

# SUNNY BOY 3600TL

SB 3600TL-20



## High yields

- Maximum efficiency of 97 %
- Multi-string technology
- Transformerless, with H5 topology
- Shade management with OptiTrac Global Peak

## Safe

- Integrated ESS DC switch-disconnector

## Simple

- Easily accessible connection area
- Cable connection without tools
- DC plug system SUNCLIX

## Communicative

- Bluetooth® technology as standard
- Multilingual graphic display
- Multi-function relay as standard

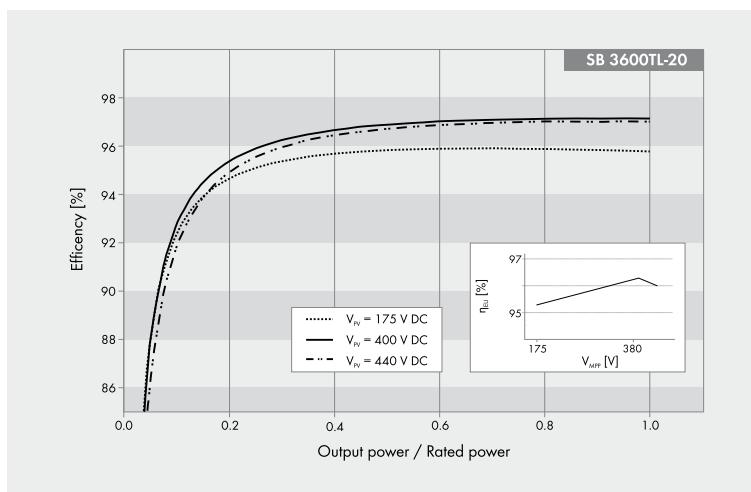
## SUNNY BOY 3600TL

Perfection Plus. Usability. The transformerless Sunny Boy generation

More communicative, easier to use and more efficient than ever: This Sunny Boy is setting new standards in inverter technology. A modern graphic display, readout of daily values even after sunset, simplified installation concept and wireless communication via Bluetooth®: The new Sunny Boys fulfill every wish. With the new OptiTrac Global Peak shade management and an optimal efficiency of 97 %, the inverters ensure optimum solar yield. As transformerless, multi-string devices, the Sunny Boy 3600TL provide maximum flexibility for plant design, and is the first choice for demanding generator designs.

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## Accessories



RS485 interface  
DM-485CB-10

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

● Standard features ○ Optional features – Not available  
Preliminary information - last updated: December 2011  
Data at nominal conditions

Technical Data		Sunny Boy 3600TL
<b>Input (DC)</b>		
Max. DC power (@ $\cos \phi = 1$ )		3880 W
Max. input voltage		550 V
MPP voltage range / Rated input voltage		175 V / 440 V - 400 V
Min. input voltage / start input voltage		125 V / 150 V
Max. input current input A / input B		15 A / 15 A
Max. input current per string input A / input B		15 A / 15 A
Number of independent MPP inputs / strings per MPP input		2 / A: 2, B: 2
<b>Output (AC)</b>		
Rated power (@ 230 V, 50 Hz)		3680 W
Max. apparent AC power		3680 VA
Nominal AC voltage / range		220 V, 230 V, 240 V / 180 V - 280 V
AC power frequency / range		50 Hz, 60 Hz / -5 Hz ... +5 Hz
Rated power frequency / rated grid voltage		50 Hz / 230 V
Max. output current		16 A
Power factor at rated power		1
Displacement power factor, configurable		–
Feed-in phases / connection phases		1 / 1
<b>Efficiency</b>		97 % / 96.3 %
Max. efficiency / European efficiency		
<b>Protective devices</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 (as per IEC 62103) / overvoltage category (as per IEC 60664-1)		I / III
<b>General Data</b>		
Dimensions (W / H / D)		470 / 445 / 180 mm (18.5 / 17.5 / 7.1 inch)
Weight		25 kg / 55.12 lb
Operating temperature range		-25 °C ... +60 °C / -13 °F ... +140 °F
Noise emission (typical)		25 dB(A)
Self-consumption (at night)		0.5 W
Topology		transformerless
Cooling concept		Convection
Degree of protection (as per IEC 60529)		IP65
Degree of protection of connection area (according to IEC 60529)		IP54
Climatic category (per IEC 60721-3-4)		4K4H
Maximum permissible value for relative humidity (non-condensing)		100 %
<b>Features</b>		
DC connection		SUNCLIX
AC Connection		Spring clamp terminal
Display		Chart
Interface: RS485 / Bluetooth		○ / ●
Warranty: 5 / 10 / 15 / 20 / 25 years		● / ○ / ○ / ○ / ○
Multi-function relay		●
Certificates and licenses (more available on request)		CE, G83 / 1-1, EN 50438*
Type designation	SB 3600TL-20	

[www.SunnyPortal.com](http://www.SunnyPortal.com)

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