



Solutions for renewable energy storage

Made locally, delivered globally.

Selectronic is an Australian, family-owned company that has been delivering energy solutions to Australia and the world for more than fifty years. Founded in 1964 by the Scott family, Selectronic quickly established itself as a major manufacturer of custom made transformers and inductors for the local electronics industry.

Over the decades, Selectronic has grown through a philosophy of providing products and solutions that focus on the customer needs and the demand from renewables and energy storage industries. Selectronic was one of the first companies in the world to have the concept of, and deliver products for, the storage of renewable energy.

Using advanced technologies, Selectronic's inverter products form the heart of efficient, cost-effective storage based renewable energy systems. Renowned in the renewables industry for its performance, durability and versatility, Selectronic's flagship model the SP PRO, is designed and made by Selectronic at its production facility in Victoria.

Through Selectronic's commitment to championing and supporting Australian owned businesses and manufacturers, each SP PRO grid forming battery inverter is assembled using over 83% in materials from Australian companies.

You can find an SP PRO in the tropics of Indonesia, the mountains of the Himalayas, the deserts of the UAE, the outback of Australia and on suburban homes throughout the world.

Selectronic has its customers covered with these world-renowned grid forming battery inverters that offer grid independence, reliability, flexibility and Melbourne-based after sales support that is second to none.



**Each SP PRO is
assembled using over
83% in materials from
Australian companies.**

Rod Scott, CEO



The Selectronic approach

Imagine a world where you can control your own power, free to individualise how you would like to use and produce your energy. A world where you can be connected to the main electricity grid, or be as remote from it as you wish.

A Selectronic based power system will be built around the Australian designed and manufactured SP PRO. The SP PRO is a bi-directional grid forming battery inverter, meaning it connects to a battery and can produce AC voltage or vice versa. The intelligence built into the SP PRO will allow seamless connection with solar inverters, batteries and grid or backup generators.

A system can be tailored to suit your lifestyle or application. A system where the power is in your hands.

The component approach

The Selectronic component approach allows battery, battery inverter and solar inverter to be mixed and matched. This means that we will not lock you in for choices in the future. You may want to upgrade your batteries to the latest technology, or add more Solar. By thinking of the big picture, you will make the most of your financial investment whilst maximising your environmental responsibility.

Stay connected

Our free SP LINK software can be used to display over 200 data points, up to 18 months of daily system summaries and up to 4 months data logging. There are a number of wired and wireless options, allowing you to view and control your system from anywhere in the world. For a system overview anywhere you have internet access on any device, our Select.live is available.

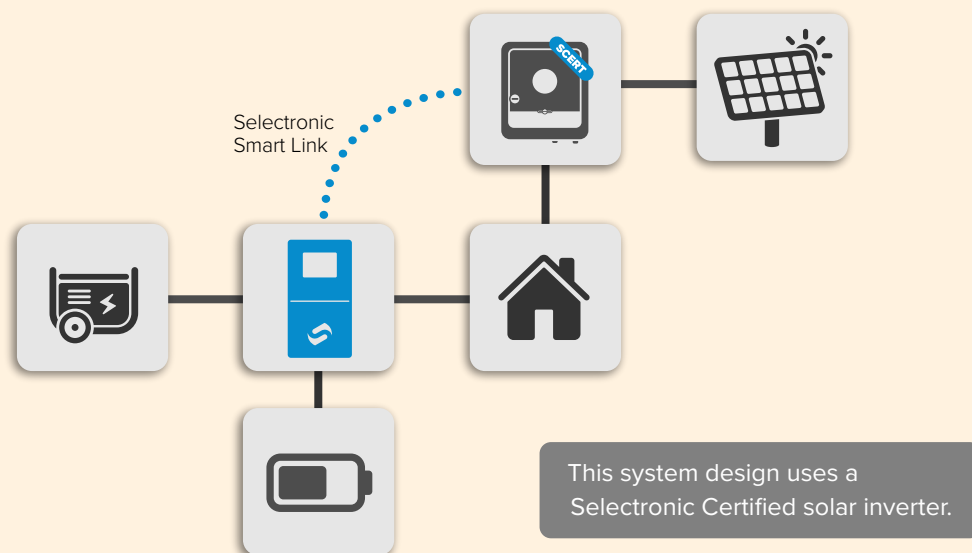
Relax, we've got you covered

The SP PRO grid forming battery inverter is at the heart of all battery-based Selectronic energy systems. The SP PRO can work with all of the top battery brands available including BYD, LG, GenZ, PowerPlus Energy, Pylontech, Sonnenschein and Selectronic's own SelectCell battery range. Selectronic gives you peace of mind, with up to a 10 year (country-dependent) warranty and an Australian-based customer service and support team.

System solutions to give you independence off the grid...

A typical Off-Grid power system

When you leave the grid behind, reliability, efficiency and lowest cost of ownership are essential. The intelligence of the SP PRO will manage all components of your system to maximise battery life, minimise generator run, and ensure the lowest possible cost of ownership over 10 to 25 years. The expected long life of our systems will not only ensure a great financial solution but an environmental one as well.



Solar power

The SP PRO can operate with AC or DC Coupled Solar arrays. Our AC Coupled Smart Link technology utilises RS485 communications to accurately and smoothly control the output of the Solar. The result is a smooth frequency and voltage output which far exceeds the quality of any other power source.

Fuel generators

Sometimes there just isn't enough sun or wind, so a backup generator is needed when batteries become depleted. The SP PRO will start the generator to run the load and then use any spare generator capacity to charge the batteries. If a load larger than the generator is turned on, the SP PRO will also run the load along with the generator. Of course SP PRO intelligence will ensure the generator does not operate during your quiet times. Ultimate piece of mind.

Hydro or wind

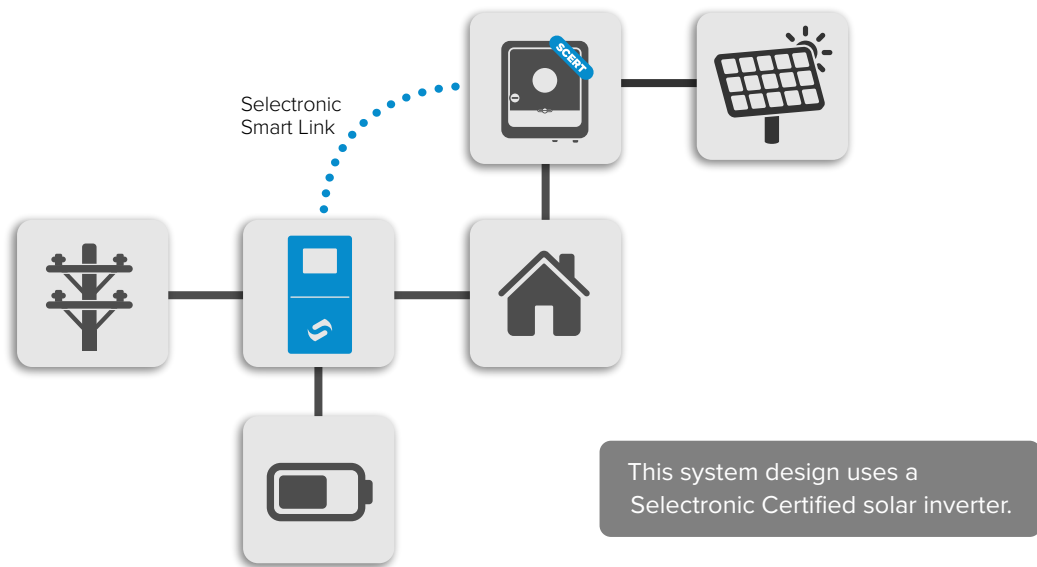
Some sites are geographically better suited to utilising wind or water as a source of power. The SP PRO will work with these DC Coupled energy sources without a problem, while continuously providing an accurate State-Of-Charge (SOC) reading.

... or full control on the grid

The complete Selectronic solar hybrid solution

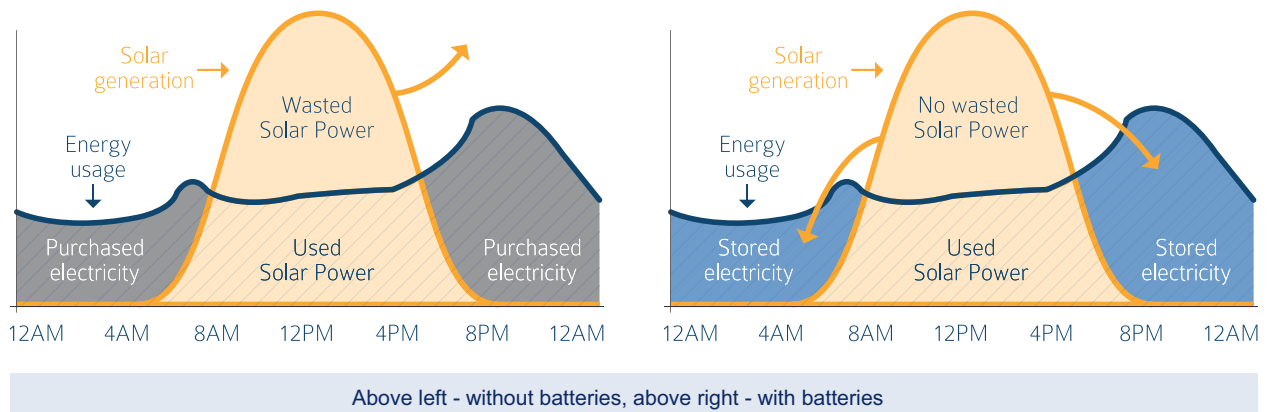
Incorporating a Selectronic Certified solar inverter with our Smart Link technology allows our flagship solution to take control of your power choice and provide flexibility over how you use the electricity grid. Our approach allows more self-consumption of solar-generated power and less reliance on the grid. Exporting unused solar to the grid appears at first glance to be cost effective but you may be paid very little, if anything, for the solar you export. Once the sun has gone down you will pay full price to buy back the electricity you gave away earlier - it hardly seems fair.

Electricity prices and Solar Feed-In Tariffs are constantly changing. That's why we developed our advanced Smart Link technology to allow full and variable control of the energy flow in your system. Regardless of the market conditions, this system can be easily adapted to any tariff situation day or night. You can choose to recharge your batteries with cheap overnight electricity or with solar the next day. You choose how much battery storage you use. Use the grid as little or as much as you want, it's your choice. Simple, automatic and undetectable.

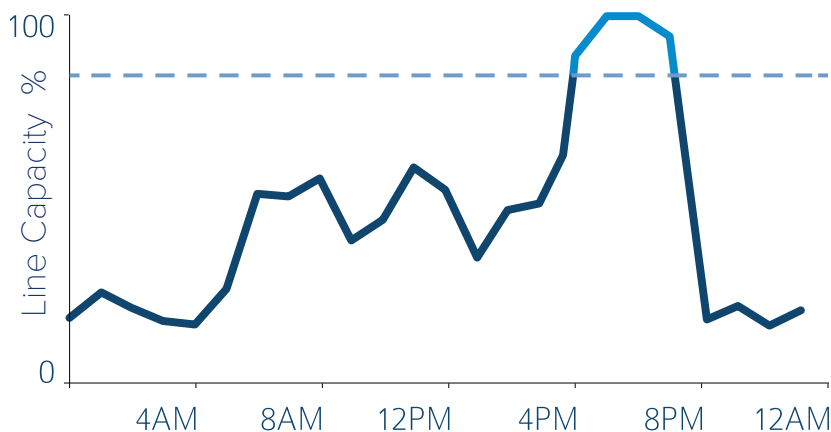


Selectronic systems can adapt and grow as your needs change. Up to 240kW with 480kW of Solar can be achieved.

The benefit of batteries On-Grid



By adding energy storage to a new or existing system, you are storing the unused solar power and reducing the amount of purchased electricity from the grid. This reduces energy bills and stores power for when you need it most, especially during power outages and during load shedding periods.



Peak lopping diagram shows energy above line capacity, supplied from stored energy.

Peak Lopping

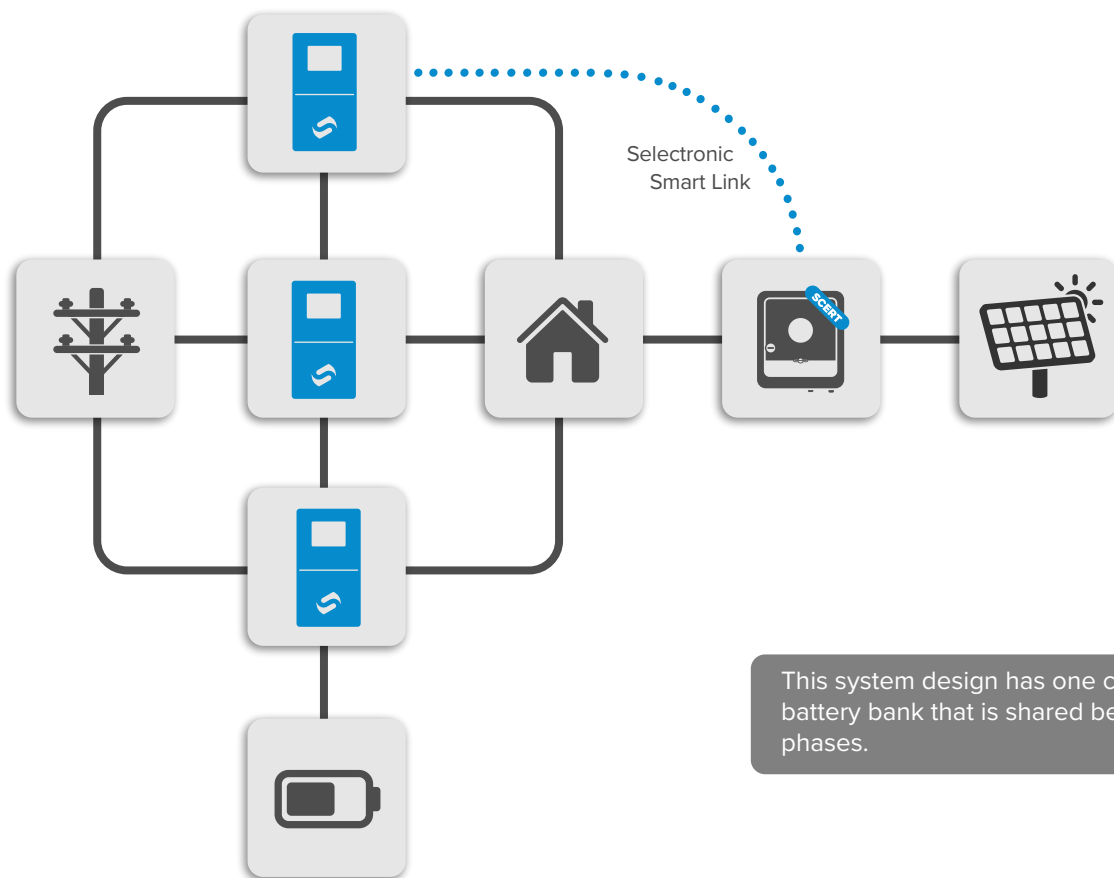
Electricity charges come in many different forms. In commercial applications it is common for electricity charges to be based on the site's peak demand. Utilising a battery bank with any SP PRO grid forming inverter allows additional load capacity to come from battery storage rather than the electricity grid. When demand reduces, batteries will be recharged ready for the next peak demand event. Peak demand charges can be significantly reduced with this system.

Grid support

The same system as used for Peak Lopping can be used to support a grid which has insufficient supply capacity. To add additional capacity to a grid, particularly a rural grid, can be very expensive. Additional capacity is easily supplied by incorporating battery storage and an SP PRO inverter. Whenever the AC Load demand is above the grid capacity, additional energy comes from the SP PRO and battery bank.

Three phase system

Many larger homes and industrial buildings will have a three-phase supply. By installing an SP PRO on each phase, along with a three-phase Selectronic Certified solar inverter, you will have all bases covered. Just like our single-phase solution, solar power will be optimised and spare solar energy stored in the battery. Our three-phase systems share a common battery bank, so energy can be shared between phases. Should the grid fail, you will continue to be able to operate three-phase or single-phase loads.



This system design has one common battery bank that is shared between phases.

POWERCHAIN

No job is too big

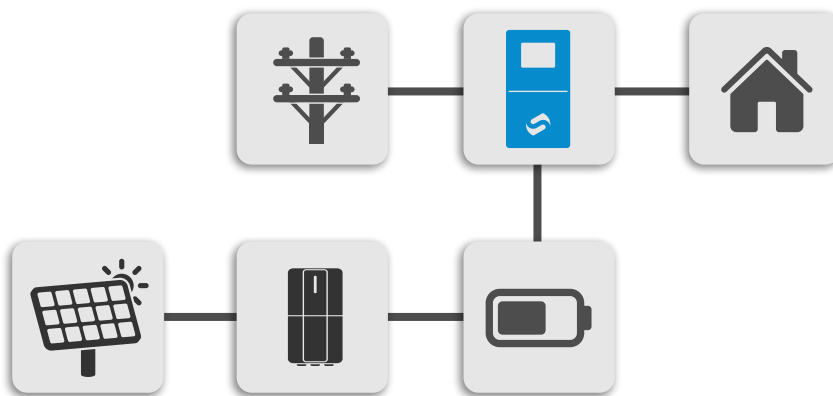
Our newly released Powerchain technology allows up to 12 SP PRO inverters in a system for up to 456kW of peak battery power. Create new systems or upgrade existing systems, with the ability to add more SP PRO inverters as your power needs grow. Single, dual or three-phase, grid connected or Off-Grid, Powerchain can do it all. Selectronic Powerchain systems are being used all over Australia and New Zealand, powering everything from houseboats to entire luxury island resorts!



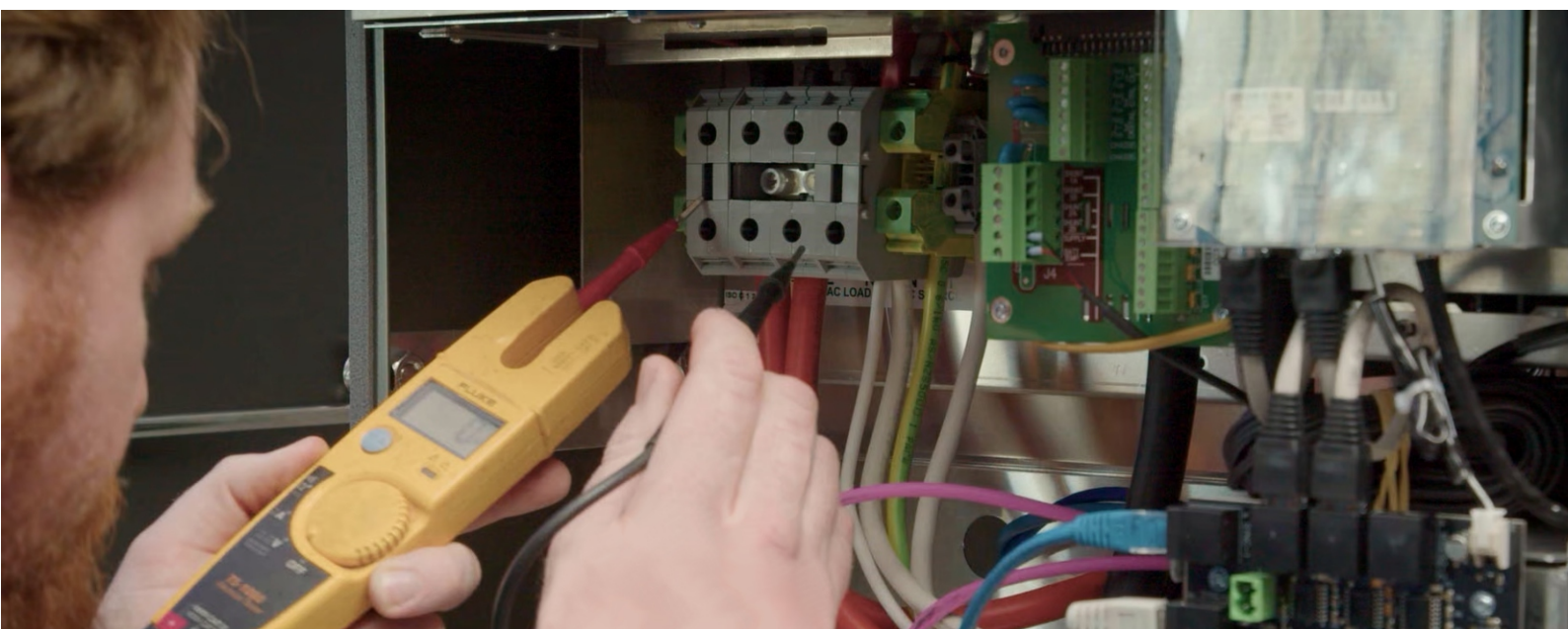


DC coupled system - more solar installed

The flexibility of the SP PRO also allows solar input on the battery side of the system, this is called DC Coupling and may allow significantly more Solar to be installed than may otherwise be allowed by your electricity company.



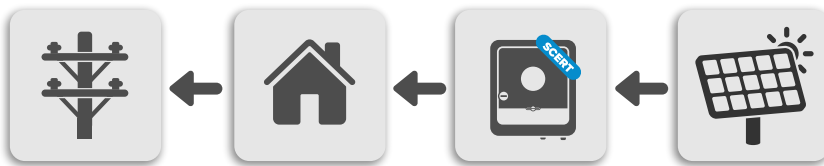
This system design uses an MPPT (Maximum Power Point Tracker) solar controller in place of a solar inverter.



System solutions to stay connected to the grid.

Solar power system - smart battery ready

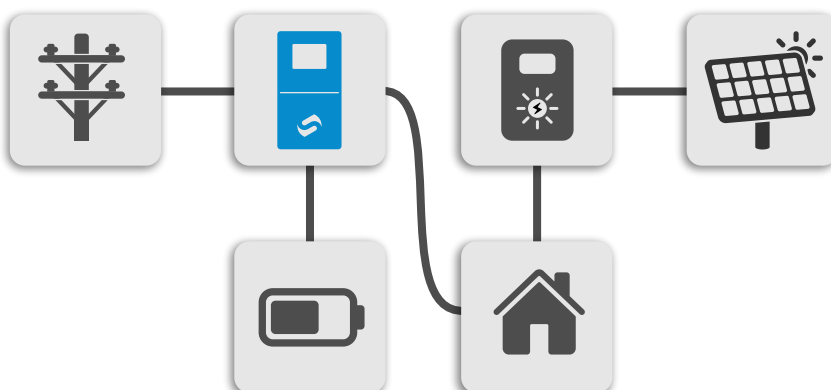
A cost effective solar installation uses a Selectronic Certified solar inverter to directly supply the AC appliances, while excess solar power is exported to the grid. Using a Selectronic Certified solar inverter allows a battery storage system to be added at a later date giving you access to a new world of features and possibilities. A Selectronic Certified solar inverter gives you maximum flexibility, now and into the future. With its flexibility and free software upgrades, your added battery storage system will look after you well into the future – regardless of changes in electricity supply structures.



This system design uses a Selectronic Certified solar inverter.

Retrofit existing solar power systems

Millions of grid solar systems are already installed around the world, many with generous feed-in tariffs that have now come to an end. The addition of an SP PRO bi-directional hybrid inverter allows you to store any excess solar energy in a battery to use later, instead of exporting it to the grid. Any solar inverter, including micro inverters, can be retrofitted with an SP PRO. If your solar inverter is Selectronic Certified, then more enhanced features within your SP PRO will be available, such as export limiting and larger solar arrays.



This system design retrofits to a system using any solar inverter.

Our products do more than you can possibly imagine.

Whether being used with or without the grid, the SP PRO is simply stunning in its versatility and robustness. We are so confident in our product we back it with up to a 10 year warranty.

Whatever your power needs, Selectronic also have you covered with an array of 'Selectronic Certified' solar inverters, as well as the Select.live remote monitoring service that allows you to monitor your power system 24 hours a day from anywhere in the world with an internet connection!

For more detailed technical information and specifications of Selectronic products, please visit our website.



SP PRO Series 2i

One of the most intelligent battery inverters in the world, the SP PRO bi-directional inverter charger can control and manage every aspect of your energy needs. Whether you live Off-Grid, On-Grid and want to add storage, or On-Grid and want to move Off-Grid, the SP PRO will convert electricity stored in batteries to operate your usual electrical loads and provide a quality and reliability far exceeding grid electricity.

All home appliances - including heating and cooling - can be operated without fuss; equipment such as pumps and motors can be operated as normal. By incorporating solar, wind, hydro or a diesel generator with batteries, you can be sure you will never be without power.



Selectronic Certified

To utilise all of the possibilities of an SP PRO system such as export limiting or going off the grid, you will need to work with a Selectronic Certified solar inverter. These inverters will use dedicated communications to precisely control the flow of energy from the solar panels. This means you have a system that is flexible, accurate and future proof.

When it is Certified you have peace of mind with compatibility and backup from Selectronic. Just imagine when you make that leap to leave the grid and go Off-Grid, your SP PRO system is ready to take you there.

SP PRO Series 2i Specifications

SP PRO model	AC continuous output	AC output 30 minutes	AC output peak	Battery voltage	Max AC solar with Selectronic Certified inverter	Max AC solar with non Selectronic Certified solar inverter	Max continuous backup power*	Solar operates during blackout	Internet monitoring	Pass through from Grid [#]	Power interruption in blackout	Warranty
SPMC240-AU	3.0kW	4.2kW	7.5kW	24V	6.0kW	3.0kW	3.0kW	Yes	Yes with optional Select.live	15kW / 240kW per phase	Typically less than 30 milliseconds	Up to 10 years for Aus / NZ, otherwise 5 years. Conditions apply.
SPMC241-AU	4.5kW	6.75kW	10.5kW	24V	9.0kW	4.5kW						
SPMC480-AU	3.5kW	5.25kW	8.4kW	48V	7.0kW	3.5kW						
SPMC481-AU	5.0kW	7.0kW	12.0kW	48V	10.0kW	5.0kW						
SPMC482-AU	7.5kW	11.25kW	18.0kW	48V	15.0kW	7.5kW						
SPMC1201	7.5kW	11.25kW	18.0kW	120V	15.0kW	7.5kW						
SPLC1200	15.0kW	23.0kW	33.0kW	120V	30.0kW	15.0kW						
SPLC1202	20.0kW	30.0kW	38.0kW	120V	38.0kW	20.0kW						

*Output dependent on battery capacity

[#]240kW per phase with external contactor

This information reflects the current technical state at the time of printing. Subject to technical changes. Errors and omissions excepted. Figures provided should be used as a guide only. See www.selectronic.com.au for full specifications.



SelectCell Lithium Batteries

With the SelectCell lithium battery range, you get unprecedented collaboration and integration with the SP PRO. Capable of system capacities from 27kWh up to a massive 1MWh, it is designed to meet the needs of 48V / 120V SP PRO systems and higher DC Voltage systems up to 628V using alternative inverters.



Single or Worker PCC

Manager PCC

Power Control Cabinets (PCC)

To ensure a reliable, safe and convenient installation, each system will be supplied with a choice of Power Control Cabinets (PCCs). These superbly engineered cabinets will not only allow for the easiest possible integration of multiple batteries but also provide the ability to choose the level of redundancy required in the system.



Select.live

Today we demand up to the minute information as a part of everyday life. Select.live is a remote monitoring portal that provides end users with user-friendly access to understand what is happening with their system in real time.

Select.live can be integrated with any SP PRO system. The secure web-based portal can be accessed on any internet connected PC or Mac computer, or any portable device that uses iOS or Android platforms.



Manufacturing in Australia Since 1964

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Solutions Brochure BR0018_06 - Specifications may change without notice. See website for latest version.