

High Yields

- > Maximum efficiency over 96 %
- > Best tracking efficiency with OptiTrac MPP control
- > OptiCool active temperature management

Safe

- > Galvanic Isolation
- > Integrated DC load disconnecting unit ESS
- > Anti-theft protection

Easy to use

- > Fast and easy installation due to plug-in communication unit
- > Innovative DC plug system SUNCLIX
- > Plug-in grounding (optional)

Communicative

- > Simple country configuration
- > Multi-language graphic display
- > Bluetooth® technology



SUNNY BOY 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 power class. Installation is now easier than ever thanks to the new 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 Volt gives you extraordinary flexibility for your system design. And the modern graphic display and wireless Bluetooth® communication system make the devices highly user-friendly.

Technical Data

SUNNY BOY 2000HF / 2500HF / 3000HF

	SB 2000HF-30	SB 2500HF-30	SB 3000HF-30
Input (DC)			
Max. DC power	2100 W	2650 W	3150 W
Max. DC voltage	700 V	700 V	700 V
PV voltage range, MPPT	175 V - 560 V	175 V - 560 V	210 V - 560 V
Max. input current	12.0 A	15.0 A	15.0 A
Number of MPP trackers	1	1	1
Max. number of strings (parallel)	2	2	2
Output (AC)			
Nominal AC power / max. AC power	2000 W / 2000 W	2500 W / 2500 W	3000 W / 3000 W
Max. output current	11.4 A	14.2 A	16.0 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
AC grid frequency / range	50 Hz / 60 Hz / ± 4.5 Hz	50 Hz / 60 Hz / ± 4.5 Hz	50 Hz / 60 Hz / ± 4.5 Hz
Power factor (cos φ)	1	1	1
THD	< 4 %	< 4 %	< 4 %
AC connection	single-phase	single-phase	single-phase
Efficiency			
Max. efficiency / Euro-Eta	> 96 % / > 95 %	> 96 % / > 95 %	> 96 % / > 95 %
Protection devices			
DC reverse polarity protection	●	●	●
DC load-disconnecting unit ESS	●	●	●
AC short-circuit protection	●	●	●
Ground fault monitoring	●	●	●
Grid monitoring (SMA Grid Guard)	●	●	●
All-pole-sensitive residual current monitoring unit	●	●	●
General data			
Dimensions (W / H / D) in mm	348 / 580 / 145	348 / 580 / 145	348 / 580 / 145
Weight	< 18 kg	< 18 kg	< 18 kg
Operating temperature range	-25 °C ... +60 °C	-25 °C ... +60 °C	-25 °C ... +60 °C
Consumption: (standby) operation / night	< 5 W / 0.25 W	< 5 W / 0.25 W	< 5 W / 0.25 W
Topology	HF-transformer	HF-transformer	HF-transformer
Cooling concept	n. s.	OptiCool	OptiCool
Installation: indoors / outdoors (IP65 electronics)	●/●	●/●	●/●
Features			
DC connection: SUNCLIX	●	●	●
AC connection: connector	●	●	●
Graphic display	●	●	●
Interfaces: Bluetooth / RS485	●/○	●/○	●/○
Warranty: 5 years / 10 years / 15 years / 20 years / 25 years	●/○/○/○/○	●/○/○/○/○	●/○/○/○/○
Certificates and approvals	www.SMA.de	www.SMA.de	www.SMA.de
● Standard equipment ○ Optional	Data at nominal conditions - provisional data, as of September, 2009		

Accessories



Plug-in generator grounding connection



Communication unit RS485 + multi-function relay