

Powerful

- > Efficiency > 98 %
- > OptiTrac MPP control
- > Highly efficient OptiCool ventilation system

Safe

- > Transformerless
- > Integrated ESS DC-load disconnecting switch
- > For installation outdoors and indoors
- > Worldwide SMA service and SMA Serviceline



SUNNY MINI CENTRAL

Three times single-phase is the best three-phase system

The Sunny Mini Central 9000TL, 10000TL and 11000TL extend SMA's reference class for high power inverters. The experience with the development of the Sunny Mini Central 8000TL, the favorite of the editorial staff of "Photon", helped us make the devices extremely reliable. Perfectly suitable for commercial PV-systems starting with 27 kW up to the megawatt range the single-phase devices can easily be combined to a three-phase system. The advantages: compared with three-phase devices they have a lower weight and can be flexibly combined. Each single Sunny Mini Central harvests the highest energy yield due to the OptiTrac technology. The innovative "Power Balancer" for symmetric feeding to the different phases reduces yield losses even further. Excellent efficiency of 98 %, lowest specific price and an installation right next to the solar generator – an unbeatable combination that pays with each and every beam of sunlight.

Technical Data

SUNNY MINI CENTRAL 9000TL / 10000TL / 11000TL

| | SMC 9000TL-10 | SMC 10000TL-10 | SMC 11000TL-10 |
|---|------------------------------|------------------------------|------------------------------|
| Input (DC) | | | |
| Max. DC power | 9300 W | 10350 W | 11400 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 | 28 A | 31 A | 34 A |
| Number of MPP trackers | 1 | 1 | 1 |
| Max. number of strings (parallel) | 5 | 5 | 5 |
| Output (AC) | | | |
| Nominal AC output | 9000 W | 10000 W | 11000 W |
| Max. AC power | 9000 W | 10000 W | 11000 W |
| Max. output current | 40 A | 44 A | 48 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 | 98.0 % | 98.0 % | 98.0 % |
| Euro ETA | 97.6 % | 97.5 % | 97.5 % |
| Protective equipment | | | |
| DC reverse polarity protection | ● | ● | ● |
| DC load disconnecting switch ESS | ● | ● | ● |
| AC short circuit protection | ● | ● | ● |
| Ground fault monitoring | ● | ● | ● |
| Monitored string fuses | ○ | ○ | ○ |
| Grid monitoring (SMA grid guard) | ● | ● | ● |
| All pole sensitive residual current monitoring unit | ● | ● | ● |
| General Data | | | |
| Dimensions (W / H / D) in mm | 468 / 613 / 242 | 468 / 613 / 242 | 468 / 613 / 242 |
| Weight | approx. 35 kg | approx. 35 kg | approx. 35 kg |
| Operating temperature range | -25 °C ... +60 °C | -25 °C ... +60 °C | -25 °C ... +60 °C |
| Noise emission (typical) | ≤ 42 dB(A) | ≤ 45 dB(A) | ≤ 46 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 |
| 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

