

SMA ENERGY SYSTEM HOME

# My Home. My Energy. Our Climate.

Save on your energy costs and shape the energy transition with solar power.



Generate solar power



Store solar power



Manage solar energy



Refuel with solar power



Grid independence

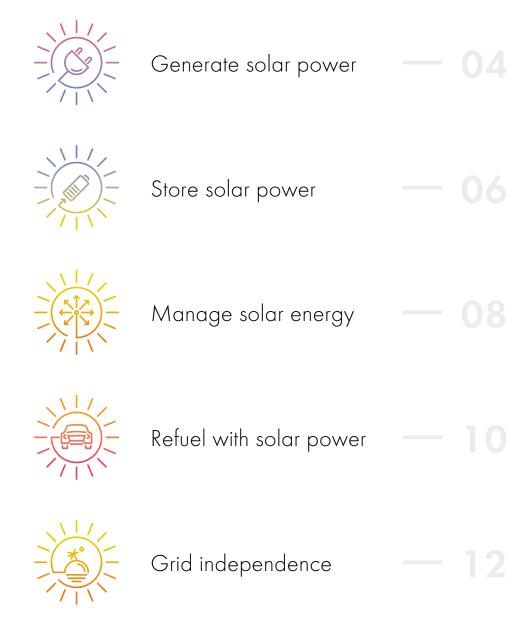


# Your SMA Energy System Home

When it comes to solar power in Australia, the sun delivers in abundance. With a PV rooftop system soaking up those sunny rays, the SMA Energy System Home helps you get the most out of your solar power. It generates your electricity and manages it throughout your household, saving energy costs, and actively helping shape the sustainable energy transition.

### One system. Everything from a single source.

**SMA Energy System Home** is the perfect combination of high-quality equipment, smart software and exceptional service. Its modular design means that getting started is easy and your system can be customized to suit your budget and individual needs anytime, with no hassle.







# Generate solar power.

SMA Energy System Home helps you significantly cut your energy costs. By harnessing the full potential of the sun, the Energy System Home generates effective and sustainable solar power resulting in more independence from energy providers and their rising electricity prices.

# How to produce your own electricity.

SMA Energy System Home allows you to generate your own renewable electricity with your very own rooftop PV system. The electricity you do not use is automatically exported into the utility grid, and you will receive a feed-in tariff for it in Australia. On the following pages you will learn how a storage system can make you even more independent from utility companies.

#### **Benefits**

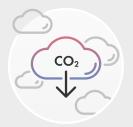
- Quick and easy installation, can be flexibly expanded
- Compact design means minimum space requirements
- Maximum vields even with shadina
- Free monitoring with the SMA Energy app



Up to 80% lower energy costs.\*



Protection against rising energy prices.



Your contribution to climate protection.



Additional income from grid feed-in.

SMA PV inverter

### The heart of your personal PV power plant.

An SMA inverter from the Sunny Boy or Sunny Tripower families is the core of your SMA Energy System Home. It converts the direct current generated by the PV modules on the roof into standard alternating current for domestic use. At the same time, you benefit from our tried-and-tested, integrated range of software functions and intelligent services like SMA Smart Connected and SMA ShadeFix.



#### System components.



#### PV inverter

Sunny Boy or Sunny Tripower inverter converts solar power (direct current) into usable alternating current.



#### System visualization

With the SMA Sunny Portal and SMA Energy app, you can clearly visualize and monitor your energy system.

<sup>\*</sup> If you implement all SMA Energy System Home applications.





# Store solar power.

Sometimes your PV system generates more power than you need. A battery-storage system allows you to store solar energy for later use.

### Solar energy at your disposal 24/7.

Solar power is not always available when you consume a lot of electricity, such as in the evening. In these situations you normally have to rely on expensive grid power.

The smart alternative: when you produce more than you consume, store your valuable energy in a battery-storage system until you need it. This way, you will use even more of your own solar power with your SMA Energy System Home.

#### **Benefits**

- System has the capacity for flexibile expansion
- Easy commissioning via integrated web interface
- 10-year warranty



Save up to 80% on energy costs.\*



Use more solar power by storing it.



Use solar power even when your PV system is not producing any electricity.



Protect against rising energy prices.

#### SMA battery inverters

### Delivers solar power even when the sun is not shining.

The SMA Sunny Island\* battery inverter allows you to store your solar power in one battery, there to use when the sun isn't shining. Your Sunny Island\* will supply your connected home appliances with electricity from the battery, even when the utility grid fails\*\*. It automatically controls the power in conjunction with the intelligent Sunny Home Manager 2.0, giving you maximum flexibility with your solar power storage usage.

- \* For on-grid purposes, the Sunny Island will be available later in 2022, pending AS/NZs 4777 .2:2020 certification.
- \*\* Extra back-up box is required/sold separately.

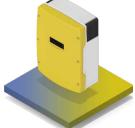
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#### System components.



#### PV inverter

Sunny Boy or Sunny Tripower inverter converts solar power (direct current) into usable alternating current.



#### Battery inverter

The Sunny Island ensures that your solar power is stored in the battery and is available again when needed.



#### Battery

Stores the energy and makes it available again when needed (batteries from external partners).



#### **Energy manager**

The Sunny Home Manager 2.0 monitors and manages all energy flows in the household and automatically adapts to individual habits, allowing it to leverage the full potential of any energy system.



### System visualization and control

With the SMA Sunny Portal and SMA Energy app, you can easily manage and clearly visualize your energy system.

 $<sup>^{\</sup>star}$  If you implement all SMA Energy System Home applications.





# Manage solar energy.

Supply and cost-effectively manage climate-friendly solar power to all your home appliances, such as electric vehicle, air-conditioner, washing machine, or swimming pool system. Intelligent energy management allows you to use your valuable solar energy with maximum efficiency.

# The smarter way to manage your household power supply.

Sunny Home Manager 2.0 combines all energy flows in your home to create an intelligent system. If needed, it can control them automatically to help you get the most out of your solar power. The energy manager produces daily yield projections using satellite weather forecasts and your own consumption analysis. Based on this information, the Sunny Home Manager 2.0 can predict when substantial solar power will be available, then calculating the appropriate time to start the washing machine.

Home appliances communicate directly with the Sunny Home Manager 2.0 via compatible interfaces or can be integrated into the energy system with compatible radio-controlled sockets.

#### Renefits

- Optimum usage of self-generated solar power in the household
- Lower energy costs by reducing reliance on utiliy providers
- Easy integration of home appliances into the energy system



Up to 80% lower energy costs.\*



Optimize self-consumption.



Energy management saves money without sacrificing comfort or convenience.



Power generators and appliances can be combined in an integrated energy system.

#### **Energy manager**

#### The SMA Energy System Home control center.

The Sunny Home Manager 2.0 measures and controls all energy flows in the home, identifies potential savings, and automatically facilitates efficient use of solar energy. Thanks to its intelligence, it ensures that no solar energy is lost and is instead used or buffered, even when feed-in power limitation is required.

Intelligent energy management is thus becoming even easier and more cost-effective.



### System components.



#### **Energy manager**

The Sunny Home Manager 2.0 is the intelligent control center of your SMA Energy System Home. It automatically monitors and controls all energy flows in the household so that you can make the most of your solar power.



#### System visualization and control

With the SMA Sunny Portal and SMA Energy app, you can easily manage and clearly visualize your energy system.



#### Directly controllable loads

Compatible home appliances can be directly integrated into the system and controlled via an EEBUS interface



#### Indirectly controllable loads

Compatible radio-controlled sockets integrate appliances without needing a compatible interface into the system. These sockets can be switched on and off as required.

<sup>\*</sup> If you implement all SMA Energy System Home applications.





# Refuel with solar power.

Combining the SMA Energy System Home with electric vehicle mobility makes economic and environmental sense. It ensures your electric vehicle will receive intelligent charging options and can be prioritized whenever your PV System is producing enough power.

# A perfect match: PV system and e-mobility.

Your SMA Energy System Home knows exactly when you have enough solar power available to charge your car. It even knows when you can charge it in a particularly climate-neutral and cost-effective way, by utilizing more of your own power and purchasing less from the utility grid. Every kilowatt of solar power is finely tuned to fill your electric vehicle's battery.

#### Ranafita

- Carbon-neutral and cost-effective charging from your own PV system
- Compatible with all standard electric vehicles
- The charging process can be controlled conveniently via smartphone
- Extra-fast charging thanks to the boost function



Up to 80% lower energy costs.\*



Climate- and resourcefriendly mobility – with no fossil fuels.



Solar-optimized charging at minimum cost.



Power generators and appliances can be combined in an integrated energy system.

#### E-mobility charging solution

#### Fast, green and cost-efficient charging.

Combined with the SMA Sunny Home Manager 2.0, the SMA EV Charger automatically prioritizes solar power for charging your electric vehicles. Or, you can simply quick charge your car, if you are in a hurry. Integrated protection against overloading the home connection means that you can charge your car at the maximum charging speed. Not only is this reliable, but it also saves you time and money. SMA Smart Connected automatically monitors your EV Charger and, if necessary, initiates immediate trouble-shooting, ensuring that you stay mobile.

With the Energy app, you can control the charging process of your electric vehicle.



#### System components.



#### **Charging station**

The SMA EV Charger intelligently prioritizes charging your electric vehicle sustainably with self-generated solar power – and quickly if you're in a hurry.



#### **Energy manager**

The Sunny Home Manager 2.0 is the intelligent control center of your SMA Energy System Home. It automatically monitors and controls all energy flows in the household so that you can make the most of your solar power.



#### Charging via the app

With the SMA Energy app, you can keep an overview of all the relevant information about your system and control the charging process with the SMA EV Charger via your smartphone.

<sup>\*</sup> If you implement all SMA Energy System Home applications.





# Grid independence.

From an isolated off-grid station operation, or a holiday resort on an island – autonomous solar power supply systems work anywhere the sun shines.

### Be self-sufficient with solar power.

Our SMA Energy System with battery-storage system provides reliable, grid-quality solar power for off-grid homes, commercial and industrial enterprises, and even remote islands. In regions with low electrification rates, it enables sustainable economic development without diesel fuel.

#### Renefits

- Grid-auality power power supply
- No more diesel-based power supply and high transport costs
- Reduced CO<sub>2</sub> emissions
- Modular expansion at any time



100% independence from the utility gird. Electricity and diesel cost savings.



Modular systems can be expanded if energy consumption rises.



AC coupling allows for long distances between energy sources and loads.



Several energy sources can be combined.

SMA battery inverters

#### Stand-alone grid without a diesel generator.

The SMA Sunny Island battery inverter is the heart and brain of any off-grid system. With its high overload capacity, the robust device reliably takes care of all load and generator management and can be expanded on a modular basis at any time.



### System components.



PV inverter
Sunny Boy or Sunny Tripower
converts solar power (direct current)
into usable alternating current.



**Battery inverter** SMA Sunny Island manages the off-grid system and ensures grid auality.



Stores the solar power and ensures a reliable energy supply (batteries supplied by external partners).



**System visualization**With SMA Sunny Portal you can clearly visualize and monitor your energy system.

# Your SMA inverter comprises all key functions.

With SMA inverters, you benefit from an exceptionally lean system design. Our devices already contain everything you need for a secure and sustainable energy supply. Smart software features optimize the yield of your PV systems in every situation, at no extra cost.



#### **SMA ShadeFix**

It is not always possible to prevent dormer windows, chimneys, trees and other obstructions from casting shadows on PV modules. The proprietary integrated software feature optimizes your energy yield automatically and in every situation – even in shading.



#### **SMA Smart Connected**

In case of malfunction, our free inverter monitoring function automatically provides your installer with the right diagnosis so they can service the device with pinpoint accuracy, minimizing downtimes for your system.



#### **SMA Energy app**

The SMA Energy app allows you to keep track of your home's energy balance at a glance. You can see exactly whether the washing machine, dryer, dishwasher and air-conditioning system are currently using solar power or grid current. You can also charge your electric vehicle conveniently via your smartphone.

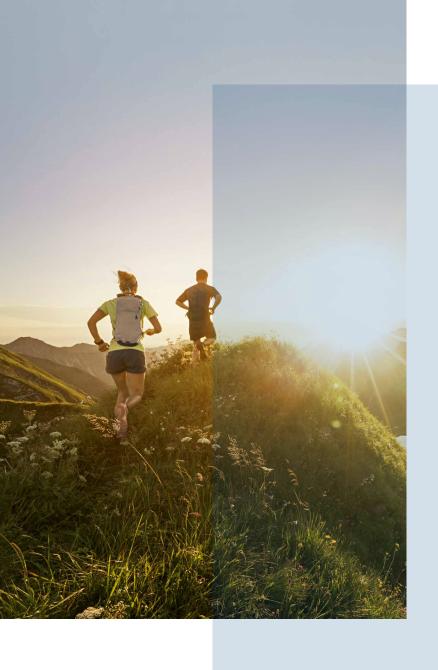












# Systems suitable for global use.

For over 40 years, our products and solutions have been paving the way for a climate-friendly, decentralized energy supply of the future. In private homes, hotels, agricultural or commercial enterprises and in power plants. In cities, in the country, in deserts, on islands and on mountaintops, even in Antarctica. Our devices and solutions function reliably even in the toughest of conditions and comply with all international standards.

## State-of-the-art test centers guarantee supreme quality.

Our inverters undergo extensive tests and quality checks in our certified test centers and our own PV systems. We can simulate the entire service life of our equipment in an accelerated process. This is how we ensure the longevity of our inverters in extreme weather conditions, from intense heat or biting cold to high humidity, in sandstorms and where there are ground vibrations.

### 110 GW

Around 110 GW of total installed SMA inverter power helps prevent over 60 million tons of CO<sub>2</sub> emissions each year.

### 5,400 tons

Our PV systems save around 5,400 tons of carbon dioxide per year, with a total output of 9.7 MW.

### 90%

Our goal for 2025: We want to make sure that 90% of our inverter components are recyclable.



### SMA-Australia.com.au





