

CONTACT

If you have technical problems, contact your installer. The following information is required in order to provide you with the necessary assistance:

- Inverter device type
- Inverter serial number
- Type and number of PV modules connected
- Event number or display message on the inverter
- Optional equipment (e.g. communication products)

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Installer contact



PV Inverters

SUNNY BOY 2000HF/2500HF/3000HF

User Manual



SB20-30HF-BA-BEN113530 | IMEN-SB20_25_30HF | Version 3.0

EN

EXPLANATION OF SYMBOLS

Symbols on the Inverter



Operation display.



An error has occurred. Inform your installer **immediately**.



Bluetooth® Wireless Technology. Bluetooth communication active.*

Symbols on the Type Label



Beware of dangerous electrical voltage.
The inverter operates at high voltages. Any electrical work on the inverter must be carried out by electrically qualified persons only.



Beware of hot surface.
The inverter can become hot during operation. Avoid contact during operation.



Observe enclosed documentation.



The inverter must not be disposed of together with the household waste.
Further disposal information can be found in the enclosed installation manual.



CE mark. The inverter complies with the requirements of the applicable EC guidelines.



RAL quality mark for solar products. The inverter complies with the requirements of the German Institute for Quality Assurance and Labeling.



Device class label. The inverter is equipped with a wireless component that complies with the harmonized standards.



Certified safety. The inverter complies with the requirements of the Europe Equipment and Product Safety Act.



Australian mark of conformity



Korean mark of conformity



Direct current (DC)



Alternating current (AC)



The inverter is protected against dust intrusion and water jets from any angle.



The inverter has a transformer.

* The Bluetooth® word mark and logos are registered trademarks owned by Bluetooth SIG, Inc. and any use of these marks by SMA Solar Technology AG is under license.

VISUAL INSPECTION, MAINTENANCE AND CLEANING

Visual inspection

Check the inverter and cables for any visual signs of external damage. Contact your installer if you find any damage. Do not perform any repair work yourself.

Maintenance and Cleaning

If the display field or the LEDs are dirty and you find it difficult to read the operating data and operating states of the inverter, clean the display and the LEDs with a damp cloth. Do not use any corrosive substances (e.g. solvents, abrasives) for cleaning. Ask your installer to check for correct inverter operation at regular intervals.

GLOSSARY

AC

Abbreviation for "alternating current".

Bluetooth

Bluetooth is a radio technology that allows the inverter and other communication devices to communicate with each other. Bluetooth communication does not require visual contact between the devices.

DC

Abbreviation for "direct current".

Electronic Solar Switch (ESS)

The Electronic Solar Switch is part of the inverter DC disconnection unit. The Electronic Solar Switch must be securely inserted into the bottom of the inverter and may only be removed by an electrically qualified person.

Energy

Energy is measured in Wh (watt hours), kWh (kilowatt hours) or MWh (megawatt hours). The energy is the power calculated over time. If, for example, your inverter operates at a constant output of 3 000 W for half an hour and then at a constant output of 2 000 W for another half hour, it has fed 2 500 Wh of energy into the power distribution grid within that hour.

Power

Power is measured in W (watts), kW (kilowatts) or MW (megawatts). Power is an instantaneous value. It displays the power your inverter is currently feeding into the power distribution grid.

PV

Abbreviation for photovoltaics.

SAFETY INSTRUCTIONS



DANGER!

Electric shock caused by high voltage in the inverter.

Do not open the inverter!

Even when no external voltage is present, there can still be high voltages in the inverter.

- Electrical installation, repair and retrofitting may only be carried out by a trained electrically qualified person:
- Physically or mentally challenged persons may only perform activities on the inverter following proper instruction and under supervision.
- Children must not play with the inverter. Children must not have access to an inverter in operation.



CAUTION!

Risk of burns through contact with the enclosure during operation.

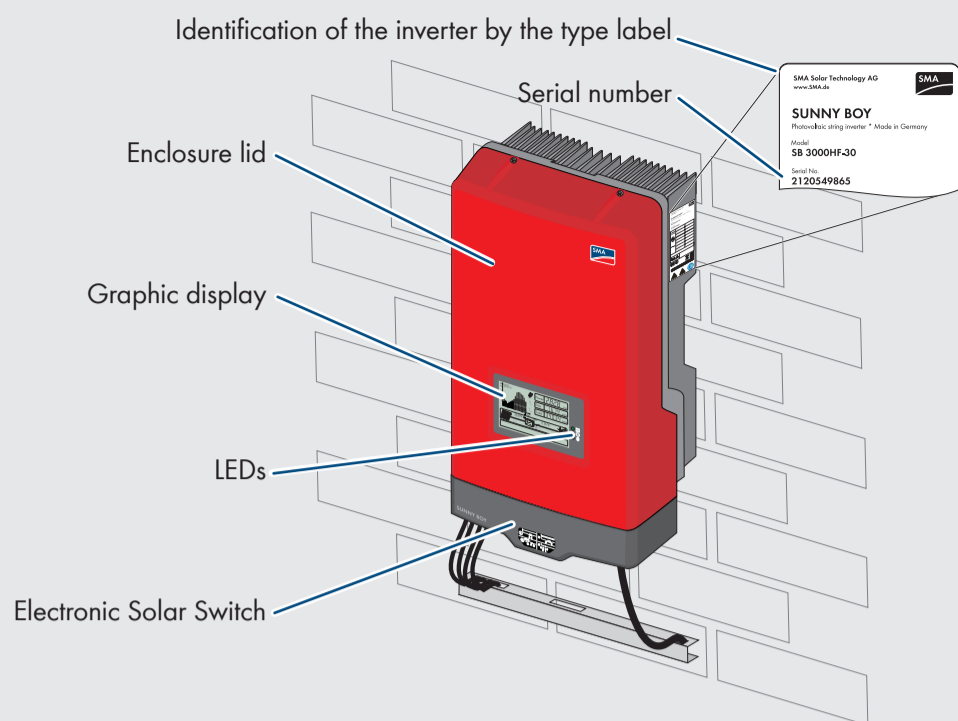
- During operation, only touch the lid and display.



Yield loss due to poor heat dissipation.

- Do not place any objects on the enclosure.

PRODUCT OVERVIEW



GRAPHIC DISPLAY

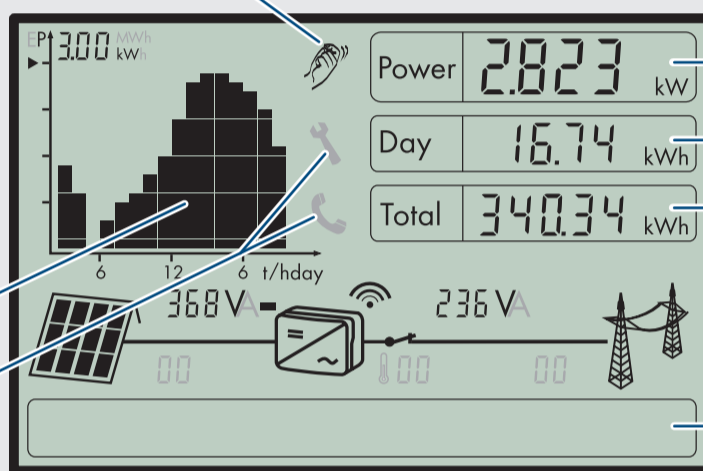
The display updates the values of your PV plant every 5 seconds.

You can operate the display by tapping it:

- Tapping the enclosure lid once: The background illumination is activated, switch between the power range of the past 16 feed-in hours and the energy yields of the past 16 days, switch to the next text line
- Double tapping (valid as of firmware version 2.30): the inverter shows, in succession, the firmware version, the serial number and designation of the inverter, the *Bluetooth* NetID, and the specified country standard and display language.

Graphical display of the inverter energy/power

Disturbance:
Contact installer



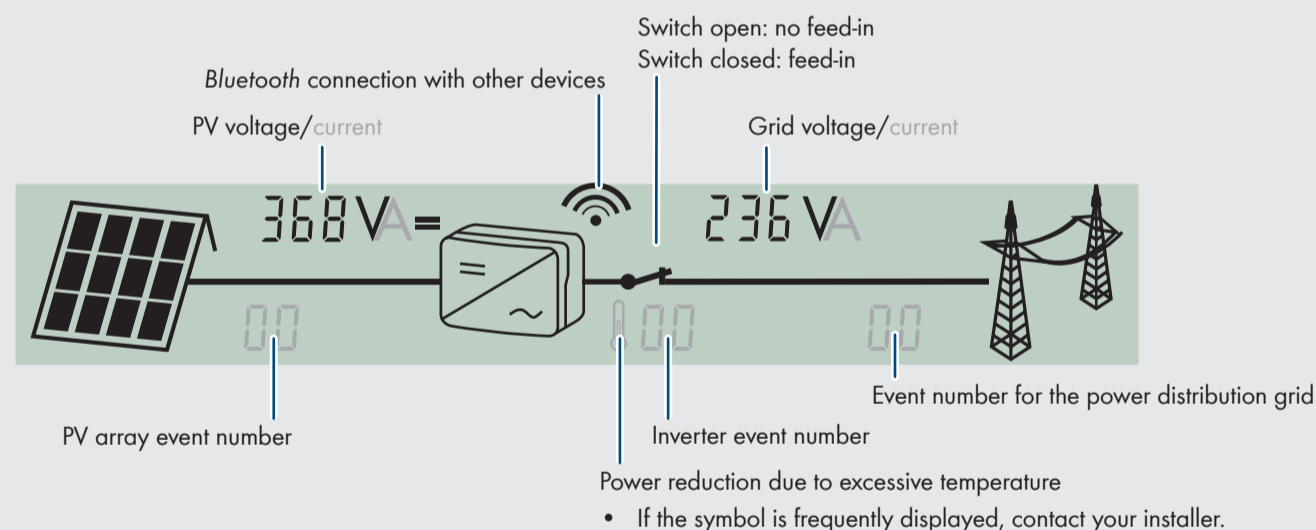
Current power

Daily energy

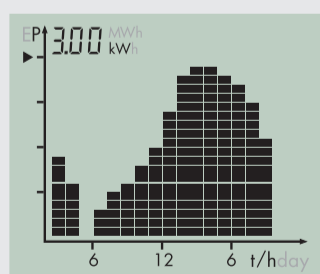
Total energy generated since the inverter was installed

Text line for displaying an event

PLANT OVERVIEW



DIAGRAM



The inverter energy and/or power is shown as a diagram on the display. The daily graph is displayed by default. The right-hand flashing bar of the diagram represents the current hour. If the inverter does not feed any power to the power distribution grid over a longer period of time (e.g. in darkness or if the PV modules are covered with snow), a gap is inserted into the chart. The column for the current hour is updated automatically every five seconds.

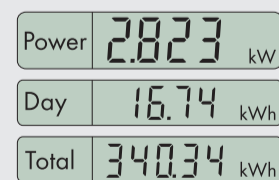
After four seconds, the bar goes off for one second and then displays the current value.

MEASUREMENT ACCURACY

The display values may deviate from the actual values and must not be used as a basis for invoicing. The inverter's measured values are required for the operational control and to control the current to be fed into the power distribution grid. The inverter does not have a calibrated meter.

POWER DISPLAY

The power and energy of the inverter are displayed in three fields: Power, Day and Total. The display is updated every five seconds.



Power

The power that the inverter is currently feeding into the power distribution grid.

Day

The energy fed into the power distribution grid on this particular day. This equals the energy generated between the inverter's start-up in the morning to the current time.

Total

The total energy that the inverter has fed into the power distribution grid during its entire operating time.

LED

- Green LED is on: Operation
- Green LED is flashing: Waiting for sufficient irradiation
- Red LED is on: Disturbance: contact installer
- Blue LED is on: *Bluetooth* communication is active. The inverter can communicate with other SMA *Bluetooth* devices with identical NetID.
- Blue LED is flashing: The inverter was identified via Sunny Explorer by setting the "Find device" parameter.