

# SUNNY BACKUP SET S

## **Straightforward**

- > Can be integrated into existing systems and new PV systems
- > Pre-configured set

## **Affordable**

- > Compact and affordable switching device
- > Smaller battery size required due to utilization of the PV energy

## **Efficient**

- > Power supply and battery charging via the grid
- > Unchanged high efficiency

## **Reliable**

- > Automatic switching to backup power in approx. 50 milliseconds
- > Independent disconnection device in accordance with DIN VDE 0126-1-1



# SUNNY BACKUP SET S

Reliable back-up electricity supply for single-family homes

Innovative electricity supply for home owners: as a supplement to the PV system, the Sunny Backup Set Small switches to off-grid mode within 50 milliseconds. Be it winter or summer, owners of small or medium-sized PV systems with inverters from SMA can supply the important loads self-sufficiently in the event of a power failure. The affordable complete solution is not only suitable for new solar power systems; existing PV systems can also be retrofitted with the certified Sunny Backup System without problems.

# Technical Data

## SUNNY BACKUP SET S

	Sunny Backup Set S
<b>Output (loads)</b>	
Nominal power / current during grid operation	5.7 kW / 25 A
Backup power (duration / 30 min / 1 min)	2.2 kW / 2.9 kW / 3.8 kW
Number of phases (grid operation / backup operation)	1 / 1
Voltage (range)	230 V (172.5 - 264.5 V)
Frequency (range)	50 Hz (45 to 65 Hz)
Permitted grid structure (grid side / load side)	TN-C / TN-S
Typical interruption time in the event of power outage	50 ms
<b>Input PV system</b>	
Nominal AC PV output / current	4.6 kW / 20 A
Compatible PV inverters	All Sunny Boy inverters *
<b>Input battery</b>	
Nominal voltage / number of blocks	24 V / 2 x 12 V
Type / energy / capacity per block	AGM / 3.4 kWh / 142 Ah
Service life (according to Eurobat)	> 12 years
<b>Efficiency / operating consumption</b>	
Max. efficiency backup operation	93.6 %
Own consumption day / night (Silent Mode)	40 W / 6 W
<b>Protective equipment</b>	
DC reverse polarity protection / total discharge protection	-/●
AC short-circuit / AC overload	●/●
Grid monitoring (SMA Grid Guard) / galvanic isolation	●/●
<b>General Data</b>	
Dimensions SBU (width / height / depth in mm)	470 / 445 / 180
Dimensions AS Box (width / height / depth in mm)	200 / 300 / 120
Dimensions battery per block (width / height / depth in mm)	498 / 230 / 177
Weight per (SBU / AS box / battery block)	19 kg / 4.5 kg / 54.5 kg
Operating temperature range	-25 °C ... +60 °C
Protection rating (SBU, AS box)	IP54 / IP65
<b>Features / function</b>	
Integrated bypass for faults / test operation	●/●
State of charge calculation / generator input	●/-
Warranty SBU 2200 (5 years / 10 years)	●/○
Battery warranty (2 years), AS-Box warranty (5 years)	●
Certificates and permits	www.SMA.de
<b>Accessories</b>	
Battery cables / DC splitter / Communication cables	4 m / - / 5 m
Battery fuses "BATFUSE"	●
Interfaces (RS485 PB / Multiclusster PB)	○/-
Additional battery parallel / other battery	○/○
External user interface "SRC-1"	●
* SB 2500, SB 2800, SB 3000, models from May 2005 and later	
● Standard ○ Optional	
Last updated: March 2009	
Type designation	SBU-Set-S.1

