

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 MPPT 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

