

SMC 9000TLRP-10 / SMC 10000TLRP-10 / SMC 11000TLRP-10



REACTIVE POWER CONTROL

Flexible

- Reactive power supply

High Yields

- Maximum efficiency of 97.7 %
- Transformerless, with H5 topology
- OptiCool active temperature management

Reliable

- SMA Power Balancer for three-phase grid connection
- Integrated ESS DC switch-disconnector
- Monitored string fuses

Simple

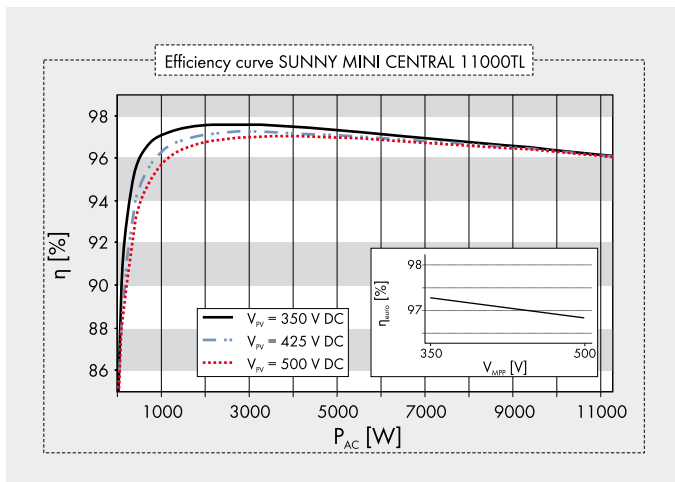
- DC plug system SUNCLIX

SUNNY MINI CENTRAL 9000TL / 10000TL / 11000TL with Reactive Power Control

Optimal grid integration with reactive power supply

Future-proof grids at a glance: the Sunny Mini Central 9000TL / 10000TL / 11000TL with Reactive Power Control are the solution when the electric power company is required to supply reactive power. The inverters can now be used to realize plant concepts which have specifications for the displacement factor $\cos \varphi$ and thus for the percentage of the reactive power. In this way, large-scale power systems, especially those in the megawatt range, can make optimal use of the distribution grid capacities provided. In doing so, they can significantly contribute to the success of renewable energy sources.

Technical data	Sunny Mini Central 9000TL	Sunny Mini Central 10000TL	Sunny Mini Central 11000TL
Input (DC)			
Max. DC power (@ $\cos \varphi = 1$)	9300 W	10350 W	11400 W
Max. DC voltage	700 V	700 V	700 V
MPP voltage range	333 V - 500 V	333 V - 500 V	333 V - 500 V
DC nominal voltage	350 V	350 V	350 V
Min. DC voltage / start voltage	333 V / 400 V	333 V / 400 V	333 V / 400 V
Max. input current / per string	28 A / 28 A	31 A / 31 A	34 A / 34 A
Number of MPP trackers / strings per MPP tracker	1 / 5	1 / 5	1 / 5
Output (AC)			
AC nominal power (@ 230 V, 50 Hz)	9000 W	10000 W	11000 W
Max. AC apparent power	9000 VA	10000 VA	11000 VA
Nominal AC voltage; range	220, 230, 240 V; 180 V - 260 V	220, 230, 240 V; 180 V - 260 V	220, 230, 240 V; 180 V - 260 V
AC grid frequency; range		50, 60 Hz; -6 Hz, +5 Hz	
Max. output current	40 A	44 A	48 A
Power factor ($\cos \varphi$)		0.8 leading ... 0.8 lagging	
Phase conductors / connection phases / power balancing	1 / 1 / ●	1 / 1 / ●	1 / 1 / ●
Efficiency			
Max. efficiency / Euro-Eta	97.7 % / 97.3 %	97.7 % / 97.2 %	97.7 % / 97.2 %
Protection devices			
DC reverse-polarity protection / reverse current protection	●/○ (Fuses)	●/○ (Fuses)	●/○ (Fuses)
ESS switch-disconnector	●	●	●
AC short circuit protection	●	●	●
Ground fault monitoring	●	●	●
Grid monitoring (SMA Grid Guard)	●	●	●
Galvanically isolated / all-pole sensitive fault current monitoring unit	-/●	-/●	-/●
DC overvoltage protector (type II), can be integrated	-	-	-
String failure detection	-	-	-
Protection class / overvoltage category	I / III	I / III	I / III
General data			
Dimensions (W / H / D) in mm	468 / 613 / 242	468 / 613 / 242	468 / 613 / 242
Weight	35 kg	35 kg	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)
Internal consumption: (night)	0.25 W	0.25 W	0.25 W
Topology	transformerless	transformerless	transformerless
Cooling concept	OptiCool	OptiCool	OptiCool
Electronics protection rating / connection area (as per IEC 60529)	IP65 / IP65	IP65 / IP65	IP65 / IP65
Climatic category (per IEC 60721-3-4)	4K4H	4K4H	4K4H
Features			
DC connection: SUNCLIX	●	●	●
AC connection: screw terminal / spring-type terminal	●/-	●/-	●/-
Display: LCD / Graphic	●/-	●/-	●/-
Interfaces: RS485 / Bluetooth	○/○	○/○	○/○
Warranty: 5 / 10 / 15 / 20 / 25 years	●/○/○/○/○	●/○/○/○/○	●/○/○/○/○
Certificates and permits (more available on request)	CE, VDE 0126-1-1, EN 50438*, C10 / C11		
* Does not apply to all national deviations of EN 50438			
● Standard features ○ Optional features - not available			
Data at nominal conditions			
Type designation	SMC 9000TLRP-10	SMC 10000TLRP-10	SMC 11000TLRP-10



Accessories



RS485 interface of type
485PB-NR



Bluetooth Piggy Back
BTBINV-NR



SMA Power Balancer
Y cable PBL-YCABLE-10