection</b>				
Anti-islanding protection			Yes (Active frequency shifting)	
Output over current protection			Yes	
Short circuit protection			Yes	
Integrated DC switch			Yes	
DC reverse-polarity protection			Yes	
Surge protection			DC Type II / AC Type II	
Integrated AFCI 2.0			Optional	
Protection class / Over voltage category			PV II, battery II, AC III	
<b>General Data</b>				
Dimensions (W × H × D)			530 × 880 × 290 mm	
Weight			73 kg	
Topology			Transformerless	
Self-consumption (night)			< 35 W	
Operating ambient temperature range			-25 ~ +60°C	
Relative humidity			0 - 100%	
Ingress protection			IP66	
Cooling concept			Intelligent fan-cooling	
Max. operation altitude			4000 m	
Grid connection standard			AS/NZS 4777.2:2020	
Safety / EMC standard			IEC 62109-1/-2, IEC 61000-6-2/-4	
<b>Features</b>				
PV connection			MC4 Quick connection plug	
Battery connection			Terminal connector	
AC connection			Terminal Block	
Display			7.0" LCD display & Bluetooth + APP	
Communication			CAN, RS485, Ethernet, Optional: Wi-Fi, Cellular, LAN	
Country of manufacture			China	

① Supporting parallel 140A input.