

**Safe**

- > Integrated ESS DC load disconnecting unit
- > Electric separation

**Flexible**

- > For inside and outside installation
- > Wide range of display and communication options

**Reliable**

- > Worldwide SMA service including Service Line
- > Attractive SMA warranty program



# SUNNY BOY 2500 / 3000

## The bestsellers

The fact that a product has sold more units worldwide than any other in its class doesn't necessarily say anything about its quality. But both the Sunny Boy 2500 and the Sunny Boy 3000 guarantee excellent energy yields because they operate with extremely low losses. Their extremely solid engineering and innovative switching concept is ideal for the most common system sizes of grid-connected solar power systems. The wide input power range enables a diversity of combination options with all current cell technologies and the extensive display and communication options make the Sunny Boy 2500 / Sunny Boy 3000 the perfect choice for your system.

# Technical data

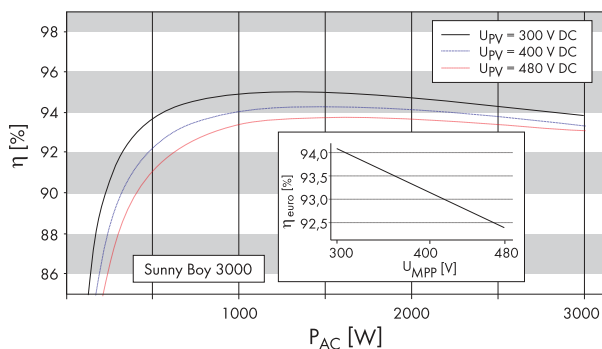
## SUNNY BOY 2500 / 3000

	SB 2500	SB 3000
<b>Input (DC)</b>		
Max. DC input power	2700 W	3200 W
Max. DC voltage	600 V	600 V
PV voltage range, MPPT	224 V - 480 V	268 V - 480 V
Max. input current	12 A	12 A
Number of MPP trackers	1	1
Max. number of strings (parallel)	3	3
<b>Output (AC)</b>		
Nominal AC output power	2300 W	2750 W
Max. AC output power	2500 W	3000 W
Max. output current	12.5 A	15 A
Nominal AC voltage / range	220 V - 240 V / 180 V - 260 V	220 V - 240 V / 180 V - 260 V
AC grid frequency (self-adjusting) / range	50 Hz / 60 Hz / $\pm 4.5$ Hz	50 Hz / 60 Hz / $\pm 4.5$ Hz
Power factor (cos $\phi$ )	1	1
AC connection	single-phase	single-phase
<b>Efficiency</b>		
Max. efficiency	94.1 %	95.0 %
Euro ETA	93.2 %	93.6 %
<b>Protective equipment</b>		
DC reverse polarity protection	●	●
DC load-disconnecting switch ESS	●	●
AC short-circuit tolerance	●	●
Ground fault monitoring	●	●
Grid monitoring (SMA grid guard)	●	●
Galvanically isolated	●	●
<b>General data</b>		
Dimensions (W / H / D) in mm	434 / 295 / 214	434 / 295 / 214
Weight	28 kg	32 kg
Operating temperature range	-25 °C to +60 °C	-25 °C to +60 °C
Operating consumption: Operating (standby) / night	< 7 W / 0.25 W	< 7 W / 0.25 W
Topology	low frequency transformer	low frequency transformer
Cooling concept	convection	convection
Mounting location: indoor / outdoor (IP65)	●/●	●/●
<b>Features</b>		
DC connection: MC3 / MC4 / Tyco	●/○/○	●/○/○
AC connection: plug connector	●	●
LCD display	●	●
Cover color: red	●	●
Interfaces: RS485 / radio	○/○	○/○
Warranty: 5 years / 10 years	●/○	●/○
Certificates and approvals	www.SMA.de	www.SMA.de

● Standard equipment ○ Optional

Data at nominal conditions - Version: September 2009

### Efficiency curve



### Accessories



Website: [www.alphatrononline.com](http://www.alphatrononline.com)  
 Email: [sales@alphatrononline.com](mailto:sales@alphatrononline.com)  
 Australia Phone: 1800 148 793  
 New Zealand Phone: +64 9 414 5520

SMA Solar Technology AG