

SolaGRID ESS

Fully integrated and expandable lead acid gel energy storage system

BENEFITS

Smart Storage

Can charge from multiple sources including PV, Wind, Hydro, Diesel Genset, and Public Grid with automatic supply control.

Cost-Efficient and Easy to Expand

Modular and adjustable for small to large sized renewable energy systems; can be easily and cost-effectively expanded as system needs grow.

Turnkey, Rugged Design

Fully turnkey system packaged in an aesthetic, weatherproofed enclosure; can withstand extreme weather conditions. Requires only a few simple AC cable connections to install.

Quality-Driven Performance, Durability

Built to perform efficiently and consistently over prolonged periods, for example, the entire lifespan of a solar system. Based on stringent assembly standards; comprised of high-quality SMA Sunny Island/Sunny Backup inverters and BAE Secura Solar batteries. AS 3000, AS 4509, AS 4086 compliant with NPER/RPEQ/CPEng certification.



SolaGRID ESS is available in 8 models, ranging from 4.6 kW to 6 kW for standalone and 5 kW grid-coupled units. Each model is available in 10 or 20 kWh of usable energy output.

10 Year Design Lifetime



With **SolaGRID ESS**, the setting sun or a windless day poses no loss in energy. This compact, turnkey energy storage sytem delivers stored energy to bridge the gap between continued electrical demand and decreasing energy production. SolaGrid ESS can also save expense by drawing power from the battery instead of the grid if higher-rate peak hours apply. The battery can then be recharged during lower rate, off-peak hours.



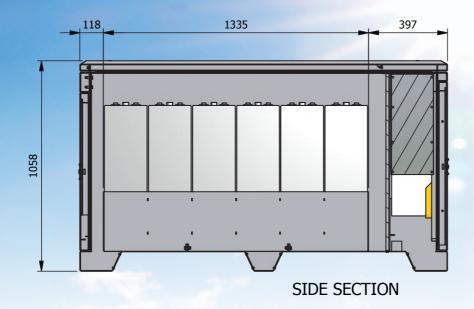


FEATURES

- Fully integrated expandable energy storage system based on SMA Sunny Island/Sunny Backup inverters and BAE Secura Solar batteries.
- Short time overload capacity of up to 12 kW (3 sec) for Standalone versions and 8.4 kW (1 min) for Grid-Coupled version — to suit motor-starting or welding loads.
- Parallel system configurations possible up to 24 kW 1-phase or 216 kW 3-phase (Standalone) or 15 kW 3-phase (Grid-Coupled).
- Charging from multiple sources possible including PV, Wind, Hydro, Diesel Genset, and Public Grid with automatic supply control.
- Control of non-essential loads with load shedding and time scheduling.
- Web-based or ethernet control and monitoring interface.
- Fully pre-assembled or partial assembly delivery options to suit site requirements. Forklift or crane lifting options.
- AS 3000, AS 4509, AS 4086 compliant with NPER/RPEQ/CPEng certification.



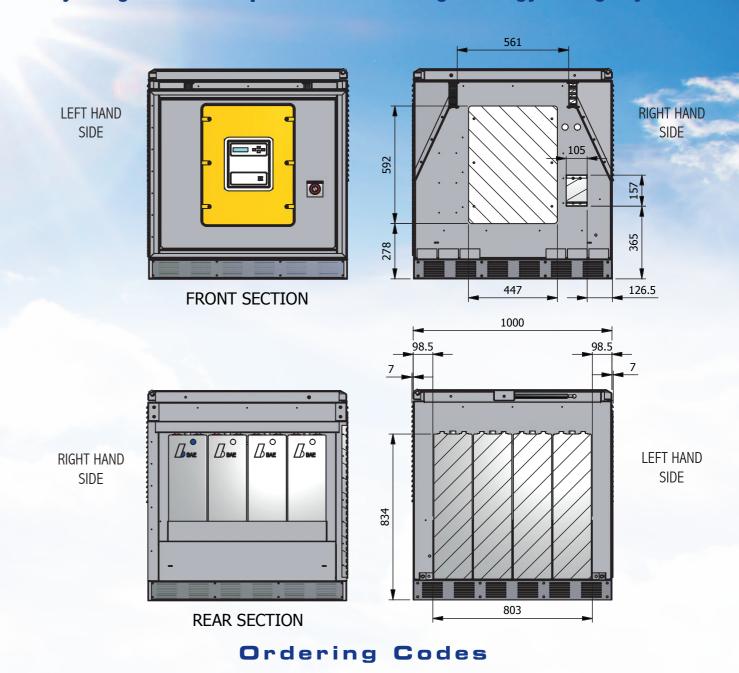
SolaGRID ESS



SPECIFICATIONS

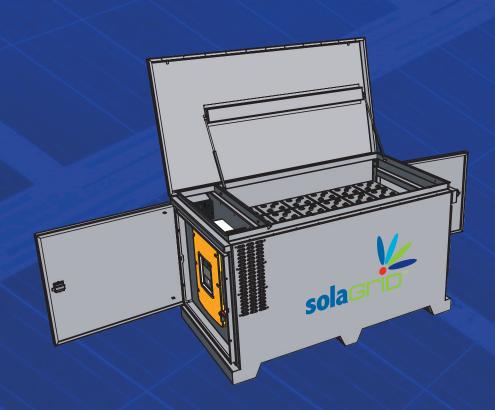
SolaGrid ESS Series	SolaGRID ESS 10	SolaGrid ESS 20	
Energy Storage Capacity	10.92 kWh @ C10	kWh @ C10 18.53 kWh @ C10	
Usable @ 50% DOD	12.23 kWh @ C20 20.97 kWh @ C20		
Battery Capacity	705 Ah @ C100	1190 Ah @ C100	
Battery Model	6 PVV 660	8 PVV 1200	
Battery Chemistry	Valve Regulated Lead Acid Gel (Non Spillable)		
Battery Arrangement	24 x 2 V Cells in Series		
System Voltage	48 VDC		
Rated Cycle Lifetime	2950 @ 50% DOD		
Continuous AC Power	4.6/5/6 kW — Standalone Versions		
(Nominal @ 25°C)	5 kW — Grid-Coupled Version		
Rated AC Frequency	50 Hz (45 – 65 Hz)		
Rated AC Voltage	230 V (172.5 – 264.5 V)		
Maximum AC Input Power	12 kW — Standalone Versions		
	5.7 kW — Grid-Coupled Version		
Operating Temperature Range	-20°C — 45°C (Fan Ventilated)		
Enclosure Dimensions	1900 x 1000 x 1000 mm		
Enclosure Construction	Fully Weatherproof Powder Coated Aluminium		
Cable Entry	Bottom — both sides — up to 12 x Ø40 mm		
Weight (Fully Assembled)	1000 kg 1900 kg		
Warranty	System: 5 years • Batteries: 3 years		

Fully integrated and expandable lead acid gel energy storage system.



SolaGrid ESS Series/*Opening	ESS 10: LEFT Hand	ESS 10: RIGHT Hand	ESS 20: LEFT Hand	ESS 20: RIGHT Hand
Continuous AC Power				
Standalone version with SI5048 (5.0 kW)	SG-ESS-10-SA5-LH	SG-ESS-10-SA5-RH	SG-ESS-20-SA5-LH	SG-ESS-20-SA5-LH
Standalone version with SI6.0H (4.6 kW)	SG-ESS-10-SA6-LH	SG-ESS-10-SA6-RH	SG-ESS-20-SA6-LH	SG-ESS-20-SA6-RH
Standalone version with SI8.0H (6.0 kW)	SG-ESS-10-SA8-LH	SG-ESS-10-SA8RH	SG-ESS-20-SA8-LH	SG-ESS-20-SA8-RH
Grid coupled version with SBU5000 (5.0 kW)	SG-ESS-10-GC5-LH	SG-ESS-10-GC5-RH	SG-ESS-20-GC5-LH	SG-ESS-20-GC5-RH

*Door openings nominated LEFT HAND / RIGHT HAND when viewed from inverter bay.





Unit 2, 35 Robson Street Clontarf QLD 4019 fax: +61 7 3283 2001 info@SolariEnergy.com.au

+61 7 3118 5927 • www.SolariEnergy.com.au