



Solar Energy Australia
A Powerbox Company



Guardian Series

26 kWh | 38 kWh | 50 kWh

Australian Made, Pre-Assembled Battery System for
On and Off-Grid Energy Storage Applications



The Guardian Series is a range of pre-assembled battery systems for on and off-grid energy storage applications.

Designed and manufactured in Australia for Australian conditions, the Guardian Series is engineered with the highest standards of safety and performance in mind, providing a durable and long-lasting solution.

The pre-wired design of the Guardian Series reduces installation time and costs, making it an ideal choice for both new and retrofitting within existing solar installations. With an intuitive user interface and advanced monitoring capabilities, the Guardian Series is easy to use and maintain, making it an ideal choice for households and businesses alike.

Whether you're looking to disconnect from the grid, reduce your energy costs, improve your energy independence, or simply do your part for the environment, Solar Energy Australia's Guardian Series has you covered.



Powered by Polarium

Polarium is a Swedish company dedicated to providing the best performing, safe and sustainable energy storage solutions, built on lithium-ion technology.

Since introduction in 2019, Polarium batteries have quickly become an integral part of critical infrastructure across Australia. You can now find Polarium batteries providing reliable backup power to telecommunications networks, government & public safety networks, railway networks, power utilities and defence infrastructure.

Their durability, high performance, intelligence, and long lifespan make them an ideal choice for powering these essential services.

Solar Energy Australia is now pleased to be offering this same battery technology within our energy storage solutions.

FEATURES & BENEFITS



AUSTRALIAN MADE, AUSTRALIAN SUPPORT

The Guardian Series has been designed, engineered, and manufactured in Australia for our unique environment. As our customer, you'll be comprehensively covered by our transparent 10-year warranty and supported throughout the lifetime of your system.



SAFE

The Guardian Series meets and exceeds all relevant safety standards and benefit from 5 layers of embedded safety protection, including the most sophisticated Battery Management System (BMS) available on the market today. In addition, each module benefits from redundancy in safety critical components and processes ensuring the Guardian is always safe even under abnormal operating conditions.



SMART

Accurately monitor key battery parameters and system performance via Bluetooth and supported inverter platforms. Know in real time how your battery system is performing with accurate State of Charge (SOC), State of Health (SOH), Current, Voltage and Temperature readings.



RELIABLE

Wide operating temperature range, patented Current Limiting Device to prevent over-charge/discharge, integrated pre-charge circuit and 'black start' feature combine to equip the Guardian Series with world-class reliability.



FLEXIBLE

The Guardian Series is a 'plug and play' pre-assembled battery system, designed with solar installers in mind that is compliant with AS 5139 installation requirements and the Clean Energy Council's 'Best Practice Guide'. It supports a range of inverter/charger platforms and can be configured for both 'AC Coupled' and 'DC Coupled' solar installations, making it an extremely flexible platform.



HIGH-ENERGY DENSITY

Available in 3 models – 26 kWh, 38 kWh and 50 kWh, the Guardian is the highest energy density and smallest footprint pre-wired battery system available on the Australian market. Larger battery systems can be easily configured by paralleling multiple cabinets via an external DC busbar.



PRICE COMPETITIVE

The Guardian series is not only the safest, most reliable, and smartest battery storage system on the market but also one of the most price competitive. The Guardian series offers excellent value for money, making it an ideal choice for those looking to maximize the benefits of their solar installations.

TECHNICAL SPECIFICATIONS

	GUARDIAN26	GUARDIAN38	GUARDIAN50
Nominal Capacity ¹ [kWh]	25.4 kWh	38.1 kWh	50.8 kWh
Usable Energy @ 80% DOD [kWh]	20.32 kWh	30.48 kWh	40.64 kWh
Nominal Voltage [Vdc]	50.8 VDC		
Recommended Charge Voltage [Vdc]	57.4 Vdc (SOC = 90%)		
Recommended End of Discharge Voltage [Vdc]	43.4 Vdc (SOC = 10%)		
Discharge Current [Arms]			
- Max. Peak (60 Seconds)	200 Arms	300 Arms	400 Arms
- Max. Continuous	160 Arms	240 Arms	320 Arms
Rated DC Power ² [kW]	8.2 kW	12.3 kW	16.4 kW
Maximum Charge Current [Adc]	100A	150A	200A
Pre-wired MCCB rating	2-Pole 250A		
Efficiency (%)	>96%		
Operating Ambient Temperature [°C]			
- Charging	0°C to +50°C		
- Discharging	-20°C to +60°C		
Cooling			
- Battery Module	Natural Convection		
- Cabinet	Thermostatically Controlled Fan		
Electrical Safety	Complies to 'Best Practice Guide for Battery Storage Equipment – Electrical Safety Requirements – Version 1'		
Safety Standards	AS IEC62619, AS/NZS 62368-1, UN38.3		
EMC Standards	RCM, ETSI EN 300 386 1.6.1 (2012-09)		
Dimensions [mm]	685 mm (W) x 763 mm (D) x 1280 mm (H)		
Weight [KG]			
- Cabinet Only	200 KG		
- Battery Modules Installed	332 KG	393 KG	454 KG
Protection Class	IP20		
Connections	Via Amphenol Surelok 10.3mm (pre-terminated cable supplied) + RJ45 (x4)		
Supported Multimode Inverter Platforms			
- CE+T	Sierra25 48/270		
- Selectronic	SP Pro Series 2i - SPMC480-AU / SPMC481-AU / SPMC482-AU		
- SMA	Sunny Island 4.4M / 6.0H / 8.0H		
- Victron Energy	MultiPlus / MultiPlus-II / Quattro		

¹ Based on discharge of 0.2C at 25°C to 35Vdc.

² Based on nom. voltage at 25°C.



SCAN THE QR CODE TO WATCH OUR
SOLAR ENERGY AUSTRALIA GUARDIAN
BATTERY SERIES VIDEO.

MARKETS



DOMESTIC



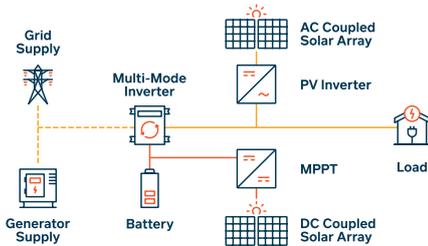
COMMERCIAL &
INDUSTRIAL (C&I)



UTILITIES

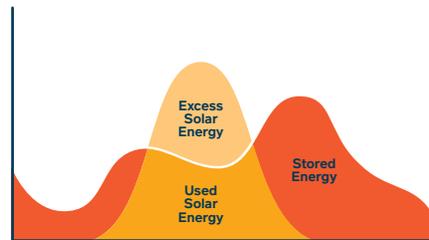
USER CASES / APPLICATIONS

The Guardian Series is an enabler for those households and businesses who are looking to increase their energy independence.



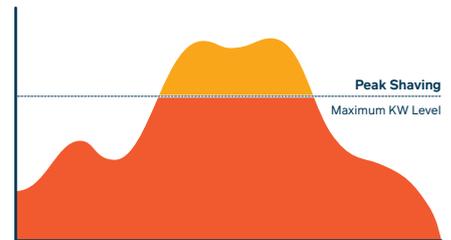
STAND-ALONE POWER / BACK-UP

The lithium-ion battery technology has rapidly become the go-to battery technology for use in off-grid solar systems, or those requiring back-up/UPS function. This is due to their high energy density, fast re-charge ability, long lifespan, and low maintenance requirements. Batteries can efficiently store excess solar energy production for use during low or no solar generation, providing a reliable source of energy for off-grid locations with less reliance on diesel backup.



LOAD SHIFTING

Store excess energy generated from your solar system during the day for use when energy demand exceeds solar output or at night. Use the stored energy from your battery system to shift energy consumption from high-cost peak periods to low-cost off-peak periods, reducing overall electricity costs.



PEAK SHIFTING

Demand charges on your electricity bill are based on the highest amount of power used during a billing cycle. High demand charges are used by Energy Providers to incentivize reducing peak consumption and support grid stability, coming at a significant cost to businesses. Use stored energy from your battery system to reduce peak energy demand drawn from the grid, reducing over-all electricity costs.

ABOUT SOLAR ENERGY AUSTRALIA

At Solar Energy Australia, we are champions of **energy independence**.

We are a dedicated team of industry professionals on a mission to bring the very best in battery energy storage technology and solutions to the Australian households and businesses alike.

Founded in 1996, Solar Energy Australia is one of the few companies that can claim more than 25 years of experience in renewable energy and off-grid power.

We understand the day to day demands of both living and working off-grid, something that is reflected in all the products we offer.

Why choose Solar Energy Australia?

- ✓ Australian owned and operated manufacturer, with more than 25 years' experience in the renewable energy sector.
- ✓ Part of the Powerbox group of companies, who are specialists in the design and manufacture of power conversion and UPS equipment for Telecommunications, Railway, Defence and Utility applications.
- ✓ Research & Development, Manufacturing & Warehouse facilities in Sydney, Australia.
- ✓ Australian owned and supported warranties
- ✓ Strategic partnership with Swedish battery manufacturer Polarium for development of BSS and BESS products for the Australian market.
- ✓ Dedicated team of engineers to support training, installation and commissioning, and total life support.
- ✓ Solar Energy Australia products only available through registered partner network.

Solar Energy Australia Pty Ltd

4 Beaumont Road, Mt Kuring-Gai,
NSW 2080 Australia

p: 1800 779 688

e: sales@solaraustralia.com.au

solaraustralia.com.au

