

	Sunny Boy 3000TL	Sunny Boy 4000TL	Sunny Boy 5000TL
Input (DC)			
Max. DC power (@ $\cos \varphi=1$)	3200 W	4200 W*	5250 W**
Max. input voltage	750 V	750 V	750 V
MPP voltage range / rated input voltage	175 V – 500 V / 400 V	175 V – 500 V / 400 V	175 V – 500 V / 400 V
Min. input voltage / initial input voltage	125 V / 150 V	125 V / 150 V	125 V / 150 V
Max. input current input A / input B	15 A / 15 A	15 A / 15 A	15 A / 15 A
Max. input current per string input A / input B	15 A / 15 A	15 A / 15 A	15 A / 15 A
Number of independent MPP inputs / strings per MPP input	2 / A:2; B:2	2 / A:2; B:2	2 / A:2; B:2
Output (AC)			
Rated output power (@ 230 V, 50 Hz)	3000 W	4000 W	4600 W
Max. apparent AC power	3000 VA	4000 VA	5000 VA***
Nominal AC voltage / range	220 V, 230 V, 240 V / 180 V – 280 V	220 V, 230 V, 240 V / 180 V – 280 V	220 V, 230 V, 240 V / 180 V – 280 V
AC power frequency / range	50 Hz, 60 Hz / -5 Hz ... +5 Hz	50 Hz, 60 Hz / -5 Hz ... +5 Hz	50 Hz, 60 Hz / -5 Hz ... +5 Hz
Rated power frequency / rated power voltage	50 Hz / 230 V	50 Hz / 230 V	50 Hz / 230 V
Max. output current	16 A	22 A	22 A
Power factor at rated power	1	1	1
Adjustable displacement factor	0.8 overexcited ... 0.8 underexcited	0.8 overexcited ... 0.8 underexcited	0.8 overexcited ... 0.8 underexcited
Feed-in phases / connection phases	1 / 1	1 / 1	1 / 1
Efficiency			
Max. efficiency / European	97 % / 96.0 %	97 % / 96.4 %	97 % / 96.5 %

efficiency			
Protection			
Input-side disconnection device	yes	yes	yes
Ground-fault monitoring / grid monitoring	yes / yes	yes / yes	yes / yes
DC surge arrester Type II, can be integrated	—	—	—
DC reverse-polarity protection / AC short-circuit current capability / galvanically isolated	yes / yes / —	yes / yes / —	yes / yes / —
All-pole sensitive residual current monitoring unit	yes	yes	yes
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)	490 / 519 / 185 mm (19.3 / 20.4 / 7.3 inch)	490 / 519 / 185 mm (19.3 / 20.4 / 7.3 inch)	490 / 519 / 185 mm (19.3 / 20.4 / 7.3 inch)
Weight	26 kg / 57.3 lb	26 kg / 57.3 lb	26 kg / 57.3 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)	25 dB(A)	25 dB(A)	25 dB(A)
Self-consumption (night)	1 W	1 W	1 W
Topology	Transformerless	Transformerless	Transformerless
Cooling concept	Convection	Convection	Convection
Degree of protection (according to IEC 60529)	IP65	IP65	IP65
Degree of protection of connection area (according to IEC 60529)	IP54	IP54	IP54
Climatic category (according to IEC 60721-3-4)	4K4H	4K4H	4K4H

Maximum permissible value for relative humidity (non-condensing)	100 %	100 %	100 %
Features			
DC terminal	SUNCLIX	SUNCLIX	SUNCLIX
AC terminal	Spring-type terminal	Spring-type terminal	Spring-type terminal
Display	Graphic	Graphic	Graphic
Interface: RS485 / <i>Bluetooth</i>	opt. / yes	opt. / yes	opt. / yes
Warranty: 5 / 10 / 15 / 20 / 25 years	yes / opt. / opt. / opt. / opt.	yes / opt. / opt. / opt. / opt.	yes / opt. / opt. / opt. / opt.
Multi-function relay	opt.	opt.	opt.
Certificates and approvals (more available on request)	CE, VDE0126-1-1, C10/11, VDE-AR-N 4105	CE, VDE0126-1-1, C10/11, VDE-AR-N 4105	CE, VDE0126-1-1, C10/11, VDE-AR-N 4105
* 4000 W with VDE-AR-N 4105 ** 4600 W with VDE-AR-N-4105 *** 4600 VA with VDE-AR-N 4105			
Provisional data, as of December 2011			
Data at nominal conditions			
Type designation	SB 3000TL-21	SB 4000TL-21	SB 5000TL-21