



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

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



High Yields

- Maximum efficiency 96%
- 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

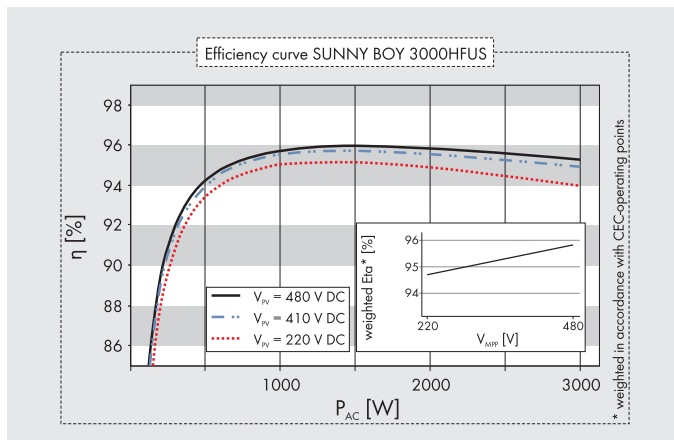
SUNNY BOY 2000HF-US / 2500HF-US / 3000HF-US

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.

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
Input (DC)						
Max. recommended PV power (@ module STC)	2500 W		3125 W		3750 W	
Max. DC power (@ $\cos \phi = 1$)	2100 W		2600 W		3150 W	
Max. DC voltage	600 V		600 V		600 V	
DC nominal voltage	480 V		480 V		480 V	
MPP voltage range	175 - 480V		175 - 480V		220 - 480V	
Min. DC voltage / start voltage	175 V / 220 V		175 V / 220 V		220 V / 220 V	
Max. input current / per string	12.2 A / 12.2 A		12.4 A / 12.4 A		14.8 A / 14.8 A	
Number of MPP trackers / fused strings per MPP tracker	1 / 3 optional					
Output (AC)						
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		183 - 229 V		183 - 229 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	10.0 A	8.5 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%	
Efficiency*						
Max. efficiency	96.0%		96.0%		96.0%	
CEC efficiency	95.0%	95.0%	95.0%	95.0%	95.0%	95.0%
Protection devices						
DC reverse-polarity protection	●		●		●	
AC short circuit protection	●		●		●	
Galvanically isolated / all-pole sensitive monitoring unit	●/—		●/—		●/—	
Protection class / overvoltage category	I / IV		I / IV		I / IV	
General data						
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	www.SMA-Solar.com					
Operating temperature range (full power)	-25 °C ... +45 °C (-13 °F ... +113 °F)					
Noise emission (typical)	www.SMA-Solar.com		www.SMA-Solar.com		www.SMA-Solar.com	
Internal consumption at night	0.8 W		0.8 W		0.8 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	
Features						
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. 107.1-2001					
Data at nominal conditions						
● Standard features ○ Optional features — Not available						
*Estimated Provisional data, as of August 2010						
Type designation	SB 2000HFUS-30		SB 2500HFUS-30		SB 3000HFUS-30	

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Accessories



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



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



Combi-Switch DC disconnect and PV array combiner box
COMBO-SWITCH



Combiner Box Simplify wiring for added convenience and safety
SBCB-6-3R or SBCB-6-4