

	SB 1300TL-10	SB 1600TL-10	SB 2100TL
Total harmonic distortion of the output current with total harmonic distortion of the AC voltage < 2%, and AC power > 50% of the rated power	≤3%	≤3%	≤3%
Rated power frequency	50 Hz	50 Hz	50 Hz
AC power frequency	50 Hz / 60 Hz	50 Hz / 60 Hz	50 Hz / 60 Hz
Operating range at AC power frequency 50 Hz	44 Hz to 55 Hz	44 Hz to 55 Hz	44 Hz to 55 Hz
Operating range at AC power frequency 60 Hz	54 Hz to 65 Hz	54 Hz to 65 Hz	54 Hz to 65 Hz
Power factor at rated power	1	1	1
Feed-in phases	1	1	1
Connection phases	1	1	1
Overvoltage category in accordance with IEC 60664-1	III	III	III

Efficiency

	SB 1300TL-10	SB 1600TL-10	SB 2100TL
Maximum efficiency, η_{\max}	96.0%	96.0%	96.0%
European efficiency, η_{EU}	94.3%	95.0%	95.2%

General Data

Width x height x depth	440 mm x 299 mm x 214 mm
Width x height x depth, with ESS	440 mm x 339 mm x 214 mm
Weight	16 kg
Length x width x height of the packaging	532 mm x 392 mm x 318 mm
Weight including packaging	21.5 kg
Climatic category in accordance with IEC 60721-3-4	4K4H
Operating temperature range	-25 °C to +60 °C
Maximum permissible value for relative humidity, non-condensing	100%
Maximum operating altitude above mean sea level (MSL)	2,000 m
Noise emission, typical	≤33 dB(A)

Power loss in night mode	0.1 W
Topology	transformerless
Cooling method	Convection
Degree of protection in accordance with IEC 60529	IP65
Protection class in accordance with IEC 62103	I
Grid configurations	TN-C, TN-S, TN-CS, TT (if $V_{N,PE} > 30$ V), IT, Delta IT, split phase
National standards and approvals, as per 10/2014*	AS 4777, C10/11, CE, CEI 0-21, EN 50438:2007, G83/2, IEC 60068-2, IEC 61727, IEC 62109-1, IEC 62109-2, NRS 097-2-1, PPC, PPDS, RD1699, RD 661/2007, UTE C15-712-1, VDE-AR-N 4105, VDE0126-1-1, VFR 2014

* **RD1699:** Contact the SMA Service Line for restrictions in specific regions.

NRS 097-2-1: This standard requires a separate label attached to the AC distribution board which indicates the AC-side disconnection of the inverter in case of a grid failure (for further details, see NRS 097-2-1, Sect. 4.2.7.1 and 4.2.7.2)

IEC 62109-2: In order to meet the requirements of this standard, use of the fault indication relay must be activated in the inverter or there must be a link to Sunny Portal with the fault alert via e-mail activated.

Protective Devices

DC reverse polarity protection	Short-circuit diode
Input-side disconnection point*	Electronic Solar Switch
DC overvoltage protection	Thermally monitored varistors
AC short-circuit current capability	Current control
Grid monitoring	SMA Grid Guard 2.1
Maximum permissible fuse protection	16 A
Ground fault monitoring	Insulation monitoring: $R_{iso} > 1$ M Ω
All-pole sensitive residual-current monitoring unit	Available

* Optional

Climatic Conditions

Installation in accordance with IEC 60721-3-3, Class 4K4H

Extended temperature range	-25 °C to +60 °C
Extended humidity range	0% to 100%
Extended air pressure range	79.5 kPa to 106 kPa

Transport in accordance with IEC 60721-3-2, Class 2K3

Extended temperature range	-25 °C to +70 °C
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Features

DC Connection	SUNCLIX DC connector
AC connection	AC connector
Display	LC text display
Speedwire with Webconnect function	As standard
BLUETOOTH	Optional
RS485, galvanically isolated	Optional

Fault Indicator Relay

Maximum AC switching voltage	240 V
Maximum DC switching voltage	30 V
Maximum AC switching current	1.0 A
Maximum DC switching current	1.0 A
Minimum electrical endurance when the maximum switching voltage and maximum switching current are complied with*	1,000,000 switching cycles

* Corresponds to 20 years at 12 switching operations per day

Electronic Solar Switch

Electrical endurance in the event of short circuit, at nominal current of 35 A	At least 50 switching operations
Maximum switching current	35 A
Maximum switching voltage	800 V
Maximum PV power	11 kW
Degree of protection when plugged in	IP65
Degree of protection when unplugged	IP21
Fuse for the Electronic Solar Switch	F200, 600 V / 4 A, fast acting (soldered, not replaceable)

Torques

Enclosure lid screws	2.0 Nm
Screw for additional grounding	6.0 Nm

Cylindrical screw for attaching the enclosure to the wall mounting bracket	6.0 Nm
SUNCLIX swivel nut	2.0 Nm
Communication interface connection	1.5 Nm