



APEX
ENERGY
AUSTRALIA

Off-Grid Solar, Battery Storage & EV Charging Systems

www.apexenergyaustralia.com.au



Off-Grid Solar, Battery Storage & EV Charging

An off-grid solar and battery system provides homeowners with reliable electricity independent of the electricity grid. These power systems are suitable for a range of electricity requirements, from tiny homes to commercial properties and everything in between.

There is no one size fits all off-grid power solution; each property and applications energy requirements must be individually evaluated. This evaluation process ensures the correct system and components are selected, maximising your investment and ensuring power reliability.

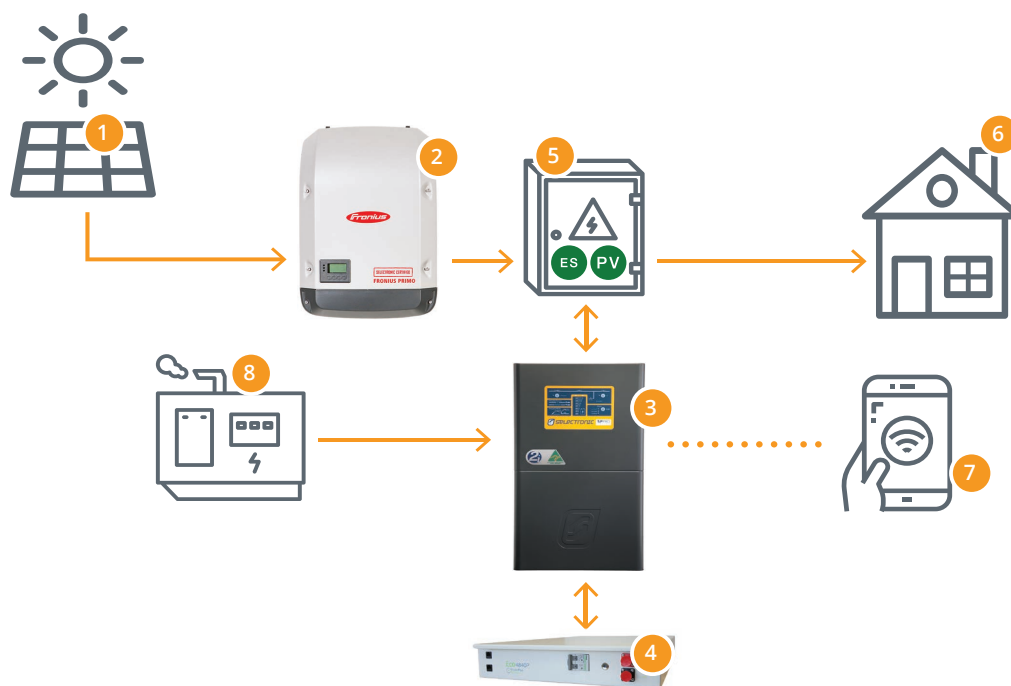
The peace of mind of your electricity supply is of the utmost importance.

Off-Grid Systems are needed when access to other reliable electricity sources is either not possible, un-economic, environmental drivers or a combination of these reasons. The use of local energy generation through solar modules and storing this energy in battery storage results in a highly efficient power source, total control and ownership of your energy resource.

Features and benefits of going Off-Grid:

- ✓ Energy independence and self-sufficiency
- ✓ A clean source of energy
- ✓ Control and ownership of your energy
- ✓ Environmental benefits
- ✓ No grid connection cost (poles and wires)
- ✓ No quarterly power bills

How an off-grid system works and what is included



An off-grid system includes equipment that must function in symmetry together to maintain optimal performance, equipment longevity and most importantly, power dependability.

- 1 **Solar Array** – Captures the sun's energy
- 2 **Solar Inverter OR MPPT Solar Charge Controller** – Converts the Solar Array energy into usable electrical power for your home or stored in the battery bank
- 3 **Battery Inverter/Charger** – Charges the battery bank when excess energy is available or discharges the battery bank to power your home
- 4 **Battery storage** – Stores solar energy during the daytime for use at night time
- 5 **System switchboard** – The area for electrical connections, electrical safety protections and user control
- 6 **Your Home** – Where electricity is being consumed
- 7 **Communications** – Access system information locally and remotely
- 8 **Backup energy source** – For times of temporary increased consumption or poor weather conditions

Necessary steps to consider and how to choose the right system



1. Estimating your energy consumption

This first step should not be underestimated and is very important to your system's future outcome. The detailed and accurate calculation of the electrical loads in a home forms the foundation for all the decisions that follow. Our CEC accredited off-grid designers thoroughly review your electricity demand and evaluate how appliances are likely to be used, homeowner lifestyle factors and environmental considerations. This ensures the off-grid system foundations are rock solid.



2. System conceptualisation and equipment selection

Solar equipment is a bit like a jigsaw puzzle; each part must be compatible, compliant, and work together harmoniously. Carefully calculating the correct PV array size, the inverter capacity, and matching a battery bank include several underlying considerations: peak discharge and charge capacity, heat tolerances, and environmental factors. We ensure there is power every day and every night, seven days a week, 365 days a year, no matter your location.



3. Installation and commissioning

Precise design and high-quality components are essential for a dependable power supply, but if the people installing and commissioning this equipment lack the proper off-grid electrical knowledge, your investment will be compromised. Thankfully, the Apex Energy installation team has decades of experience in stand-alone power systems installation, and we continue to build on this knowledge. We know it is our responsibility to deliver a safe and reliable electricity supply and take this seriously.



4. Monitoring and Service

A monitoring system enables both the homeowner and ourselves to keep an eye on system performance. Remote monitoring provides you with peace of mind that your energy investment is doing everything it should be. When selecting an off-grid provider, it is important to understand you will be connected to this company or person for many years to come. If you require support, our service team is only a phone call or email away and available in the unlikely event we are needed.



Off-Grid Home - Everyday system



Ground Mount Solar Array

Apex Energy Australia Solutions



Most Popular



Off-Grid Home - Light

Off-Grid Home - Everyday

Off-Grid Property

Suitable For	Tiny homes Holiday homes Efficient homes Cabins Sheds Offices	Holiday homes Family homes Workshops Accommodation Offices	Large homes Farms and estates Workshops Offices Businesses
Equipment	BOS System One Victron architecture Made in Germany	Selectronic SP Pro SPMC Fronius or FIMER Inverter Powerplus ECO Batteries	Selectronic SP Pro SPLC Fronius Symo Solar Inverter Powerplus LiFe Batteries
Inverter power	2.4 or 10kW, 1Phase	3 to 7.5kW, 1Phase	15 to 60kW, 1-3Phase
Solar Power	1 to 10kW	2 to 15kW	10 to 120kW
Battery storage	2.4 to 19.2kWh Lithium	4 to 80kWh Lithium	33 to 200kWh Lithium
Included	AC Switchboard LCD touch display Remote monitoring* Enclosure housing		AC Switchboard LED display Remote monitoring* Flexible layout
Optional	Weather station Monitoring sensors EV Charger		Battery technology Outdoor enclosure EV Charger
Equipment Warranty	Five years		Ten years
Workmanship Warranty	Five years		Five years
Brands	BCS BALANCE OF STORAGE SYSTEMS	SELECTRONIC	and Powerplus

Are you looking for an off-grid power solution for your home or business?

Contact Apex Energy Australia to speak with one of our friendly staff members for a no-obligation, hassle-free quote.

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