

Powerful

- > Highly efficient OptiCool ventilation system
- > Efficiency up to 95.6 %
- > Feeding of maximum power up to an ambient temperature of 45 °C

Safe

- > Electric separation
- > Integrated ESS DC-load disconnecting switch

Reliable

- > Worldwide SMA service and SMA Service Line
- > Attractive SMA warranty program



SUNNY BOY 3300 / 3800

Price Effective

Excellent efficiency, outstanding performance in terms of environment: these are the key features of these two Sunny Boys. They are the first choice for you if you want optimum energy harvest due to the fact that they have a maximum efficiency of 95.6 % - this makes them the best transformer based devices in this power class. Both devices are suitable for both inside or outside installation and they are assembled in a sturdy aluminum enclosure. The patented OptiCool ventilation system with the dual-chamber design protects the electric components and guarantees highest efficiency. Your advantage: low component temperature within the inverter results in good overload capacity and highest yield from your PV system.

Technical Data

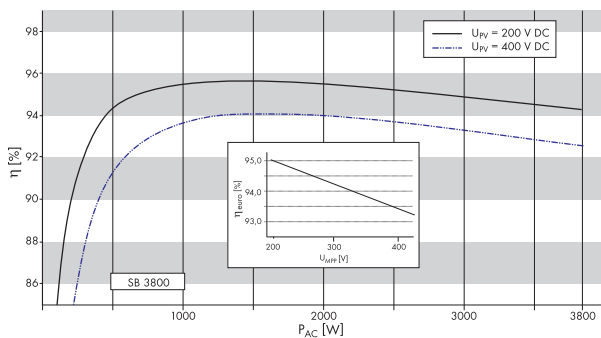
SUNNY BOY 3300 / 3800 / 3800/V*

	SB 3300	SB 3800	SB 3800/V*
Input (DC)			
Max. DC power	3820 W	4040 W	3900 W
Max. DC voltage	500 V	500 V	500 V
PV voltage range, MPPT	200 V - 400 V	200 V - 400 V	200 V - 400 V
Max. input current	20 A	20 A	20 A
Number of MPP trackers	1	1	1
Max. number of strings (parallel)	3	3	3
Output (AC)			
Nominal AC output	3300 W	3800 W	3680 W
Max. AC power	3600 W	3800 W	3680 W
Max. output current	18 A	18 A	16 A
Nominal AC voltage / range	220V - 240V / 180V - 260V	220V - 240V / 180V - 260V	220V - 240V / 180V - 260V
AC grid frequency (self-adjusting) / range	50 Hz / 60 Hz / ± 4.5 Hz	50 Hz / 60 Hz / ± 4.5 Hz	50 Hz / 60 Hz / ± 4.5 Hz
Power factor (cos ϕ)	1	1	1
AC Connection	single-phase	single-phase	single-phase
Efficiency			
Max. efficiency	95.2 %	95.6 %	95.6 %
Euro ETA	94.4 %	94.7 %	94.7 %
Protective equipment			
DC reverse polarity protection	●	●	●
DC load disconnecting switch ESS	●	●	●
AC short circuit protection	●	●	●
Ground fault monitoring	●	●	●
Grid monitoring (SMA grid guard)	●	●	●
Electric separation	●	●	●
General Data			
Dimensions (W / H / D) in mm	450 / 352 / 236	450 / 352 / 236	450 / 352 / 236
Weight	38 kg	38 kg	38 kg
Operating temperature range	-25 °C ... +60 °C	-25 °C ... +60 °C	-25 °C ... +60 °C
Noise emission (typical)	≤ 40 dB(A)	≤ 42 dB(A)	≤ 42 dB(A)
Consumption: operating (standby) / night	< 7 W / 0.1 W	< 7 W / 0.1 W	< 7 W / 0.1 W
Topology	low frequency transformer	low frequency transformer	low frequency transformer
Cooling concept	OptiCool	OptiCool	OptiCool
Installation location: indoor / outdoor (IP65)	● / ●	● / ●	● / ●
Features			
DC connection: MC3 / MC4 / Tyco	● / ○ / ○	● / ○ / ○	● / ○ / ○
AC connection: plug connector	●	●	●
LCD display	●	●	●
Color of lid: red	●	●	●
Interfaces: RS485 / radio / Bluetooth®	○ / ○ / ○	○ / ○ / ○	○ / ○ / ○
Warranty: 5 years / 10 years	● / ○	● / ○	● / ○
Certificates and approvals	www.SMA.de	www.SMA.de	www.SMA.de
Certificate number (please specify with the order)	-	-	V0153

● Standard ○ Optional

Values apply for nominal conditions - Version: April 2009
*Version for country specific requirements according to EN 50438 with $I_{AC} = 16$ A

Efficiency curve



Accessories

- Radio communication** with the inverters
- USB interface** for data transmission to PC and charging of the batteries
- Easy and intuitive operation with the **rotating pushbutton**
- Compact and lightweight** size: 127 x 75 x 195 mm Weight: approx. 350 g
- Large, easy-to-read **LCD display**