



## INSTALLATION STEPS

The simple installation of the Sunny Boy Smart Energy



Pictures 1 & 2: Mounting



Pictures 3 & 4: Battery installation



Pictures 5 & 6: DC and AC connection



### ADVANTAGES AT A GLANCE:

- » Approximately 52 percent\* less electricity from electric utility companies
- » Significantly reduced initial investment thanks to application-oriented battery capacity
- » Self-consumption rate boosted to 55 percent (up from 30)\*
- » Solar power can also be used during the evening and at night
- » Almost complete usage of the annually generated PV energy, even when power feed-in is limited to 70 percent or less of nominal generator power
- » Outstanding efficiency in power conversion and temporary storage of power
- » Maximum reliability and dependability with lithium-ion cells from LG Chem with integrated battery management

## SMA INTEGRATED STORAGE SYSTEM



### Easy to Use

- Fast and easy installation
- No separate battery design required
- Simply greater independence

### Efficient

- Reduced initial investment and optimized battery use
- Minimization of derating losses
- Maximum reliability and dependability with lithium-ion cells from LG Chem

### Reliable

- Future-proof with smart grid compatibility
- VDE-certified lithium-ion battery and inverter

### Intelligent

- Loads can be controlled automatically
- Use of location-based generation and consumption forecasts

## SMA INTEGRATED STORAGE SYSTEM

The simple storage solution for new PV systems\*

With the SMA Integrated Storage System, SMA offers an incredibly simple, intelligent energy management system as part of the SMA Smart Home system. The key elements of this cost-effective storage solution for new PV systems are the Sunny Home Manager, Sunny Boy Smart Energy – our full-fledged PV inverter with integrated storage – and the SMA Energy Meter. With an application-oriented battery capacity of 2 kWh, the SMA Integrated Storage System guarantees lower initial investment and considerably increased rates of self-consumption and therefore greater independence from rising energy prices. By integrating the battery into the energy management system, losses caused by limiting capacity can be better reduced.

# SMA INTEGRATED STORAGE SYSTEM

The turnkey battery solution for new PV systems



1 Sunny Boy Smart Energy

2 Sunny Home Manager

3 Sunny Portal  
The Sunny Portal is used to operate and configure the Sunny Home Manager. These functions are available via any Internet browser and can be accessed using a PC or smartphone. Furthermore, the live display showing all power and energy values motivates users to save more electricity.

4 Energy meter

5 SMA Energy Meter

6 Uncontrolled loads  
Stoves, TVs, computers and other electronic devices are not controlled by the Sunny Home Manager. The Sunny Home Manager memorizes the typical load profile of the building and takes it into account during automatic controllable load management planning.

Controlled loads  
Electrical appliances that do not have specific turn-on times can be remotely activated by the Sunny Home Manager and thus included in the intelligent load management system.

7 Washing machine

8 Clothes dryer

9 Heat pump

10 Micro-CHP plant

11 Electric vehicle

12 SMA Bluetooth® radio-controlled socket

13 Utility Grid

14 Router



## SUNNY HOME MANAGER

The control center of smart energy management

With its standard access to Sunny Portal, the Sunny Home Manager enables optimized load management. It not only records all the energy flowing in the home and integrates the PV generation forecast into the planning, but also incorporates charging and discharging of the lithium-ion battery into the Sunny Boy Smart Energy system. In addition, it can also activate controllable household devices via the optional SMA radio-controlled sockets.



## SUNNY BOY SMART ENERGY

The perfect combination of PV inverter and battery

The Sunny Boy Smart Energy is currently the easiest and most affordable solution for common household PV applications. This combination of a modern PV inverter and a battery with an effective capacity of 2 kilowatt-hours not only optimizes increased self-consumption, but also makes it easier to use home-generated solar energy during the evening and at night.



## SMA ENERGY METER

Universal recording of measured values for intelligent energy management

The SMA Energy Meter determines – balanced and with phase accuracy – electrical measured values as grid feed-in and purchased electricity meter and communicates these values via Speedwire. In this way, all of the data relating to PV generation, purchased electricity and grid feed-in can be transmitted via standard Ethernet cables, for example to the Sunny Home Manager or to the Sunny Boy Smart Energy.

## Optional accessory:



## SMA BLUETOOTH RADIO-CONTROLLED SOCKET

With the aid of the SMA radio-controlled sockets, household loads such as washing machines and dishwashers can be switched on or off remotely. This not only increases self-consumption, but also helps users record the load profiles of individual appliances - thus helping them identify particularly high-consumption devices.