



# SUNNY BOY 700-US

SB 700U 150 VDC / SB 700U 200 VDC / SB 700U 250 VDC



### UL Certified

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

### Safe

- Galvanic isolation due to integrated transformer

### Simple

- Simple installation thanks to three-point mounting assembly

### Flexible

- Three different input voltage ranges
- Modular addition for all applications

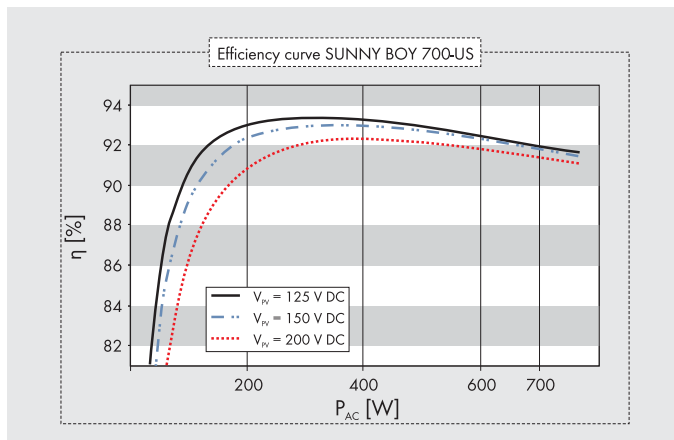
## SUNNY BOY 700-US

The versatile choice for any system configuration

The SMA Sunny Boy 700-US was SMA's first mass-produced string inverter and it continues to enjoy immense popularity in today's solar market. Its compact size and economical price make it ideal for starter or demonstration systems. It is also perfectly suited for adding a bit more power to an existing solar system. Its modular design makes expansion to almost any size easy. Three different configurable input voltage ranges make the Sunny Boy 700-US a versatile choice, whatever your system configuration.

Technical data	SB700-US	SB700-US	SB700-US
	150 V DC	200 V DC	250 V DC
<b>Input (DC)</b>			
Max. recommended PV power (@ module STC)	575 W	750 W	875 W
Max. DC power (@ $\cos \phi = 1$ )	510 W	670 W	780 W
Max. DC voltage	150 V	200 V	250 V
DC nominal voltage	95 V	125 V	150 V
MPP voltage range	77 V - 120 V	100 V - 160 V	125 V - 200 V
Min. DC voltage / start voltage	75 V / 95 V	100 V / 125 V	125 V / 150 V
Max. input current / per string		7 A / 7 A	
Number of MPP trackers / strings per MPP tracker		1 / 2	
<b>Output (AC)</b>			
AC nominal power	460 W	600 W	700 W
Max. AC apparent power	460 VA	600 VA	700 VA
Nominal AC voltage / adjustable		120 V / -	
AC voltage range		106 V - 132 V	
AC grid frequency; range		60 Hz; 59.3 - 60.5 Hz	
Max. output current	4.4 A	5.7 A	6.6 A
Power factor ( $\cos \phi$ )	1	1	1
Phase conductors / connection phases	1 / 1	1 / 1	1 / 1
Harmonics	< 3%	< 3%	< 3%
<b>Efficiency</b>			
Max. efficiency	92.4%	93.3%	93.6%
CEC efficiency	91.5%	91.5%	91.5%
<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)		322 / 290 / 180 (13 / 11 / 7)	
DC disconnect dimensions (W / H / D) in mm (in)		-	
Packing dimensions (W / H / D) in mm (in)		390 / 390 / 230 (15 / 15 / 9)	
DC disconnect packing dimensions (W / H / D) in mm (in)		-	
Weight / DC disconnect weight		23 kg (51 lb) / -	
Packing weight / DC disconnect packing weight		26 kg (57 lb) / -	
Operating temperature range (full power)		-25 °C ... +45 °C (-13 °F ... +113 °F)	
Noise emission (typical)	-	-	-
Internal consumption at night	0.1 W	0.1 W	0.1 W
Topology	LF transformer	LF transformer	LF transformer
Cooling concept	convection	convection	convection
Electronics protection rating / connection area	NEMA 3X / NEMA 3X	NEMA 3X / NEMA 3X	NEMA 3X / NEMA 3X
<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		
Data at nominal conditions			
● Standard features ○ Optional features - Not available			
Type designation	SB 700U 150 VDC	SB 700U 200 VDC	SB 700U 250 VDC

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### Accessories



RS485 interface  
485USPB-NR

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