

SUNNY BOY 2000HF / 2500HF / 3000HF

SB 2000HF-30 / SB 2500HF-30 / SB 3000HF-30



High Yields

- Maximum efficiency 96.3 %
- The best tracking efficiency with OptiTrac MPP tracking
- Shade management with OptiTrac Global Peak *

Safe

- Galvanic isolation
- Integrated ESS DC switch-disconnector
- Theft protection

Simple

- Quick and easy configuration thanks to Quick Module
- DC plug system SUNCLIX
- Suitable for generator grounding

Communicative

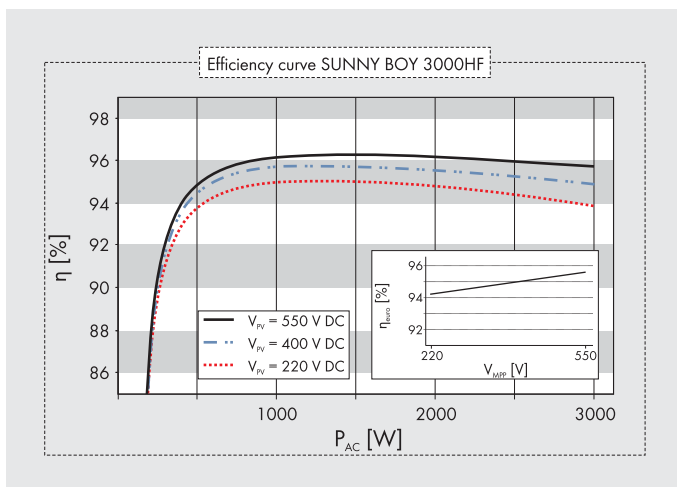
- Graphic display
- *Bluetooth*® technology as standard

SUNNY BOY 2000HF / 2500HF / 3000HF

Simply high yields

This is the new generation of galvanically isolated inverters – packed full of the latest SMA technology, the Sunny Boy HF series provides the highest yields for transformer inverters of this performance class. Installation is now easier than ever thanks to the DC connector system SUNCLIX, the plug-in generator grounding (optional), and an easily accessible configuration area – including easier mounting due to the reduced weight. The wide input voltage range from 175 to 700 volts gives you extraordinary flexibility for your plant design, and the modern graphic display and wireless *Bluetooth* communication system make the devices highly user-friendly.

Technical data	Sunny Boy 2000HF	Sunny Boy 2500HF	Sunny Boy 3000HF
Input (DC)			
Max. DC power (@ $\cos \varphi = 1$)	2100 W	2600 W	3150 W
Max. DC voltage	700 V	700 V	700 V
MPP voltage range	175 V - 560 V	175 V - 560 V	210 V - 560 V
DC nominal voltage	530 V	530 V	530 V
Min. DC voltage / start voltage	175 V / 220 V	175 V / 220 V	175 V / 220 V
Max. input current / per string	12 A / 12 A	15 A / 15 A	15 A / 15 A
Number of MPP trackers / strings per MPP tracker	1 / 2	1 / 2	1 / 2
Output (AC)			
AC nominal power (@ 230 V, 50 Hz)	2000 W	2500 W	3000 W
Max. AC apparent power	2000 VA	2500 VA	3000 VA
Nominal AC voltage; range	220, 230, 240 V; 180 - 280 V	220, 230, 240 V; 180 - 280 V	220, 230, 240 V; 180 - 280 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	11.4 A	14.2 A	15 A
Power factor ($\cos \varphi$)	1	1	1
Phase conductors / connection phases	1 / 1	1 / 1	1 / 1
Efficiency			
Max. efficiency / Euro-eta	96.3 % / 95.0 %	96.3 % / 95.3 %	96.3 % / 95.4 %
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	348 / 580 / 145	348 / 580 / 145	348 / 580 / 145
Weight	17 kg	17 kg	17 kg
Operating temperature range	-25 °C ... +60 °C	-25 °C ... +60 °C	-25 °C ... +60 °C
Noise emission (typical)	38 dB(A)	38 dB(A)	38 dB(A)
Internal consumption: (night)	< 1 W	< 1 W	< 1 W
Topology	HF transformer	HF transformer	HF transformer
Cooling concept	OptiCool	OptiCool	OptiCool
Electronics protection rating / connection area (as per IEC 60529)	IP65 / IP54	IP65 / IP54	IP65 / IP54
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, Enel-GUIDA Ed. 1.1, RD 1663, G83/1-1, PPC, AS4777, UTE C 15-712-1, EN 50438***, C10/C11, PPDS		
* In planning			
*** Does not apply to all national deviations of EN 50438			
● Standard features ○ Optional features - not available			
Provisional data, as of February 2011 - data at nominal conditions			
Type designation	SB 2000HF-30	SB 2500HF-30	SB 3000HF-30



Accessories



SMA Plug-in Grounding
PLUG-IN-GRD-10-NR



Quick Module RS485
+ multi-function relay
485QM-10-NR