

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

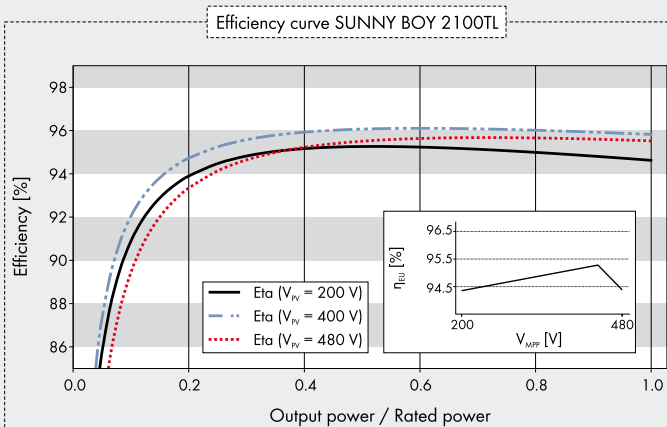
Simple

- SUNCLIX DC plug-in system

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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
Input (DC)			
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
Output (AC)			
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
Efficiency			
Max. efficiency / European efficiency	96,0 % / 94,3 %	96,0 % / 95,0 %	96,0 % / 95,2 %
Protection			
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
General Data			
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
Features			
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