



# SUNNY BOY 2000HF-US / 2500HF-US / 3000HF-US

SB 2000HFUS-30 / SB 2500HFUS-30 / SB 3000HFUS-30



## High Yields

- Maximum efficiency 97.3%
- The best tracking efficiency with OptiTrac™ MPP tracking
- OptiCool™ active temperature management

## Safe

- Galvanic isolation
- Integrated DC switch-disconnect

## User-friendly

- Slim enclosure mounts in between wall studs
- Plug-in grounding with GFDI
- Reduced weight
- Quick and easy configuration thanks to Quick Module

## Informative

- Modern graphic display
- Bluetooth® technology

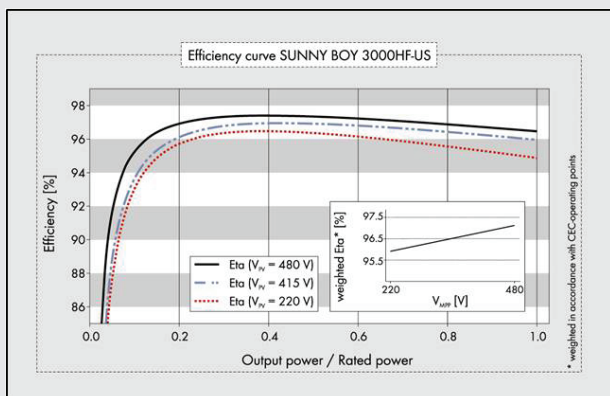
## SUNNY BOY 2000HF-US / 2500HF-US / 3000HF-US

Easy installation, simple communication and maximum performance

The new Sunny Boy high frequency inverters are designed for projects requiring UL certification and represent the next step in innovative SMA technology. Featuring world-class efficiency, a slim-line enclosure and reduced weight, the Sunny Boy HF series of inverters can be mounted in between wall studs, making it perfect for new construction or space-constrained retrofits. Installation is made simple by automatic grid detection\*, field configuration for positive ground modules and a wide input voltage range of 175 to 600 V, which provides exceptional system design flexibility. The modern graphic display and wireless Bluetooth communication system provides a wealth of data in a user-friendly format.

\* US Patent US7352549B1

Technical data	Sunny Boy 2000HF-US		Sunny Boy 2500HF-US		Sunny Boy 3000HF-US	
	208 V AC	240 V AC	208 V AC	240 V AC	208 V AC	240 V AC
<b>Input (DC)</b>						
Max. recommended PV power (@ module STC)	2500 W		3125 W		3750 W	
Max. DC power (@ $\cos \phi = 1$ )	2200 W		2750 W		3300 W	
Max. DC voltage	600 V		600 V		600 V	
DC nominal voltage	480 V		480 V		480 V	
MPP voltage range	175 - 480 V		220 - 480 V		220 - 480 V	
Min. DC voltage / start voltage	175 V / 220 V		220 V / 220 V		220 V / 220 V	
Max. input current / per string	15 A / 15 A		15 A / 15 A		15 A / 15 A	
Number of MPP trackers / fused strings per MPP tracker	1 / 2 standard, extendable to 3					
<b>Output (AC)</b>						
AC nominal power	2000 W		2500 W		3000 W	
Max. AC apparent power	2000 VA		2500 VA		3000 VA	
Nominal AC voltage / adjustable	208 V / ●	240 V / ●	208 V / ●	240 V / ●	208 V / ●	240 V / ●
AC voltage range	183 - 229 V	211 - 264 V	183 - 229 V	211 - 264 V	183 - 229 V	211 - 264 V
AC grid frequency; range	60 Hz; 59.3 - 60.5 Hz		60 Hz; 59.3 - 60.5 Hz		60 Hz; 59.3 - 60.5 Hz	
Max. output current	9.6 A	8.3 A	12.0 A	10.4 A	14.4 A	12.5 A
Power factor ( $\cos \phi$ )	1		1		1	
Phase conductors / connection phases	1 / 2		1 / 2		1 / 2	
Harmonics	< 4%		< 4%		< 4%	
<b>Efficiency</b>						
Max. efficiency	97.3%		96.9%		96.6%	
CEC efficiency	97.0%		96.5%		96.5%	
<b>Protection devices</b>						
DC reverse-polarity protection	●		●		●	
AC short circuit protection	●		●		●	
Galvanically isolated / all-pole sensitive monitoring unit	●/—		●/—		●/—	
Protection class / overvoltage category	I / III		I / III		I / III	
<b>General data</b>						
Dimensions (W / H / D) in mm (in)	348 / 727 / 183 (14 / 29 / 7) incl. DC Disconnect					
DC disconnect dimensions (W / H / D) in mm (in)	—					
Packing dimensions (W / H / D) in mm (in)	450 / 600 / 400 (18 / 24 / 16) incl. DC Disconnect					
DC disconnect packing dimensions (W / H / D) in mm (in)	—					
Weight / DC disconnect weight	approx. 23 kg (51 lb) incl. DC Disconnect					
Packing weight / DC disconnect packing weight	25 kg / 55 lb					
Operating temperature range (full power)	-25 °C ... +60 °C (-13 °F ... +140 °F)					
Noise emission (typical)	www.SMA-Solar.com		www.SMA-Solar.com		www.SMA-Solar.com	
Internal consumption at night	<1 W		<1 W		<1 W	
Topology	HF transformer		HF transformer		HF transformer	
Cooling concept	OptiCool		OptiCool		OptiCool	
Electronics protection rating / connection area	NEMA 3R / NEMA 3R		NEMA 3R / NEMA 3R		NEMA 3R / NEMA 3R	
<b>Features</b>						
Display: text line / graphic	—/●		—/●		—/●	
Interfaces: RS485 / Bluetooth	○/●		○/●		○/●	
Warranty: 10 / 15 / 20 years	●/○/○		●/○/○		●/○/○	
Certificates and permits (more available on request)	UL1741, UL1998, IEEE 1547, FCC Part 15 (Class A & B), CSA C22.2 No. 107.1-01					
Data at nominal conditions						
● Standard features ○ Optional features — Not available						
Type designation	SB 2000HFUS-30		SB 2500HFUS-30		SB 3000HFUS-30	



## Accessories



Flush Mount Kit for integration in wood-framed walls  
MOUNT KIT-10-NR



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



Optional String Fuse Kit  
SBSFKUS-10-NR