

# SUNNY BOY 1200 / 1700 / 2500 / 3000

SB 1200 / SB 1700 / SB 2500 / SB 3000



## Safe

- Integrated ESS DC switch-disconnector
- Galvanic isolation

## All purpose

- For indoor and outdoor installation
- Suitable for generator grounding

## Reliable

- Tried and tested technology
- Maintenance free, thanks to convection cooling

## Simple

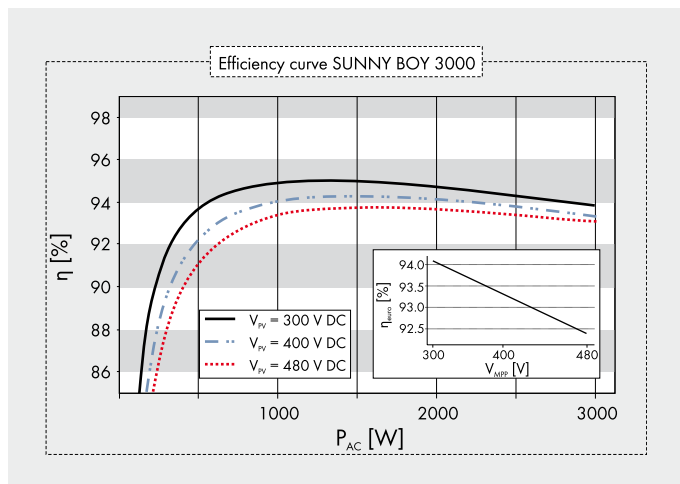
- DC plug system SUNCLIX

## SUNNY BOY 1200 / 1700 / 2500 / 3000

Proven technology for secure investments

Universally applicable: the Sunny Boy inverters 1200, 1700, 2500 and 3000 are used in the most diverse AC grids thanks to their galvanic isolation. In addition, the devices are suitable for simple grounding of the generator. Their integrated ESS DC switch-disconnector makes installation simpler while also reducing assembly costs. Equipped with the OptiTrac MPP-tracking process, it will always find the best working point, even under dynamic weather conditions. In this way, it reliably converts solar energy into solar yield.

Technical data	Sunny Boy 1200	Sunny Boy 1700	Sunny Boy 2500	Sunny Boy 3000
<b>Input (DC)</b>				
Max. DC power (@ $\cos \varphi = 1$ )	1320 W	1850 W	2700 W	3200 W
Max. DC voltage	400 V	400 V	600 V	600 V
MPP voltage range	100 V - 320 V	147 V - 320 V	224 V - 480 V	268 V - 480 V
DC nominal voltage	120 V	180 V	300 V	350 V
Min. DC voltage / start voltage	100 V / 120 V	139 V / 180 V	224 V / 300 V	268 V / 330 V
Max. input current / per string	12.6 A / 12.6 A	12.6 A / 12.6 A	12 A / 12 A	12 A / 12 A
Number of MPP trackers / strings per MPP tracker	1 / 2	1 / 2	1 / 3	1 / 3
<b>Output (AC)</b>				
AC nominal power (@ 230 V, 50 Hz)	1200 W	1550 W	2300 W	2750 W
Max. AC apparent power	1200 VA	1700 VA	2500 VA	3000 VA
Nominal AC voltage; range	220, 230, 240 V; 180 V - 265 V	220, 230, 240 V; 180 V - 265 V	220, 230, 240 V; 180 V - 265 V	220, 230, 240 V; 180 V - 265 V
AC grid frequency; range	50, 60 Hz; $\pm 4.5$ Hz	50, 60 Hz; $\pm 4.5$ Hz	50, 60 Hz; $\pm 4.5$ Hz	50, 60 Hz; $\pm 4.5$ Hz
Max. output current	6.1 A	8.6 A	12.5 A	15 A
Power factor ( $\cos \varphi$ )	1	1	1	1
Phase conductors / connection phases	1 / 1	1 / 1	1 / 1	1 / 1
<b>Efficiency</b>				
Max. efficiency / Euro-eta	92.1 % / 90.9 %	93.5 % / 91.8 %	94.1 % / 93.2 %	95.0 % / 93.6 %
<b>Protection devices</b>				
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	I / III
<b>General data</b>				
Dimensions (W / H / D) in mm	440 / 339 / 214	440 / 339 / 214	440 / 339 / 214	440 / 339 / 214
Weight	23 kg	25 kg	28 kg	32 kg
Operating temperature range	-25 °C ... +60 °C	-25 °C ... +60 °C	-25 °C ... +60 °C	-25 °C ... +60 °C
Noise emission (typical)	$\leq 41$ dB(A)	$\leq 46$ dB(A)	$\leq 33$ dB(A)	$\leq 30$ dB(A)
Internal consumption (night)	$< 0.1$ W	$< 0.1$ W	$< 0.25$ W	$< 0.25$ W
Topology	LF transformer	LF transformer	LF transformer	LF transformer
Cooling concept	Convection	Convection	Convection	Convection
Electronics protection rating / connection area (as per IEC 60529)	IP65 / IP65	IP65 / IP65	IP65 / IP65	IP65 / IP65
Climatic category (per IEC 60721-3-4)	4K4H	4K4H	4K4H	4K4H
<b>Features</b>				
DC connection: SUNCLIX	●	●	●	●
AC connection: screw terminal / plug connector / spring-type terminal	-/●/—	-/●/—	-/●/—	-/●/—
Display: text line / graphic	●/—	●/—	●/—	●/—
Interfaces: RS485 / Bluetooth®	o/o	o/o	o/o	o/o
Warranty: 5 / 10 / 15 / 20 / 25 years	●/o/o/o/o/o	●/o/o/o/o/o	●/o/o/o/o/o	●/o/o/o/o/o
Certificates and permits (more available on request)	CE, VDE 0126-1-1, UTE C 15-712-1, DK 5940*, RD 1663, G83/1-1, CER/06/190 (only SB 1700), PPC, AS4777, EN 50438**, C10/C11, PPDS, IEEE 929		CE, VDE 0126-1-1, DK 5940*, RD 1663, G83/1-1, CER/06/190, PPC, AS4777, EN 50438**, C10/C11, PPDS	
*Only applies to IT variants, ** Does not apply to all national deviations of EN 50438				
● Standard features   o Optional features   — not available   Data at nominal conditions				
Type designation	SB 1200	SB 1700	SB 2500	SB 3000



### Accessories



RS485 interface of type 485PB-NR



Bluetooth® Piggy Back BTPBINV-NR



Grounding set "Positive" ESHV-P-NR



Grounding set "Negative" ESHV-P-NR