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

Efficient

- Efficiency of 96%
- Transformerless
- Complete monitoring solution thanks to integrated Speedwire/ Webconnect interface

Safe

- Integrated ESS DC load-break switch (optional)

Reliable

- Proven technology
- Maintenance free thanks to convection cooling

Easy to use

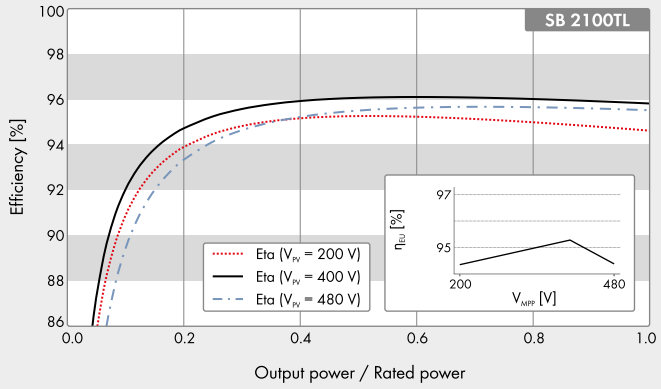
- SUNCLIX DC plug-in system
- Easy commissioning of the integrated Speedwire/Webconnect interface

SUNNY BOY 1300TL / 1600TL / 2100TL

Small inverters for high yields

Combining a wide input voltage and input current range, the transformerless Sunny Boy can be connected to nearly all standard crystalline PV modules. As a proven entry-level model, its efficiency is first-class. Its low weight and robust enclosure make installation easy for both indoors and outdoors. With its three power classes, it is the ideal inverter for smaller PV systems.

Efficiency Curve



Accessory

RS485 interface 485PB-NR

Bluetooth interface BTPBINV-NR

Speedwire/Webconnect interface SWPB-10

[1] Applies to Firmware version 4.50, and higher
[2] Does not apply to all national appendices of EN 50438

● Standard features ○ Optional – Not available
Last revision: October 2014
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	115 V[1] – 480 V	155 V to 480 V	200 V to 480 V
Rated input voltage	400 V	400 V	400 V
Min. input voltage / initial input voltage	100 V[1] / 120 V[1]	125 V / 150 V	125 V / 150 V
Max. input current / max. input current per string	12 A[1] / 12 A[1]	12 A[1] / 12 A[1]	12 A[1] / 12 A[1]
Max. DC short-circuit current	18 A	18 A	18 A
Number of independent MPP inputs / strings per MPP input	1 / 1	1 / 1	1 / 2
Output (AC)			
Rated power (at 230 V, 50 Hz)	1300 W	1600 W	1950 W
Max. apparent AC power	1300 VA	1600 VA	2100 VA
Nominal AC voltage	220 V / 230 V / 240 V	220 V / 230 V / 240 V	220 V / 230 V / 240 V
Nominal AC voltage range	180 V to 260 V	180 V to 260 V	180 V to 260 V
AC power frequency / range	50 Hz, 60 Hz[1] / -6 Hz ... +5 Hz	50 Hz, 60 Hz[1] / -6 Hz ... +5 Hz	50 Hz, 60 Hz[1] / -6 Hz ... +5 Hz
Rated power frequency / rated grid voltage	50 Hz / 230 V	50 Hz / 230 V	50 Hz / 230 V
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 weighted efficiency	96.0 % / 94, 3 %	96.0 % / 95.0 %	96.0 % / 95.2 %
Protective Devices			
Input-side disconnection point	○	○	○
Ground fault monitoring / grid monitoring	● / ●	● / ●	● / ●
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 mm (17.3 / 13.3 / 8.4 inch)	440 / 339 / 214 mm (17.3 / 13.3 / 8.4 inch)	440 / 339 / 214 mm (17.3 / 13.3 / 8.4 inch)
Weight	16 kg (35,3 lb)	16 kg (35,3 lb)	16 kg (35,3 lb)
Operating temperature range	-25 °C ... +60 °C (-13 °F ... +140 °F)	-25 °C ... +60 °C (-13 °F ... +140 °F)	-25 °C ... +60 °C (-13 °F ... +140 °F)
Noise emission (typical)	33 dB(A)	33 dB(A)	33 dB(A)
Self-consumption (at night)	0.1 W	0.1 W	0.1 W
Topology	Transformerless	Transformerless	Transformerless
Cooling method	Convection	Convection	Convection
Degree of protection (as per IEC 60529)	IP65	IP65	IP65
Climatic category (according to IEC 60721-3-4)	4K4H	4K4H	4K4H
Max. permissible value for relative humidity (non-condensing)	100 %	100 %	100 %
Furnishings			
DC connection / AC connection	SUNCLIX / connector	SUNCLIX / connector	SUNCLIX / connector
Display	Text line	Text line	Text line
Interfaces: RS485, *Bluetooth*®, Speedwire/Webconnect	○ / ○ / ●	○ / ○ / ●	○ / ○ / ●
Warranty: 5 / 10 / 15 / 20 / 25 years	● / ○ / ○ / ○ / ○	● / ○ / ○ / ○ / ○	● / ○ / ○ / ○ / ○
Certificates and approvals (others available upon request)	AS 4777, C10/11, CE, CEI 0-21, EN 50438[2], G83/1-1, IEC 62109-1/-2, NRS 097-2-1, PPC, PPDS, RD1699, RD 661/2007, UTE C15-712-1, VDE-AR-N 4105, VDE0126-1-1		
Type designation	SB 1300TL-10	SB 1600TL-10	SB 2100TL