

Safe

- > Highly efficient OptiCool ventilation system
- > Electric separation
- > Integrated ESS DC load disconnecting unit

Reliable

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



SUNNY MINI CENTRAL

The Little Giants

The most impressive aspect of the Sunny Mini Central 4600A, 5000A and 6000A is their first-class efficiency: they reliably and consistently feed maximum energy yields into the public grid, while their graduated power classes guarantee maximum flexibility in system planning. They are suitable for implementation in smaller systems, as well as in the realization of solar parks with capacities of several hundred kilowatts.

Due to the robust aluminum die-cast housing, and the proven ventilation system OptiCool, these devices provide perfect temperature management. Thus, they achieve maximum yields, even at high ambient temperatures. The electric separation results in high flexibility: these Sunny Mini Central can be used with crystalline cells as well as with thin film modules.

Technical Data

SUNNY MINI CENTRAL 4600A / 5000A / 6000A

	SMC 4600A	SMC 5000A	SMC 6000A
Input (DC)			
Max. DC power	5250 W	5750 W	6300 W
Max. DC voltage	600 V	600 V	600 V
PV voltage range, MPPT	246 V - 480 V	246 V - 480 V	246 V - 480 V
Max. input current	26 A	26 A	26 A
Number of MPPT trackers	1	1	1
Max. number of strings (parallel)	4	4	4
Output (AC)			
Nominal AC output	4600 W	5000 W	6000 W
Max. AC power	5000 W	5500 W	6000 W
Max. output current	26 A	26 A	26 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 / ± 4.5 Hz	50 Hz / 60 Hz / ± 4.5 Hz	50 Hz / 60 Hz / ± 4.5 Hz
Power factor (cos ϕ)	1	1	1
AC Connection / Power Balancing	single-phase/●	single-phase/●	single-phase/●
Efficiency			
Max. efficiency	96.1 %	96.1 %	96.1 %
Euro ETA	95.2 %	95.2 %	95.2 %
Protective equipment			
DC reverse polarity protection	●	●	●
DC load disconnecting switch ESS	●	●	●
AC short circuit protection	●	●	●
Ground fault monitoring	●	●	●
Grid monitoring (SMA grid guard)	●	●	●
Electric separation	●	●	●
General Data			
Dimensions (W / H / D) in mm	468 / 613 / 242	468 / 613 / 242	468 / 613 / 242
Weight	62 kg	62 kg	63 kg
Operating temperature range	-25 °C ... +60 °C	-25 °C ... +60 °C	-25 °C ... +60 °C
Noise emission (typical)	≤ 42 dB(A)	≤ 42 dB(A)	≤ 42 dB(A)
Consumption: operating (standby) / night	< 7 W / 0.25 W	< 7 W / 0.25 W	< 7 W / 0.25 W
Topology	low frequency transformer	low frequency transformer	low frequency transformer
Cooling concept	OptiCool	OptiCool	OptiCool
Installation: Indoor / Outdoor (electronics IP 65)	●/●	●/●	●/●
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

● Standard ○ Optional

Values apply for nominal conditions - Version: March 2009

Efficiency curve

