

# SUNNY BOY 1300TL / 1600TL / 2100TL

SB 1300TL-10 / SB 1600TL-10 / SB 2100TL



## Efficient

- Efficiency of up to 96 %
- Transformerless

## Reliable

- Integrated ESS DC switch-disconnector (optional)

## Reliable

- Proven technology
- Maintenance free, thanks to convection cooling

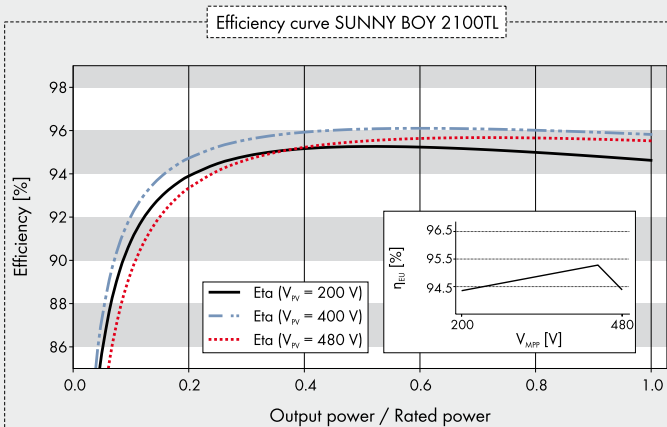
## Simple

- SUNCLIX DC plug-in system

## SUNNY BOY 1300TL / 1600TL / 2100TL

Small inverters with big results

Combining broad input voltage and current ranges, this transformerless Sunny Boy can be connected to nearly all standard crystalline PV modules. As a proven starter model among the transformerless inverters, its efficiency is top-class. Its low weight and robust enclosure allow simple installation, both indoors and outdoors. With its two performance classes, it is the ideal inverter for smaller PV plants.



## Accessories



RS485 interface  
485PB-NR



Bluetooth Piggy-Back  
BTPBINV-NR

\* Does not apply to all national annexes to EN 50438

● Standard features ○ Optional features – Not available

For SUNNY BOY 1600TL:

Provisional data, as of November 2011

Data at nominal conditions

Technical Data	Sunny Boy 1300TL	Sunny Boy 1600TL	Sunny Boy 2100TL
<b>Input (DC)</b>			
Max. DC power (@ cos φ=1)	1400 W	1700 W	2200 W
Max. input voltage	600 V	600 V	600 V
MPP voltage range / rated input voltage	125 V - 480 V	155 V - 480 V	200 V - 480 V
Min. input voltage / initial input voltage	400 V	400 V	400 V
Max. input current	125 V / 150 V	125 V / 150 V	125 V / 150 V
Max. input current per string	11 A / 11 A	11 A / 11 A	11 A / 11 A
Number of independent MPP inputs / strings per MPP input	1 / 1	1 / 1	1 / 2
<b>Output (AC)</b>			
Rated output power (@ 230 V, 50 Hz)	1300 W	1600 W	1950 W
Max. apparent AC power	1300 VA	1600 VA	2100 VA
Nominal AC voltage / range	220, 230, 240 V; 180 V - 260 V	220, 230, 240 V; 180 V - 260 V	220, 230, 240 V; 180 V - 260 V
AC power frequency / range	50 Hz; -4,5 Hz, +2,5 Hz	50 Hz; -4,5 Hz, +2,5 Hz	50 Hz; -4,5 Hz, +2,5 Hz
Rated power frequency / rated power voltage	50 Hz; -4,5 Hz, +2,5 Hz	50 Hz; -4,5 Hz, +2,5 Hz	50 Hz; -4,5 Hz, +2,5 Hz
Max. output current	7,2 A	8,9 A	11 A
Power factor at rated power	1	1	1
Feed-in phases / connection phases	1 / 1	1 / 1	1 / 1
<b>Efficiency</b>			
Max. efficiency / European efficiency	96,0 % / 94,3 %	96,0 % / 95,0 %	96,0 % / 95,2 %
<b>Protection</b>			
Input-side 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	I / III
<b>General Data</b>			
Dimensions (W / H / D)	440 / 339 / 214	440 / 339 / 214	440 / 339 / 214
Weight	16 kg	16 kg	16 kg
Operating temperature range	-25 °C ... +60 °C	-25 °C ... +60 °C	-25 °C ... +60 °C
Noise emission (typical)	≤ 33 dB(A)	≤ 33 dB(A)	≤ 33 dB(A)
Self-consumption (night)	< 0,1 W	< 0,1 W	< 0,1 W
Topology	transformerless	transformerless	transformerless
Cooling concept	Convection	Convection	Convection
Degree of protection (according to IEC 60529)	IP65 / IP65	IP65 / IP65	IP65 / IP65
Climatic category (according to IEC 60721-3-4)	4K4H	4K4H	4K4H
<b>Features</b>			
DC terminal	●	●	●
AC terminal	-/●/-	-/●/-	-/●/-
Display	●/-	●/-	●/-
Interface: RS485 / Bluetooth	○/○	○/○	○/○
Warranty: 5 / 10 / 15 / 20 / 25 years	●/○/○/○/○	●/○/○/○/○	●/○/○/○/○
Certificates and approvals (more available on request)	CE, VDE 0126-1-1, EN 50438*, C10/11, PPDS, UTE C15-712-1, AS4777, VDE-AR-N 4105		
Type designation	SB 1300TL-10	SB 1600TL-10	SB 2100TL