

Powerful

- > Efficiency > 98 %
- > OptiTrac MPP control for best tracking efficiency with MPP tracking
- > Highly efficient OptiCool ventilation system
- > Transformerless

Safe

- > Integrated ESS DC load disconnecting unit
- > For inside and outside installation

Reliable

- > Worldwide SMA service and SMA Service Line
- > Attractive SMA warranty program



SUNNY MINI CENTRAL

No other pays off faster

With the transformerless Sunny Mini Central, SMA is setting new standards. By means of a completely new inverter topology, efficiency of over 98 % is achieved for the first time, and optimized manufacturing processes result in what is currently the lowest specific price. This enables phenomenal energy yields with low investment costs and thus a very short payback time for the entire system. Furthermore, three distinct power classes provide maximum flexibility when designing larger photovoltaic systems. The housing, suitable for use outdoors, enables installation in close proximity to the generator, and thus simplifies the cabling on the DC side. The setup of smaller units also enables detailed monitoring of individual sections in large systems.

Technical Data

SUNNY MINI CENTRAL 6000TL / 7000TL / 8000TL

	SMC 6000TL	SMC 7000TL	SMC 8000TL
Input (DC)			
Max. DC input power	6200 W	7200 W	8250 W
Max. DC voltage	700 V	700 V	700 V
PV voltage range, MPPT	333 V - 500 V	333 V - 500 V	333 V - 500 V
Max. input current	19 A	22 A	25 A
Number of MPP trackers	1	1	1
Max. number of strings (parallel)	4	4	4
Output (AC)			
Nominal AC output power	6000 W	7000 W	8000 W
Max. AC output power	6000 W	7000 W	8000 W
Max. output current	27 A	31 A	35 A
Nominal AC voltage / range	220V - 240V / 180V - 260V	220V - 240V / 180V - 260V	220V - 240V / 180V - 260V
AC grid frequency (self-adjusting) / range	50 Hz / 60 Hz / $\pm 4,5$ Hz	50 Hz / 60 Hz / $\pm 4,5$ Hz	50 Hz / 60 Hz / $\pm 4,5$ Hz
Power factor (cos φ)	1	1	1
AC connection / power balancing	single-phase / ●	single-phase / ●	single-phase / ●
Efficiency			
Max. efficiency	98.0 %	98.0 %	98.0 %
Euro ETA	97.7 %	97.7 %	97.7 %
Protective equipment			
DC reverse polarity protection	●	●	●
DC load disconnecting switch ESS	●	●	●
AC short-circuit tolerance	●	●	●
Ground fault monitoring	●	●	●
Grid monitoring (SMA grid guard)	●	●	●
Integrated all-pole sensitive RCD	●	●	●
General data			
Dimensions (W / H / D) in mm	468 / 613 / 242	468 / 613 / 242	468 / 613 / 242
Weight	31 kg	32 kg	33 kg
Operating temperature range	-25 °C ... +60 °C	-25 °C ... +60 °C	-25 °C ... +60 °C
Noise emission (typical)	≤ 31 dB(A)	≤ 33 dB(A)	≤ 40 dB(A)
Consumption: operating (standby) / night	<10 W / 0.25 W	<10 W / 0.25 W	<10 W / 0.25 W
Topology	transformerless	transformerless	transformerless
Cooling concept	OptiCool	OptiCool	OptiCool
Mounting location: indoor / outdoor (IP65)	● / ●	● / ●	● / ●
Features			
DC connection: MC3 / MC4 / Tyco	○ / ● / ○	○ / ● / ○	○ / ● / ○
AC connection: screw terminal	●	●	●
LCD display	●	●	●
Interfaces: RS485 / radio	○ / ○	○ / ○	○ / ○
Warranty: 5 years / 10 years	● / ○	● / ○	● / ○
Certificates and approvals	www.SMA.de	www.SMA.de	www.SMA.de

● Included ○ Option

Values apply for nominal conditions - Version: March 2009

Efficiency curve

