



# Paihia 2-4 Bedroom Off-Grid Solar System

With average power usage  
of 8-11kWh/day<sup>^</sup>

**\$41,532\***



**AA SOLAR**  
& SUN POWER PLUS

***Tried, Tested and Loved for over 30 years***

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\* 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 auto-start generator installed.

<sup>^</sup> 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.

## Overview:

- ✓ Off-Grid System
- ✓ 6.37kWp Solar Panel Array (14x 455W)
- ✓ 14.2kWh (12.8kWh usable) Battery Bank
- ✓ Inverter/Charger
- ✓ Solar Controller

The AA Solar Paihia 2-4-Bedroom Off-Grid Solar Kitset suits a family home or Bach with average power 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 whilst also doing the vacuuming and a load of washing.

This System is designed for situations where daily power usage does not exceed 8-11kWh.

## Tell Me More:

Paihia 2-4 Bedroom Off-Grid Solar PV System is the ideal System for people expecting to use an average of 8-11kWh/day and where the amount of load required is 6kVA continuous (30min) and up to 15kVA 5sec peak (values at 25°C). It comes with a 6.37kW Solar Array and a 14.2kWh (12.8kWh usable) Battery bank.

## How Much Power Will I have?

Your System has fourteen panels; the 6.37kW solar arrays' average daily power production will be between 10-14kWh on a winter's day and up to 22-29kWh on a summer's day.

## System Inclusions:

- Fully Integrated Off-Grid Power System
  - 14 x 455W Solar Panel PERC Half Cell
  - Solar Controller
  - Inverter/Charger\*
  - Monitoring Control Hub
  - 4 x US3000 Lithium Battery\*
  - Indoor Battery Cabinet
  - AC/DC Protection Switch Gear
  - Flush Tin Mounting Kit
- \* Inverter/Charger and Batteries need to be housed in a watertight shed or similar.





## What Can Be Powered:

With this System you can power pretty much everything that a typical home requires, provided that the total power draw at any one time does not exceed 5kVA continuous and 6kVA for 30 minutes. This does exclude high wattage equipment such as electric induction cooking and ovens, and we strongly recommend gas cooking, hot water and space heating.

All the power requirements of a typical energy-conscious home with gas cooking and hot water and up to 6kVA 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 5kVA continuous, 6kVA for 30mins, and 15kVA for 5sec (values at 25°C) available.

This does exclude 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

## 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; 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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