

SB 3000US / SB 3800-US-10 / SB 4000US


**SB 3800-US NOW AVAILABLE**

**UL Certified**

- For countries that require UL certification (UL 1741/IEEE 1547)

**Efficient**

- 96.8% peak efficiency
- OptiCool™ active temperature management system

**Safe**

- Galvanic isolation

**Simple**

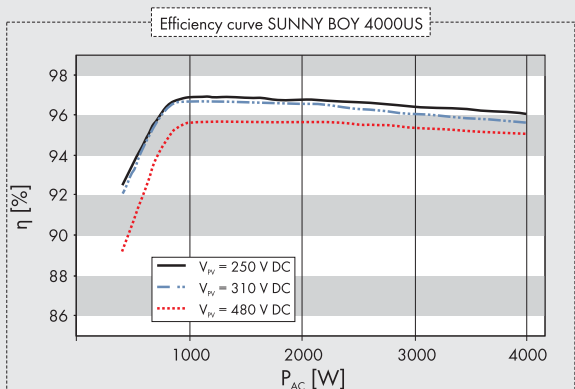
- Patented automatic grid voltage detection\*
- Integrated DC disconnect switch

## SUNNY BOY 3000-US / 3800-US / 4000-US

UL certified, reliable system managers

The Sunny Boy 3000-US, 3800-US and 4000-US inverters are specially designed for countries that require UL certification. Automatic grid voltage detection\* and an integrated DC disconnect switch simplifies installation, ensuring safety as well as saving time. These models feature galvanic isolation and can be used with all types of modules—crystalline as well as thin-film. The die-cast aluminum enclosure, with the OptiCool active temperature management system, guarantees the highest yields possible and a long service life, even under extreme conditions. The Sunny Boy 3800-US is designed for projects with a current limit of 16A.

Technical data	Sunny Boy 3000-US		Sunny Boy 3800-US	Sunny Boy 4000-US	
	208 V AC	240 V AC	240 V AC	208 V AC	240 V AC
<b>Input (DC)</b>					
Max. recommended PV power (@ module STC)	3750 W		4750 W	4375 W	5000 W
Max. DC power (@ $\cos \phi = 1$ )	3200 W		4200 W	4200 W	
Max. DC voltage	500 V		600 V	600 V	
DC nominal voltage	250 V		310 V	310 V	
MPP voltage range	175 – 400 V	200 – 400 V	250 – 480 V	220 – 480 V	250 – 480 V
Min. DC voltage / start voltage	175 / 228 V	200 / 228 V	250 / 285 V	220 / 285 V	250 / 285 V
Max. input current / per string (at DC disconnect)	17 A / 17 A 36 A @ combined terminal		18 A / 18 A 36 A @ combined terminal	18 A / 18 A 36 A @ combined terminal	
Number of MPP trackers / fused strings per MPP tracker	1 / 4 (DC disconnect)				
<b>Output (AC)</b>					
AC nominal power	3000 W		3800 W	3500 W	4000 W
Max. AC apparent power	3000 VA		3800 VA	3500 VA	4000 VA
Nominal AC voltage / adjustable	208 V / ●	240 V / ●	240 V / –	208 V / ●	240 V / ●
AC voltage range	183 – 229 V	211 – 264 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	15 A	13 A	16 A	17 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	96.0%	96.5%	96.8%	96.5%	96.8%
CEC efficiency	95.0%	95.5%	96.0%	95.5%	96.0%
<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)	450 / 350 / 235 (18 / 14 / 9)				
DC Disconnect dimensions (W / H / D) in mm (in)	187 / 297 / 190 (7 / 12 / 7.5)				
Packing dimensions (W / H / D) in mm (in)	390 / 580 / 470 (15 / 23 / 18.5)				
DC Disconnect packing dimensions (W / H / D) in mm (in)	370 / 240 / 280 (15 / 9 / 11)				
Weight / DC Disconnect weight	38 kg (84 lb) / 3.5 kg (8 lb)				
Packing weight / DC Disconnect packing weight	44 kg (97 lb) / 4 kg (9 lb)				
Operating temperature range (full power)	–25 °C ... +45 °C (–13 °F ... +113 °F)				
Noise emission (typical)	40 dB(A)	www.SMA-Solar.com		37 dB(A)	
Internal consumption at night	0.1 W		0.1 W	0.1 W	
Topology	LF transformer		LF transformer	LF 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. 107.1-2001				
NOTE: US inverters ship with gray lids.					
Data at nominal conditions					
● Standard features ○ Optional features – Not available					
Type designation	SB 3000US		SB 3800-US-10	SB 4000US	



## Accessories



RS485 interface  
485USPB-NR



Bluetooth® Piggy Back  
BTPBINV-NR



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

