



SMA HOME ENERGY SOLUTION

# I LOVE THE SUN

It doesn't send  
energy bills.







# Your SMA Home Energy Solution

The sun delivers valuable energy to your home every single day – completely free of charge. A PV rooftop system combined with our energy system allows you to generate and use electricity for your home, save up to 80% on your energy costs, and actively help shape the energy transition.

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

**The SMA Home Energy Solution** 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 upgraded to suit your budget and individual needs anytime, with no hassle.



Generate solar power  
for optimal consumption

— 04



Generate and store  
solar power

— 06



Manage and distribute  
solar power

— 08



Refuel with  
solar power

— 10



Heat with  
solar power

— 12





## Generate solar power for optimal consumption.

The SMA Home Energy Solution helps you cut your energy costs permanently, starting now. Harness the unlimited power of the sun to generate cost-effective and sustainable solar power. Less dependence on energy providers and no more worries about rising electricity prices.

### How to produce your own electricity.

The SMA Home Energy Solution allows you to generate your own green electricity with your very own rooftop PV system. The electricity you do not use yourself is automatically fed into the utility grid. On the following pages you will learn how a storage system can make you even more independent of utility companies.

### Benefits

- Quick and easy installation, can be flexibly expanded
- Compact design means minimum space requirements
- Maximum yields even with shading
- Free monitoring with the SMA Energy app
- 5+5-year warranty\*

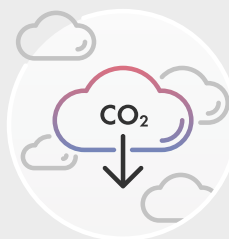
\*Registration of the product in SMA Online Service Center within 30 days is required.



Up to 80% lower energy costs.\*



Protection against rising energy prices.



Your contribution to climate protection.



Additional income from grid feed-in.

\* If you implement all SMA Home Energy Solution applications.

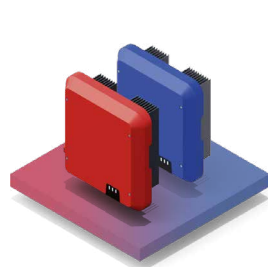
SMA PV and hybrid inverter

## The heart of your personal PV power plant.

An SMA PV or hybrid inverter from the Sunny Boy or Sunny Tripower families is the core of your SMA Home Energy Solution. 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.



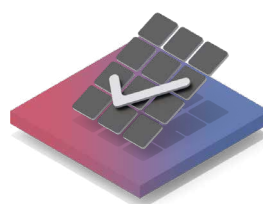
### Hybrid inverter

Sunny Boy Smart Energy and Sunny Tripower Smart Energy combine solar and battery inverter in one device and supplies your household even when there is a utility outage.



### System visualization

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



### SMA ShadeFix

Maximize PV-system yields in any situation. Even in the shade. With SMA ShadeFix software integrated in the inverter.



### SMA Smart Connected

Automate failure detection. Perform proactive system maintenance to save valuable working time.



## Generate and store solar power.

Do you want to consume your own solar power in an integrated way, around the clock? The SMA Home Storage Solution, including a hybrid inverter and the SMA Home Storage battery, is the ideal choice for your home. The intelligent, rapidly charging hybrid inverter, integrated with advanced features, transforms the flexible and modular Home Storage Solution into a crucial component of a harmonised appliance ecosystem. The ultimate all-in-one solution.

### Solar power in any weather.

Both hybrid inverters, the Sunny Tripower Smart Energy and the Sunny Boy Smart Energy shines with its high-speed battery charging and discharging capability. Charging performance can be a particular problem in transition months, when there are few hours of sunshine and lots of cloud cover.

Whether during times of low solar irradiation or the highs of midday – the SMA Home Storage stores solar power and makes it available as needed. The battery offers flexible scalability to be adapted to individual needs and has an especially long lifetime of around 8000 charging cycles.

#### Benefits

- Compact all-in-one solution for generating and storing solar power
- Fast charging and maximum battery use even when there is little sunshine
- Integrated battery-backup function
- 5+5-years warranty for hybrid inverters\*
- 2+8-years warranty for battery\*

\*Registration of the product in SMA Online Service Center within 30 days is required.

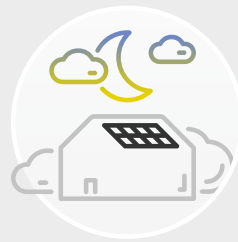




Save up to 80% on energy costs.\*



Use more solar power yourself by storing it.



Solar energy at your disposal 24/7.



Protect against rising energy prices.

\* If you implement all SMA Home Energy Solution applications.

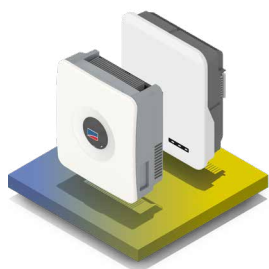
SMA hybrid inverter and battery

## The strong heart for every home.

PV systems including the Sunny Tripower Smart Energy or the Sunny Boy Smart Energy can be expanded at any time. By adding a powerful battery such as the SMA Home Storage Solution, for example, you benefit from unparalleled flexibility, quick installation and modular design. This means that the system is prepared to meet any upcoming needs or demands.

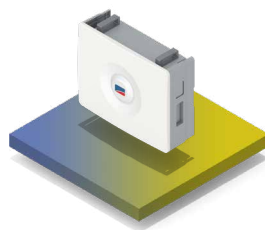


## System components.



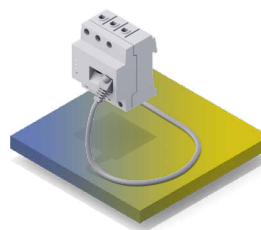
### Hybrid inverter

Both hybrid inverters combine solar and battery inverter in one device and supplies your household even when there is a utility grid outage.



### Battery

Stores the energy and makes it available again as and when needed. The SMA Home Storage is developed for intensive use with ~8000 life cycles and 10 years of warranty\*



### 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.



Compatibility list  
for approved batteries



## Manage and distribute solar energy.

Supply your home appliances with solar power, charge your electric vehicle with climate-friendly power, and manage your heating cost-efficiently. Your SMA Home Energy Solution fully automates all of these processes. 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 forecasts using satellite weather forecasts and your own consumption analysis. Based on this information, the Sunny Home Manager 2.0 can predict when a lot of solar power will be available and when is the perfect 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.

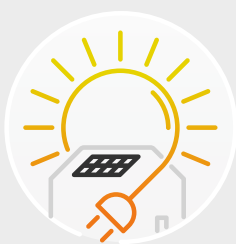
### Benefits

- Optimum usage of self-generated solar power in the household
- Lower energy costs by avoiding derating losses
- 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.

\* If you implement all SMA Home Energy Solution applications.

## Energy manager

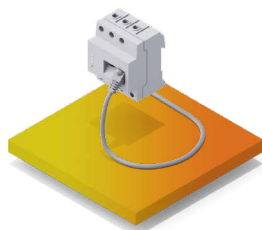
### The SMA Home Energy Solution control center.

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.



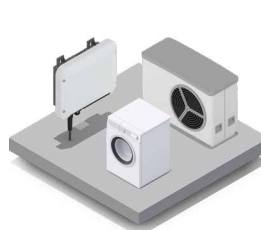
### Energy manager

The Sunny Home Manager 2.0 is the intelligent control center of your SMA Home Energy Solution. 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 additionally integrate appliances without a compatible interface into the system and switch them on and off intelligently as required.



Compatibility list  
electric load

 SMA component

 Third-party component



## Refuel with solar power.

With the SMA Home Energy Solution, e-mobility makes sense both environmentally and economically. It ensures that your electric vehicle will prioritize charging whenever your PV system is producing enough power.

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

Your SMA Home Energy Solution 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. You thus use more of your own power and need to buy less from the utility grid. Every kilowatt of solar power in your electric vehicle's battery is turned into range for your car.

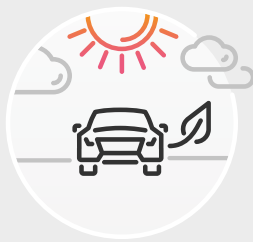
### **Benefits**

- 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
- 5-year warranty

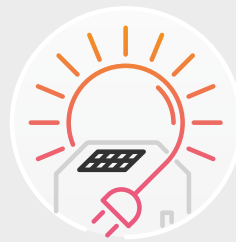




Up to 80% lower energy costs.\*



Climate- and resource-friendly mobility – with no fossil fuels.



Solar-optimized charging at minimum cost.



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

\* If you implement all SMA Home Energy Solution applications.

## E-mobility charging solution

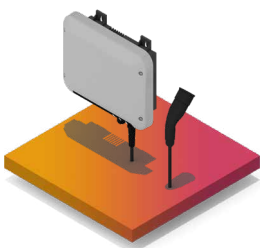
### Fast, green and cost-efficient charging.

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 prioritize quick charging if you're 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 troubleshooting, ensuring that you stay mobile.

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

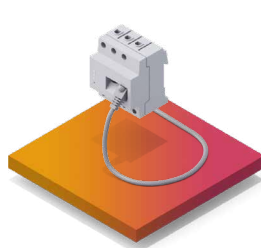


### System components.



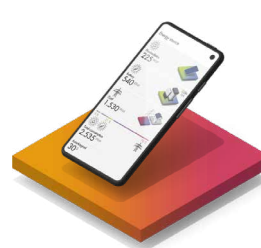
#### Charging station

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



#### Energy manager

The Sunny Home Manager 2.0 is the intelligent control center of your SMA Home Energy Solution. 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.



## Heat with solar power.

With SMA Home Energy Solution, you can use your self-generated solar power for heating and hot water. You'll save on your utility bill and help protect the environment.

### Heat with solar power – day and night.

When you integrate your heating into the SMA Home Energy Solution, you convert solar power into hot water and heat for taking a shower or bath, or for heating your home. You'll use more of your own, self-generated power, reduce your heating bill, and protect the environment.

#### Benefits

- Sustainable heating and immediate cost reduction
- Numerous compatible devices from renowned manufacturers can be integrated into the heating system
- Protect against rising energy prices

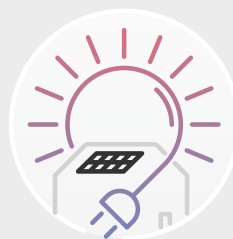




Save up to 80% on energy costs.\*



Climate-friendly home heating  
– with no fossil fuels.



Heat with solar power.



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

\* If you implement all SMA Home Energy Solution applications.

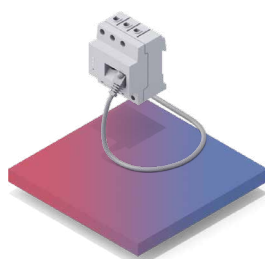
## Energy manager

### Cut your heating costs.

SMA Home Energy Solution allows you to operate a heat pump or heating element with your own solar power. Your Sunny Home Manager 2.0 controls the system so that solar power is prioritized for running the heat pump. Surplus energy is stored in a buffer storage system for use in the evening and at night, meaning that you will need less power from the grid in the evening.

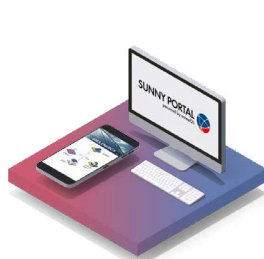


### System components.



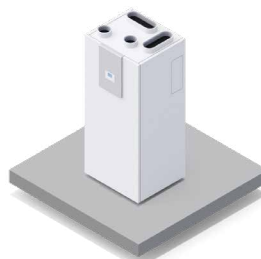
#### Energy manager

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



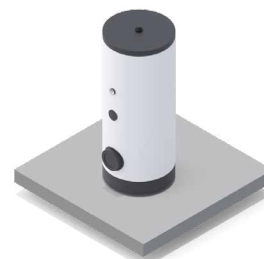
#### System visualization

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



#### Compatible heat pumps

The heat pump converts ambient heat into usable heat and uses electricity from the PV system in the most efficient way (suppliers include AEG Haustechnik, Stiebel Eltron, Vaillant and Wolf).



#### Thermal storage system

Stores the heat produced by the heat pump for later use.



Compatibility list  
for appliances

 SMA component

 Third-party component

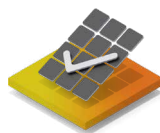


# Why SMA

With the SMA Home Energy Solution, 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 heating system are currently using solar power or grid current. You can also charge your electric vehicle conveniently via your smartphone.



## SMA services and warranties

Our SMA warranty gives you peace of mind.

- Free replacement inverter with all necessary updates, provision of a replacement device or repair, according to service requirement
- Minimum downtime and safeguarding of your yields
- Optional extended warranty

From hotline support to reliable service on-site, we are there for you when you need us. To allow us to process your inquiries more quickly, please register in the SMA Online Service Center so that we can respond quickly to your inquiries.



SMA Online  
Service Center



## Tried and tested supreme quality for your home.

For 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 are designed in Germany. They 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. To achieve the goal of security-optimized products, we not only comply with internationally recognized standards, but also shape them.

## 100 %

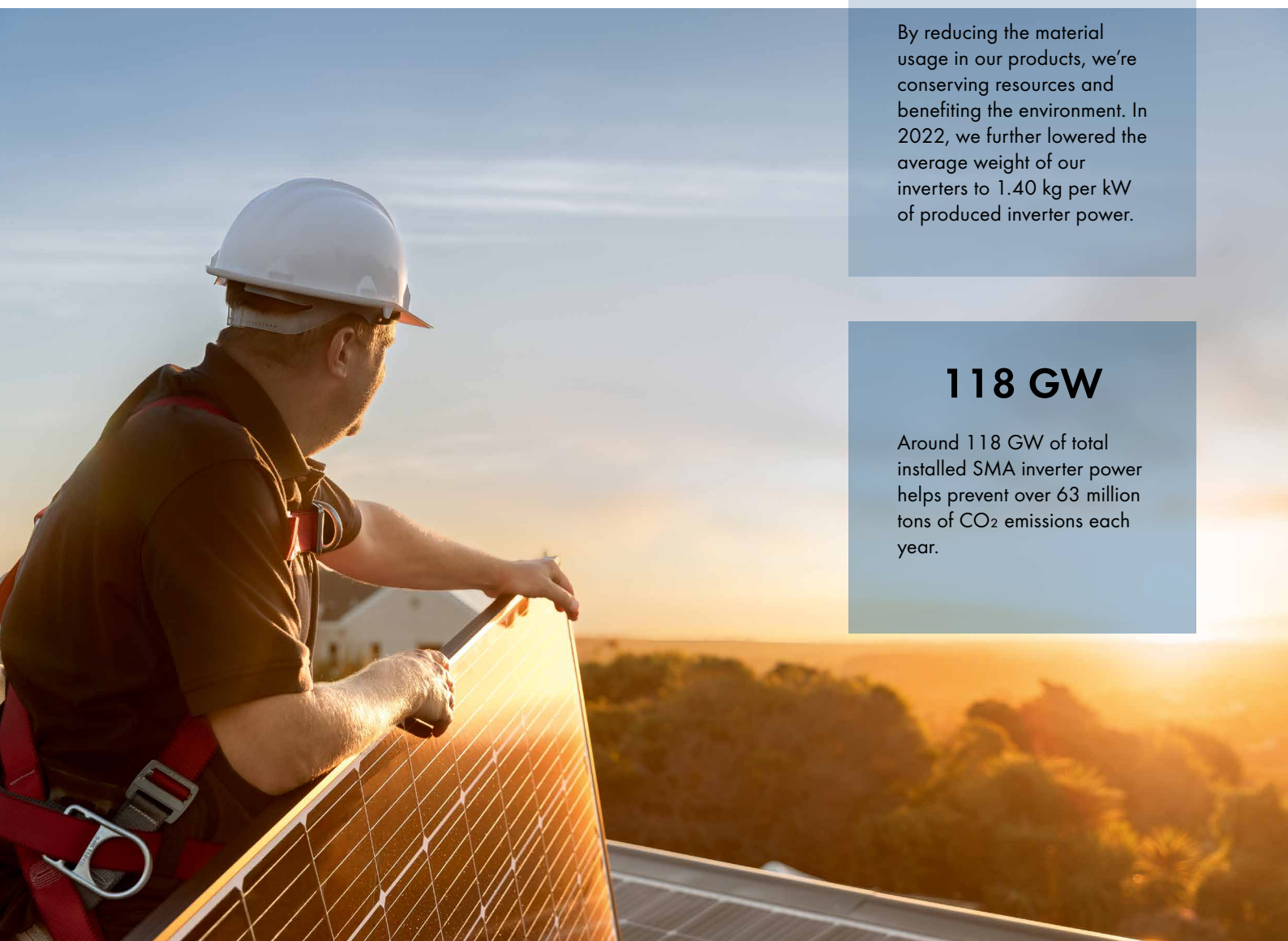
Our main site in Germany is supplied with 100 percent de-centrally generated renewable electricity from the immediate vicinity.

## 1,40 kg/kW

By reducing the material usage in our products, we're conserving resources and benefiting the environment. In 2022, we further lowered the average weight of our inverters to 1.40 kg per kW of produced inverter power.

## 118 GW

Around 118 GW of total installed SMA inverter power helps prevent over 63 million tons of CO<sub>2</sub> emissions each year.





**SMA-Solar.com**

