

**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
<b>Input (DC)</b>			
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
<b>Output (AC)</b>			
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 / $\pm 4.5$ Hz	50 Hz / 60 Hz / $\pm 4.5$ Hz	50 Hz / 60 Hz / $\pm 4.5$ Hz
Power factor (cos $\varphi$ )	1	1	1
AC connection / power balancing	single-phase / ●	single-phase / ●	single-phase / ●
<b>Efficiency</b>			
Max. efficiency	98.0 %	98.0 %	98.0 %
Euro ETA	97.6 %	97.5 %	97.5 %
<b>Protective equipment</b>			
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	●	●	●
<b>General Data</b>			
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)	$\leq 42$ dB(A)	$\leq 45$ dB(A)	$\leq 46$ 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)	●/●	●/●	●/●
<b>Features</b>			
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

