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

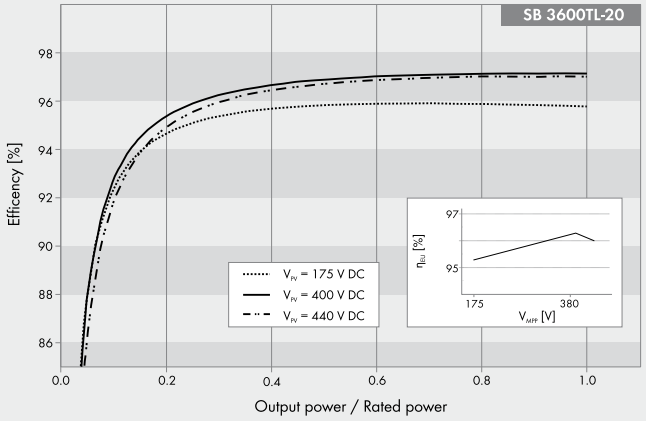
Communicative
- *Bluetooth*® technology as standard
- Multilingual graphic display
- Multi-function relay as standard

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.

SUNNY BOY 3600TL



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
Input (DC)	
Max. DC power (@ cos φ = 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
Output (AC)	
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
Efficiency	
Max. efficiency / European efficiency	97 % / 96.3 %
Protective devices	
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
General Data	
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 %
Features	
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

Professional management, monitoring and presentation of PV plants

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