SMC 4600A / SMC 5000A / SMC 6000A



High-yield

- OptiCool active temperature management
- The best tracking efficiency with OptiTrac MPP tracking

Safe

- > Galvanic isolation
- Integrated ESS DC load-disconnecting unit
- SMA Power Balancer for three-phase grid connection

Flexible

> Suitable for generator grounding



SUNNY MINI CENTRAL

Ideal for three-phase systems

The Sunny Mini Central 4600A, 5000A, and 6000A are convincing, above all, due to their first-rate efficiency: they reliably feed maximum energy yields into the public grid. Additionally, they offer the highest degree of flexibility in plant design due to their graduated power classes. They are suitable for use in smaller plants as well as in the implementation of solar parks with power outputs of several hundred kilowatts. Furthermore, the galvanic isolation provides flexible connection possibilities. In this way, the Sunny Mini Central can be used with crystalline cells as well as 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 MPP trackers	1	1	1
Max. number of strings (parallel)	4	4	4
Output (AC)			
Nominal AC ouput	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	220 V - 240 V /	220 V - 240 V /	220 V - 240 V /
	180 V - 260 V	180 V - 260 V	180 V - 260 V
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
Phase shift (cos φ)	1	1	1
AC connection / Power balancing	single-phase / ●	single-phase / ●	single-phase / ●
Efficiency	anigio pinaco y	unigio pinato / -	angle phase /
Max. efficiency	96.1 %	96.1 %	96.1 %
Euro-Eta	95.2 %	95.2 %	95.2 %
Protection devices	75.2 /0	75.2 /0	75.2 /6
DC reverse polarity protection	•	•	•
ESS DC load-disconnecting switch	•	•	•
AC short-circuit protection	•	•	•
Ground fault monitoring			
*	•	•	•
Grid monitoring (SMA Grid Guard)	•	•	•
Galvanically isolated	•	•	•
General Data	4/0 //10 /040	4/0 //10 /040	4/0 //10 /040
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	LF transformer	LF transformer	LF transformer
Cooling concept	OptiCool	OptiCool	OptiCool
Installation: Indoors / Outdoors (IP65 electronics)	●/●	●/●	●/●
Features			
DC connection: MC3 / MC4 / Tyco	0/•/0	0/•/0	0/•/0
AC connection: screw terminal	•	•	•
LCD	•	•	•
Interfaces: Bluetooth® / RS485	0/0	0/0	0/0
Warranty: 5 years / 10 years / 15 years / 20 years / 25 years	•/0/0/0/0	•/O/O/O/O	•/O/O/O/O
Certificates and approvals	www.SMA.de	www.SMA.de	www.SMA.de
• Standard • Optional	Data at nominal conditions – Last update: March 2009		
98 96 97 98 98 99 90 88 90 90 88 90 90 90 90 90 90 90 90 90 90 90 90 90	SMA Powe Plug PBLSN	AC-10-NR Kit "Negative"	Bluetooth Piggy-Back Grounding-Kit "Positive" ESHV-P-NR