

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

Proven technology for secure investments

Universally applicable: the Sunny Boy inverters 1200 and 1700 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-disconnecting unit 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

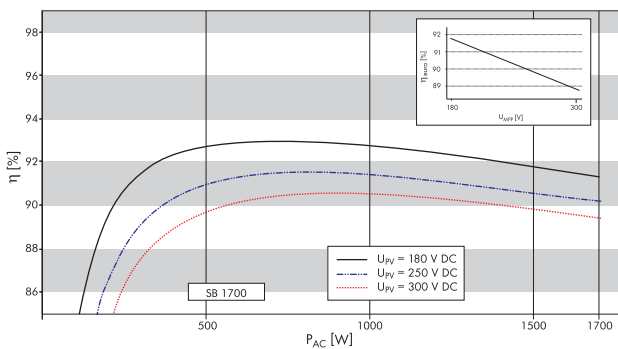
SUNNY BOY 1200 / 1700

	SB 1200	SB 1700
Input (DC)		
Max. DC power	1320 W	1850 W
Max. DC voltage	400 V	400 V
PV-voltage range, MPPT	100 V - 320 V	139 V - 320 V
Max. input current	12.6 A	12.6 A
Number of MPP trackers	1	1
Max. number of strings (parallel)	2	2
Output (AC)		
Nominal AC output	1200 W	1550 W
Max. AC power	1200 W	1700 W
Max. output current	6.1 A	8.6 A
Nominal AC voltage / range	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
Phase shift (cos ϕ)	1	1
AC connection	single-phase	single-phase
Efficiency		
Max. efficiency / Euro-Eta	92.1 % / 90.7 %	93.5 % / 91.8 %
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
Weight	23 kg	25 kg
Operating temperature range	-25 °C ... +60 °C	-25 °C ... +60 °C
Noise emission (typical)	≤ 41 dB(A)	≤ 46 dB(A)
Consumption: operating (standby) / night	< 4 W / 0.1 W	< 5 W / 0.1 W
Topology	LF transformer	LF transformer
Cooling concept	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
	Available from 10 / 2009	

● Standard ○ Optional

Data at nominal conditions - Last update: July 2009

Efficiency curve



Accessories



RS485 interface of type 485PB-NR



Bluetooth Piggy-Back



Grounding-Kit "Positive" ESHV-P-NR



Grounding-Kit "Negative" ESHV-P-NR