



Safe

- Integrated ESS DC load-disconnecting unit
- Galvanic isolation

Universal

- For indoor and outdoor installation
- Suitable for generator grounding

Reliable

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

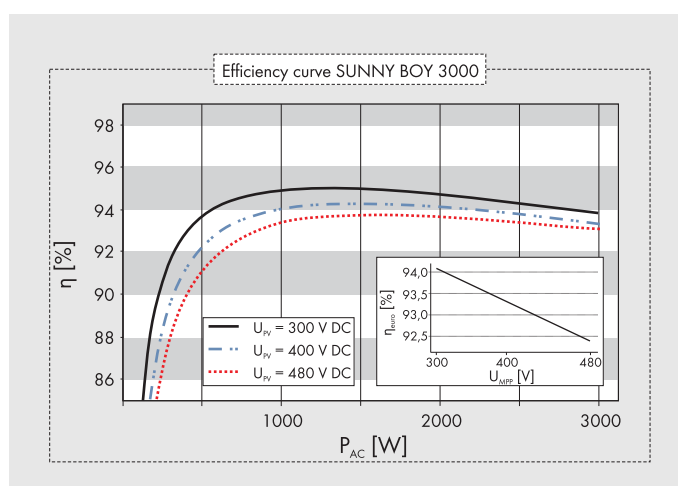
SUNNY BOY 1200 / 1700 / 2500 / 3000

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 the simple grounding of the generator. Their integrated ESS DC load-disconnection switch simplifies installation and reduces its cost at the same time. Equipped with the OptiTrac MPP tracking process, it will always find the optimal working point, even under dynamic weather conditions. In this way, it reliably converts solar energy into solar earnings.

Technical Data

	Sunny Boy 1200	Sunny Boy 1700	Sunny Boy 2500	Sunny Boy 3000
Input (DC)				
Max. DC power	1320 W	1850 W	2700 W	3200 W
Max. DC voltage	400 V	400 V	600 V	600 V
PV-voltage range, MPPT	100 V - 320 V	139 V - 320 V	224 V - 480 V	268 V - 480 V
Max. input current	12.6 A	12.6 A	12 A	12 A
Number of MPP trackers	1	1	1	1
Max. number of strings (parallel)	2	2	3	3
Output (AC)				
Nominal AC output	1200 W	1550 W	2300 W	2750 W
Max. AC power	1200 W	1700 W	2500 W	3000 W
Max. output current	6.1 A	8.6 A	12.5 A	15 A
Nominal AC voltage / range	220 V - 240 V / 180 V - 260 V	220 V - 240 V / 180 V - 260 V	220 V - 240 V / 180 V - 260 V	220 V - 240 V / 180 V - 260 V
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	50 Hz / 60 Hz / ± 4.5 Hz
Phase shift (cos φ)	1	1	1	1
AC connection	single-phase	single-phase	single-phase	single-phase
Efficiency				
Max. efficiency / Euro-Eta	92.1 % / 90.7 %	93.5 % / 91.8 %	94.1 % / 93.2 %	95.0 % / 93.6 %
Protection devices				
DC reverse polarity protection	●	●	●	●
ESS DC load-disconnecting switch	●	●	●	●
AC short-circuit protection	●	●	●	●
Ground fault monitoring	●	●	●	●
Grid monitoring (SMA Grid Guard)	●	●	●	●
Galvanically isolated	●	●	●	●
General Data				
Dimensions (W / H / D) in mm	434 / 295 / 214	434 / 295 / 214	434 / 295 / 214	434 / 295 / 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)	≤ 41 dB(A)	≤ 46 dB(A)	≤ 33 dB(A)	≤ 30 dB(A)
Consumption: operating (standby) / night	<4 W / 0.1 W	<5 W / 0.1 W	<7 W / 0.25 W	<7 W / 0.25 W
Topology	LF transformer	LF transformer	LF transformer	LF transformer
Cooling concept	convection	convection	convection	convection
Mounting location: indoors / outdoors (IP65)	●/●	●/●	●/●	●/●
Features				
DC connection: MC3 / MC4 / Tyco	●/○/○	●/○/○	●/○/○	●/○/○
AC connection: plug connector	●	●	●	●
LCD	●	●	●	●
Interfaces: Bluetooth / RS485	○/○	○/○	○/○	○/○
Warranty: 5 years / 10 years	●/○	●/○	●/○	●/○
Certificates and approvals	www.SMA.de	www.SMA.de	www.SMA.de	www.SMA.de
● Standard ○ Optional				
Data at nominal conditions - Last update: March 2009				
Type Designation	SB 1200	SB 1700	SB 2500	SB 3000



Accessories



RS485 interface of type 485PB-NR



Bluetooth Piggy-Back



Grounding-Kit "Positive" ESHV-P-NR



Grounding-Kit "Negative" ESHV-P-NR