

SUNNY BOY 3300 / 3800

SB 3300 / SB 3800



Powerful

- Efficiency of up to 95.6 %
- OptiCool active temperature management
- The best tracking efficiency with OptiTrac MPP tracking

Safe

- Galvanic isolation
- Integrated ESS DC switch-disconnector

Flexible

- For indoor and outdoor installation
- Suitable for generator grounding*

Simple

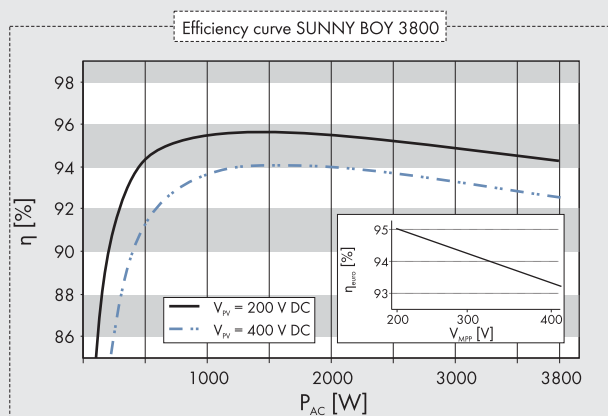
- DC plug system SUNCLIX

SUNNY BOY 3300 / 3800

The generalist

It is robust, easy-to-handle, and, thanks to its galvanic isolation, can be used in all kinds of AC grids: the Sunny Boy 3300 / 3800. Due to its suitability for generator grounding, it can be combined with all module types. The die-cast aluminum enclosure, with the OptiCool active cooling system, guarantees the highest yields and a long service life, even under extreme conditions.

Technical data	Sunny Boy 3300	Sunny Boy 3800	Sunny Boy 3800/V
Input (DC)			
Max. DC power (@ $\cos \varphi = 1$)	3820 W	4040 W	3900 W
Max. DC voltage	500 V	500 V	500 V
MPP voltage range	200 V - 400 V	200 V - 400 V	200 V - 400 V
DC nominal voltage	200 V	200 V	200 V
Min. DC voltage / start voltage	200 V / 250 V	200 V / 250 V	200 V / 250 V
Max. input current / per string	20 A / 16 A	20 A / 16 A	20 A / 16 A
Number of MPP trackers / strings per MPP tracker	1 / 3	1 / 3	1 / 3
Output (AC)			
AC nominal power (@ 230 V, 50 Hz)	3300 W	3800 W	3680 W
Max. AC apparent power	3600 VA	3800 VA	3680 VA
Nominal AC voltage; range	220, 230, 240 V; 180 V - 260 V	220, 230, 240 V; 180 V - 260 V	220, 230, 240 V; 180 V - 260 V
AC grid frequency; range	50, 60 Hz; ± 4.5 Hz	50, 60 Hz; ± 4.5 Hz	50, 60 Hz; ± 4.5 Hz
Max. output current	18 A	18 A	18 A
Power factor ($\cos \varphi$)	1	1	1
Phase conductors / connection phases	1 / 1	1 / 1	1 / 1
Efficiency			
Max. efficiency / Euro-eta	95.2 % / 94.4 %	95.6 % / 94.7 %	95.6 % / 94.7 %
Protection devices			
DC reverse-polarity protection	●	●	●
ESS switch-disconnector	●	●	●
AC short circuit protection	●	●	●
Ground fault monitoring	●	●	●
Grid monitoring (SMA Grid Guard)	●	●	●
Galvanically isolated / all-pole sensitive fault current monitoring unit	●/—	●/—	●/—
Protection class / overvoltage category	I / III	I / III	I / III
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)
Internal consumption (night)	< 0.1 W	< 0.1 W	< 0.1 W
Topology	LF transformer	LF transformer	LF transformer
Cooling concept	OptiCool	OptiCool	OptiCool
Electronics protection rating / connection area (as per IEC 60529)	IP65 / IP65	IP65 / IP65	IP65 / IP65
Climatic category (per IEC 60721-3-4)	4K4H	4K4H	4K4H
Features			
DC connection: SUNCLIX	●	●	●
AC connection: screw terminal / plug connector / spring-type terminal	-/●/—	-/●/—	-/●/—
Display: text line / graphic	●/—	●/—	●/—
Interfaces: RS485 / Bluetooth®	○/○	○/○	○/○
Warranty: 5 / 10 / 15 / 20 / 25 years	●/○/○/○/○	●/○/○/○/○	●/○/○/○/○
Certificates and permits (more available on request)	CE, VDE 0126-1-1, DK 5940**, RD 1663, G83/1-1, CER/06/190, PPC, AS4777, EN 50438***, C10/C11, PPDS		
* Variants for France under preparation			
** Only applies to IT variants			
*** Does not apply to all national deviations of EN 50438			
● Standard features ○ Optional features — not available, data at nominal conditions			
Type designation	SB 3300	SB 3800	SB 3800/V



Accessories



RS485 interface of type
485PB-NR



Bluetooth® Piggy Back
BTPBINV-NR



Grounding set "Positive"
ESHV-P-NR*



Grounding set "Negative"
ESHV-N-NR*