

# SUNNY BOY 3300 / 3800

SB 3300-11 / SB 3800-11



## Powerful

- Efficiency of up to 95.6%
- OptiCool active temperature management
- The best tracking efficiency with OptiTrac MPP tracking

## Secure

- Galvanic Isolation
- Integrated ESS DC switch-disconnector (optional)

## Flexible

- For outdoor and indoor installation
- Suitable for PV array grounding
- Integrated grid management functions with reactive power provision

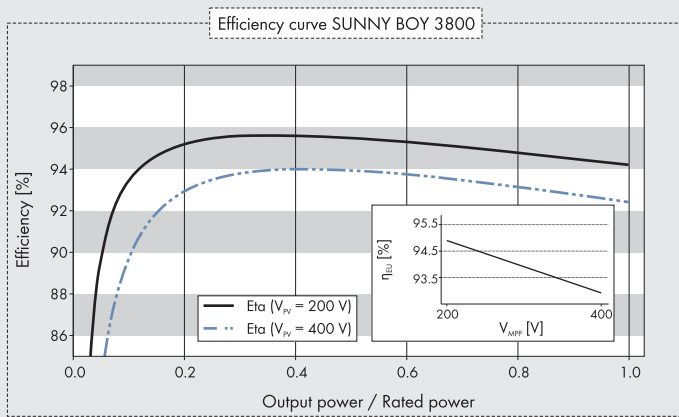
## Easy to use

- SUNCLIX DC plug-in system

## SUNNY BOY 3300 / 3800

The All-rounder with Integrated Grid Management Functions

It is robust, easy-to-handle, and, thanks to its galvanic isolation, it can be used in all kinds of AC grids: the Sunny Boy 3300/3800. Due to its suitability for PV array grounding, it can be combined with all module types. The die-cast aluminum enclosure, with the OptiCool active cooling system, guarantees the highest yields and a long service life, even under extreme conditions. Thanks to reactive power provision, it supports grid stability, and it is flexible and can be applied to different plant sizes.



## Accessories



RS485 interface  
485PB-NR



Bluetooth Piggy-Back  
BTPBINV-NR



Grounding set "positive"  
ESHV-P-NR



Grounding set "negative"  
ESHV-N-NR

\* Does not apply to all national appendices of EN 50438

\*\* If ESS is deselected, the number of string inputs is reduced to 2

● Standard features ○ Optional features – Not available

Data at nominal conditions - Last update: October 2012

Technical Data	Sunny Boy 3300	Sunny Boy 3800
<b>Input (DC)</b>		
Max. DC power (@ $\cos \phi = 1$ )	3820 W	4040 W
Max. input voltage	500 V	500 V
MPP voltage range / rated input voltage	200 V – 400 V / 200 V	200 V – 400 V / 200 V
Min. input voltage / start input voltage	200 V / 250 V	200 V / 250 V
Max. input current	20 A	20 A
Max. input current per string	16 A	16 A
Number of independent MPP inputs / strings per MPP input	1 / 3**	1 / 3**
<b>Output (AC)</b>		
Rated power (@ 230 V, 50 Hz)	3300 W	3800 W
Max. apparent AC power	3600 VA	3800 VA
Nominal AC voltage / range	220 V, 230 V, 240 V / 180 V – 265 V	220 V, 230 V, 240 V / 180 V – 265 V
AC power frequency / range	50 Hz, 60 Hz / –4,5 Hz ... +4,5 Hz	50 Hz, 60 Hz / –4,5 Hz ... +4,5 Hz
Rated power frequency / rated grid voltage	50 Hz / 230 V	50 Hz / 230 V
Max. output current	18 A	18 A
Power factor at rated power	1	1
Displacement power factor, adjustable	0.8 overexcited ... 0.8 underexcited	0.8 overexcited ... 0.8 underexcited
Feed-in phases / connection phases	1 / 1	1 / 1
<b>Efficiency</b>		
Max. efficiency / European weighted efficiency	95.2 % / 94.4 %	95.6 % / 94.7 %
<b>Protective devices</b>		
DC disconnection device	○	○
Ground fault monitoring / grid monitoring	● / ●	● / ●
DC surge arrester (type II), can be integrated	–	–
DC reverse polarity protection / AC short-circuit current capability / galvanically isolated	● / ● / ●	● / ● / ●
All-pole-sensitive residual-current monitoring unit	–	–
Protection class (according to IEC 62103) / overvoltage category (according to IEC 60664-1)	I/III	I/III
<b>General Data</b>		
Dimensions (W / H / D)	450 / 352 / 236 mm (17.7 / 13.9 / 9.3 inches)	450 / 352 / 236 mm (17.7 / 13.9 / 9.3 inches)
Priority	38 kg (83.6 lb)	38 kg (83.6 lb)
Operating temperature range	–25 °C ... to +60 °C (–13 °F ... to +140 °F)	–25 °C ... to +60 °C (–13 °F ... to +140 °F)
Noise emission (typical)	40 dB(A)	42 dB(A)
Self-consumption (at night)	0.1 W	0.1 W
Topology	LF transformer	LF transformer
Cooling concept	OptiCool	OptiCool
Degree of protection (according to IEC 60529)	IP65	IP65
Climatic class (as per IEC 60721-3-4)	4K4H	4K4H
Max. permissible value for relative humidity (non-condensing)	100 %	100 %
<b>Features</b>		
DC connection	SUNCLIX	SUNCLIX
AC connection	Connector	Connector
Display	Text line	Text line
Interface: RS485 / Bluetooth	○ / ○	○ / ○
Warranty: 5 / 10 / 15 / 20 / 25 years	● / ○ / ○ / ○ / ○	● / ○ / ○ / ○ / ○
Multi-function relay	–	–
Certificates and approvals (more available on request)	CE, VDE0126-1-1, G83/1-1, PPC, EN 50438*, C10/11, PPDS, UTE C15-712-1, VDE-AR-N 4105, RD1699, CEI 0-21	CE, VDE0126-1-1, G83/1-1, PPC, EN 50438*, C10/11, PPDS, UTE C15-712-1, VDE-AR-N 4105, RD1699, CEI 0-21
Type designation	SB 3300-11	SB 3800-11