Omaha 4 Bedroom Off-Grid Solar System



Tried, Tested and Loved for over 30 years

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www.aasolar.co.nz

* We will provide a detailed estimate tailored for your specific needs; prices are an indication. They are subject to change due to customisation, shipping, or supplier price changes. All PV generation figures are Auckland based, with PV modules facing True-North pitch without shading. No system installation, inspection, commissioning, and maintenance allowance in this kit price. Installations shall be in accordance with NZ law, regulations and associated standards. Systems are wired to the main distribution board. It is highly recommended that any system with less than four days of autonomy have an autostart generator installed.

[^] For Off-Grid PV Systems, the way you use power throughout the year and over a 24hr period will alter the system performance. Normalised profiles have been used to provide kitset examples.

With average power usage of 13-16kWh/day^ One Day Battery Autonomy

\$51,950^{*}(Inc GST)

Overview:

- ✓ Off-Grid System
- ✓ 9.1kWp Solar Panel Array (20x 455W)
- ✓ 17.76kWh (16kWh usable) Battery Bank
- Inverter/Charger
- Solar Controller

The Omaha 4-Bedroom Off-Grid Solar System suits a mid-large family holiday house with above-average energy needs. Who uses gas for cooking, hot water and ideally wood or gas fire in the winter. This System will enable you to run all the usual household appliances. It even offers the capacity to run several kitchen appliances simultaneously while still doing the vacuuming and a load of washing!

This System is designed for situations where daily power usage does not exceed 13-16kWh.

We highly recommend increasing your days' autonomy from one day's reserve to cover those dull stormy days. We can add more panels to your System and upgrade the battery bank (see Popular Upgrades).

Tell Me More:

The Omaha 4 Bedroom Off-Grid Solar PV System is the ideal System for people expecting to use an average of 13-16kWh/day and where the amount of load required is 8kVA continuous (30min) and up to 21kVA 5sec peak (values at 25°C). It comes with a 9.1kW solar array and a 17.76kWh battery bank.

At the heart of this Off-Grid System is the inverter/ charger that provides a central unit to monitor and control all aspects of the System. We also include conduits, cables and miscellaneous items for the System that comply with AS/NZ Standards (refer to our website for details). This System is supplied with an outdoor battery cabinet so the battery bank can be installed outdoors. The remainder of the equipment is best suited for indoor installations, which can be supplied prewired on an installation panel upon request. AA Solar customise Solar Kitsets to suit your specific power needs and location.

System Inclusions:

- Fully integrated Off-Grid power System (can be offered as a prewired panel upon request)
- 20 x 455W Solar Panel Silver PERC Half Cell
- Solar Controller
- Inverter/Charger
- RCC-02 Remote Control
- Xcom-Can Multi-protocol Communication module
- 5 x US3000 Lithium Battery
- Outdoor Cabinet
- Comprehensive Installation kit: fuses, cables, clips, screws etc. (Refer to our website for a complete list of inclusions)
- A complete set of documentation for electrical registration and sign-off



How Much Power Will I have?

Your System has twenty panels; the 9.1kW solar arrays' average daily power production will be between 15-19kWh in winter and up to 33-41kWh in summer.

What Can Be Powered:

This System will power all the power requirements of a typical energy-conscious home with gas cooking and hot water and up to 8kVA peak demand for 30min.

- 🗸 Lighting°
- Water pump°
- Medium-large fridge/freezer°
- ✓ TV°
- ✓ Rangehood[◦]
- Macerator°
- ✓ Internet, laptops, phone chargers
- Suitable washing machine°
- All small appliances such as jug, toaster, microwave create variable loads; please discuss planned usage with your trusted AA Solar Engineer. The key is to ensure they are not all used at once. Keep in mind that you have a total of 7kVA continuous, 8kVA for 30mins, and 21kVA for 5sec (values at 25°C) available.

This System can not support high wattage equipment such as electric induction cooking and ovens.

Note: AC loads must stay within the Inverter's limitations.

° = Energy efficient

Pro Tip:

For year-round living, we highly recommend adding an auto-start generator. Provide backup power during periods when the weather is bad and your total solar generation is not enough to cover your energy needs and keep your battery bank full.

Warranties:

PV modules – Twenty Five-year linear power and Ten-year material & workmanship

Inverter/charger – Ten-years

Charger controller – Ten-years

Battery – Ten-years

Mounting System – Ten-years

Popular Upgrades:

All systems can be tailored to your individual needs by our highly qualified solar engineers. Our most common upgrades provide backup power for low light days.

One Day	Two Day	Four Day
Autonomy	Autonomy	Autonomy
\$51,950* inc GST	\$74,700* inc GST	\$117,450* inc GST

Why AA Solar:

At AA Solar, we are passionate about helping our customers harness the sun's power to give greater energy freedom, lower costs and a clean, safe energy solution. We tackle all solar & battery projects from RVs, Boats, Industrial Equipment to Off-Grid Residential homes. No job is too big or too small for this talented, dedicated crew of Solar Engineers.



- ✓ Bespoke Solutions
- ✓ Friendly experienced professionals
- Can-do attitude
- Great pricing and service
- Best in class, for warranties

Being a custom business, we: design, specify, source, install and guarantee the right Solar System for you. With a track record of over 30 years, you can be assured, and we are here to support you now and for many years to come.

Our expert team will explain our products and processes and help demystify solar PV and batteries; we are the ideal partner for anyone seeking to install an off-grid System themselves or equally would like us to install it for them.

Our process starts and finishes with you. Our job is to understand your power needs and then provide the advice, product and service you need to get the right solar solution, first time, every time.



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