

SUNNY MINI CENTRAL / SUNNY TRIPOWER

String inverter



Please also refer to the SMA design tool Sunny Design which can be downloaded free-of-charge at www.SMA.de.



SUNNY MINI CENTRAL
4600A / 5000A / 6000A



SUNNY MINI CENTRAL
7000HV



SUNNY MINI CENTRAL
6000TL / 7000TL / 8000TL



SUNNY MINI CENTRAL
9000TL / 10000TL / 11000TL



SUNNY MINI CENTRAL
9000TLRP / 10000TLRP / 11000TLRP



SUNNY TRIPOWER
10000TL / 12000TL



SUNNY TRIPOWER
15000TL / 17000TL

Technical Abbreviation	SMC 4600A / 5000A / 6000A	SMC 7000HV-11	SMC 6000TL / 7000TL / 8000TL	SMC 9000TL-10 / 10000TL-10 / 11000TL-10	SMC 9000TLRP-10 / 10000TLRP-10 / 11000TLRP-10	STP 10000TL-10 / 12000TL-10	STP 15000TL-10 / 17000TL-10
Input (DC)							
Max. DC-power (at cos φ = 1)	5250 W / 5750 W / 6300 W	7500 W	6200 W / 7200 W / 8250 W	9300 W / 10350 W / 11400 W	9300 W / 10350 W / 11400 W	10400 W / 12500 W	15600 W / 17600 W
Max. DC voltage	600 V	800 V	700 V	700 V	700 V	1000 V / 1000 V	1000 V / 1000 V
PV voltage range, MPPT (at nominal power output)	246 V - 480 V	335 V - 560 V	333 V - 500 V	333 V - 500 V	333 V - 500 V	Input A: 315 V - 800 V / 379 V - 800 V Input B: 150 V - 800 V	Input A: 355 V - 800 V / 400 V - 800 V Input B: 150 V - 800 V
Max. input current	26 A	23 A	19 A / 22 A / 25 A	28 A / 31 A / 34 A	28 A / 31 A / 34 A	22 A / 11 A	33 A / 11 A
Number of MPP trackers	1	1	1	1	1	2	2
Max. number of strings (parallel)	4	4	4	5	5	Input A: 4 / Input B: 1	Input A: 5 / Input B: 1
Output (AC)							
Nominal AC output	4600 W / 5000 W / 6000 W	6650 VA	6000 W / 7000 W / 8000 W	9000 W / 10000 W / 11000 W	9000 VA / 10000 VA / 11000 VA	10000 VA / 12000 VA	15000 VA / 17000 VA
Max. AC power	5000 W / 5500 W / 6000 W	7000 VA	6000 W / 7000 W / 8000 W	9000 W / 10000 W / 11000 W	9000 VA / 10000 VA / 11000 VA	10000 VA / 12000 VA	15000 VA / 17000 VA
Max. output current	26 A	31 A	27 A / 31 A / 35 A	40 A / 44 A / 48 A	40 A / 44 A / 48 A	16 A / 19.2 A	24 A / 24.6 A
Nominal AC-voltage	220 V - 240 V	220 V - 240 V	220 V - 240 V	220 V - 240 V	220 V - 240 V	3 / N / PE, 230 V / 400 V	3 / N / PE, 230 V / 400 V
AC-Grid frequency	50 Hz / 60 Hz	50 Hz / 60 Hz	50 Hz / 60 Hz	50 Hz / 60 Hz	50 Hz / 60 Hz	50 Hz / 60 Hz	50 Hz / 60 Hz
Power factor (cos φ)	1	0,8 über- ... 0,8 untererregt	1	1	0,8 über- ... 0,8 untererregt	0.8 leading ... 0.8 lagging	0.8 leading ... 0.8 lagging
AC connection / power balancing	Single-phase / ●	Single-phase / ●	Single-phase / ●	Single-phase / ●	Single-phase / ●	Three-phase / -	Three-phase / -
Efficiency							
Max. efficiency	96.1 %	96.2 %	98.0 %	98.0 %	97.7 %	98.0 %	98.0 %
Euro ETA	95.3 %	95.5 %	97.7 %	97.6 % / 97.5 % / 97.5 %	97.3 % / 97.2 % / 97.2 %	97.5 %	97.5 %
Protection devices							
DC reverse polarity protection	●/-	●/-	●/-	● / optionale Sicherungen	● / optionale Sicherungen	● / electronic	● / electronic
DC load-disconnecting unit ESS	●	●	●	●	●	●	●
AC short-circuit protection	●	●	●	●	●	●	●
Ground fault monitoring	●	●	●	●	●	●	●
Grid monitoring (SMA Grid Guard)	●	●	●	●	●	●	●
Galvanically isolated / all-pole sensitive fault current monitoring unit	●/-	●/-	-/●	-/●	-/●	-/●	-/●
DC overvoltage protector type II can be integrated	-	-	-	-	-	●	●
String failure detection	-	-	-	-	-	●	●
General data							
Dimensions (W / H / D) in mm	468 / 613 / 242	468 / 613 / 242	468 / 613 / 242	468 / 613 / 242	468 / 613 / 242	665 / 690 / 265	665 / 690 / 265
Weight	62 kg / 62 kg / 63 kg	65 kg	31 kg / 32 kg / 33 kg	approx. 35 kg	approx. 35 kg	approx. 65 kg	approx. 65 kg
Operating temperature range	-25 °C ... +60 °C	-25 °C ... +60 °C	-25 °C ... +60 °C	-25 °C ... +60 °C	-25 °C ... +60 °C	-25 °C ... +60 °C	-25 °C ... +60 °C
Noise emission (typical)	≤ 42 dB(A)	≤ 41 dB(A)	≤ 31 dB(A) / ≤ 33 dB(A) / ≤ 40 dB(A)	≤ 42 dB(A) / ≤ 45 dB(A) / ≤ 46 dB(A)	≤ 42 dB(A) / ≤ 45 dB(A) / ≤ 46 dB(A)	n. s.	n. s.
Power Consumption: (nighttime)	< 0.25 W	< 0.25 W	< 0.25 W	< 0.25 W	< 0.25 W	< 1 W	< 1 W
Topology	Low frequency transformer	Low frequency transformer	transformerless	transformerless	transformerless	transformerless	transformerless
Cooling concept	OptiCool	OptiCool	OptiCool	OptiCool	OptiCool	OptiCool	OptiCool
Installation location: indoor / outdoor (IP65)	●/●	●/●	●/●	●/●	●/●	●/●	●/●
Features							
DC connection*: MC3 / MC4 / Tyco / SUNCLIX	○/●/-/●*	○/●/-/●*	○/●/-/●*	○/●/-/●*	○/●/-/●*	-/-/-/●	-/-/-/●
AC connection: screw terminal / spring-type terminal	●/-	●/-	●/-	●/-	●/-	-/●	-/●
Display: LCD / Graphic	●/-	●/-	●/-	●/-	●/-	-/●	-/●
Interfaces: RS485 / Bluetooth®	○/○	○/○	○/○	○/○	○/○	○/○	○/○
Warranty: 5 / 10 / 15 / 20 / 25 years	●/○/○/○/○	●/○/○/○/○	●/○/○/○/○	●/○/○/○/○	●/○/○/○/○	●/○/○/○/○	●/○/○/○/○
Certificates and approvals	www.SMA.de	www.SMA.de	www.SMA.de	www.SMA.de	www.SMA.de	www.SMA.de	www.SMA.de