

SUNNY BOY 1600TL / 2100TL

SB 1600TL-10 / SB 2100TL



Efficient

- Efficiency 96 %
- Transformerless

Safe

- » Integrated DC load disconnecting switch ESS (optional)

Reliable

- Tried and tested technology
- Maintenance free, thanks to convection cooling

Easy to use

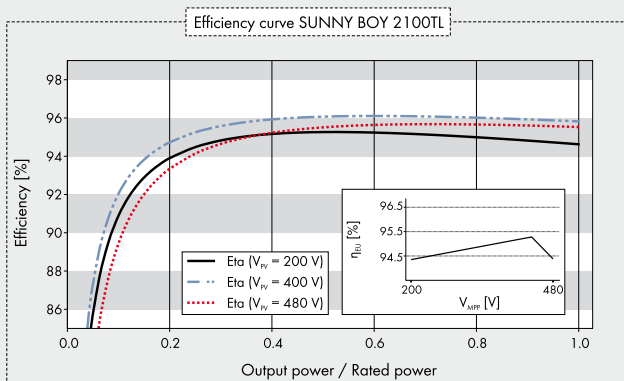
- DC plug system SUNCLIX

SUNNY BOY 1600TL / 2100TL

The little ones with big returns

Combining a broad input voltage range and a broad input current range, the 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 power classes, it is the ideal inverter for smaller PV plants.

Technical data	Sunny Boy 1600TL	Sunny Boy 2100TL
Input (DC)		
Max. DC power (@ $\cos \varphi = 1$)	1700 W	2200 W
Max. DC voltage	600 V	600 V
MPP voltage range	155 V - 480 V	200 V - 480 V
DC nominal voltage	400 V	400 V
Min. DC voltage / start voltage	125 V / 150 V	125 V / 150 V
Max. input current / per string	11 A / 11 A	11 A / 11 A
Number of MPP trackers / strings per MPP tracker	1 / 1	1 / 2
Output (AC)		
AC nominal power (@ 230 V, 50 Hz)	1600 W	1950 W
Max. AC apparent power	1600 VA	2100 VA
Nominal AC voltage; range	220, 230, 240 V; 180 V - 260 V	220, 230, 240 V; 180 V - 260 V
AC grid frequency; range	50 Hz; -4.5 Hz, +2.5 Hz	50 Hz; -4.5 Hz, +2.5 Hz
Max. output current	8,9 A	11 A
Power factor ($\cos \varphi$)	1	1
Phase conductors / connection phases	1 / 1	1 / 1
Efficiency		
Max. efficiency / Euro-eta	96.0 % / 95.0 %	96.0 % / 95.2 %
Protective Devices		
DC reverse-polarity protection	●	●
ESS switch-disconnector	○	○
AC short circuit tolerance	●	●
Ground fault monitoring	●	●
Grid monitoring (SMA Grid Guard)	●	●
Galvanically isolated / all-pole sensitive fault current monitoring unit	-/●	-/●
Protection class / overvoltage category	I / III	I / III
General Data		
Dimensions (W / H / D) in mm	440 / 339 / 214	440 / 339 / 214
Weight	16 kg	16 kg
Operation temperature range	-25 °C ... +60 °C	-25 °C ... +60 °C
Noise emission, typical	≤ 33 dB(A)	≤ 33 dB(A)
Internal consumption (at night)	< 0.1 W	< 0.1 W
Topology	transformerless	transformerless
Cooling concept	convection	convection
Electronics degree of protection / connection area (per IEC 60529)	IP65 / IP65	IP65 / IP65
Climatic category (per IEC 60721-3-4)	4K4H	4K4H
Features		
DC connection: SUNCLIX	●	●
AC connection: screw terminal / plug connector / spring terminal	-/●/-	-/●/-
Display: text line / graphic	●/-	●/-
Interfaces: RS485 / Bluetooth®	○/○	○/○
Warranty: 5 / 10 / 15 / 20 / 25 years	●/○/○/○/○	●/○/○/○/○
Certificates and licenses (more available on request)	CE, VDE 0126-1-1, EN 50438*, C10/C11, PPDS, UTE C15-712-1, AS4777	
* Does not apply to all national appendices of EN 50438		
● Standard features ○ Optional features - not available		
Data at nominal conditions		
Type designation	SB 1600TL-10	SB 2100TL



Accessories



RS485 interface 485PB-NR



Bluetooth® Piggy-Back BTPBINV-NR