

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



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



Flexible

- Reactive power supply

High yields

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

Reliable

- Pluggable SMA Power Balancer for three-phase power supply line
- Integrated ESS DC switch-disconnector
- Monitored string fuses

Simple

- SUNCLIX DC plug-in system

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

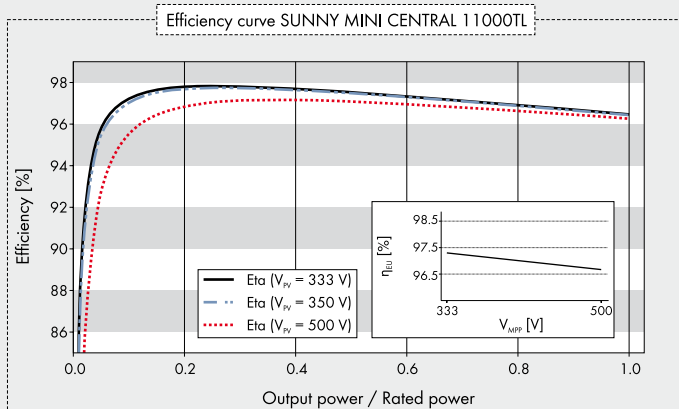
Optimum grid integration with reactive power supply

Sunny Mini Central inverters with Reactive Power Control are the ideal solution when utility companies demand reactive power supply. They can be used to realize plant designs which specify for the displacement factor $\cos \varphi$ and the corresponding percentage of reactive power. This way, large PV power stations can now make optimum use of grid distribution capacities, which significantly contributes to the success of renewable energy.

SUNNY MINI CENTRAL 9000TL / 10000TL / 11000TL

with Reactive Power Control

Technical Data	Sunny Mini Central 9000TL	Sunny Mini Central 10000TL
Input (DC)		
Max. DC power (@ cos φ=1)	9300 W	10350 W
Max. input voltage	700 V	700 V
MPP voltage range / rated input voltage	333 V - 500 V / 350 V	333 V - 500 V / 350 V
Min. input voltage / initial input voltage	333 V / 400 V	333 V / 400 V
Max. input current	28 A	31 A
Max. input current per string	28 A	31 A
Number of independent MPP inputs / strings per MPP input	1 / 5	1 / 5
Output (AC)		
Rated output power (@230 V, 50 Hz)	9000 W	10000 W
Max. apparent AC power	9000 VA	10000 VA
Nominal AC voltage / range	220 V, 230 V, 240 V / 180 V - 265 V	220 V, 230 V, 240 V / 180 V - 265 V
AC power frequency / range	50 Hz, 60 Hz / -6 Hz ... +5 Hz	50 Hz, 60 Hz / -6 Hz ... +5 Hz
Rated power frequency / rated power voltage	50 Hz / 230 V	50 Hz / 230 V
Max. output current	40 A	44 A
Power factor at rated output power	1	1
Adjustable displacement factor	0.8 overexcited ... 0.8 underexcited	0.8 overexcited ... 0.8 underexcited
Feed-in phases / connection phases	1 / 1	1 / 1
Power balancing	●	●
Efficiency		
Max. efficiency / European efficiency	97.7% / 97.3%	97.7% / 97.2%
Protection		
Reverse current protection / input-side disconnection device	Optional (fuses) / ●	Optional (fuses) / ●
Ground fault monitoring / grid monitoring	● / ●	● / ●
DC reverse-polarity protection / AC short-circuit current capability / galvanically isolated	● / ● / -	● / ● / -
All-pole sensitive residual current monitoring unit	●	●
Protection class (according to IEC 62103) / overvoltage category (according to IEC 60664-1)	I / III	I / III
General Data		
Dimensions (W / H / D)	468 / 613 / 242 mm (18.4 / 24.1 / 9.5 in)	468 / 613 / 242 mm (18.4 / 24.1 / 9.5 in)
Weight	35 kg / 77.16 lb	35 kg / 77.16 lb
Operating temperature range	-25 °C ... +60 °C / -13 °F ... +140 °F	-25 °C ... +60 °C / -13 °F ... +140 °F
Noise emission (typical)	42 dB(A)	45 dB(A)
Self-consumption (night)	0.25 W	0.25 W
Topology	Transformerless	Transformerless
Cooling concept	OptiCool	OptiCool
Degree of protection (according to IEC 60529)	IP65	IP65
Degree of protection of connection area (according to IEC 60529)	IP65	IP65
Climatic category (according to IEC 60721-3-4)	4K4H	4K4H
Maximum permissible value for relative humidity (non-condensing)	100 %	100 %
Features		
DC terminal	SUNCLIX	SUNCLIX
AC terminal	Screw terminal	Screw terminal
Display	Text line	Text line
Interface: RS485 / Bluetooth	○ / ○	○ / ○
Warranty: 5 / 10 / 15 / 20 / 25 years	● / ○ / ○ / ○ / ○	● / ○ / ○ / ○ / ○
Certificates and approvals (more available on request)	CE, VDE0126-1-1, RD 1663/2000, RD 661/2007, EN 50438*, C10/11, PPDS, EC 61727, UTE C15-712-1	
Type designation	SMC 9000TLRP-10	SMC 10000TLRP-10



Accessories



RS485 interface
485PB-SMC-NR



Bluetooth Piggy-Back
BTPBINV-NR



SMA Power Balancer
Connection cable
PBL-CABLE-10

* Does not apply to all national annexes to EN 50438

● Standard features ○ Optional features – Not available
Data at nominal conditions

Technical Data	Sunny Mini Central 11000TL	
Input (DC)		
Max. DC power (@ $\cos \varphi = 1$)	11400 W	
Max. input voltage	700 V	
MPP voltage range / rated input voltage	333 V - 500 V / 350 V	
Min. input voltage / initial input voltage	333 V / 400 V	
Max. input current	34 A	
Max. input current per string	34 A	
Number of independent MPP inputs / strings per MPP input	1 / 5	
Output (AC)		
Rated output power (@230 V, 50 Hz)	11000 W	
Max. apparent AC power	11000 VA	
Nominal AC voltage / range	220 V, 230 V, 240 V / 180 V - 265 V	
AC power frequency / range	50 Hz, 60 Hz / -6 Hz ... +5 Hz	
Rated power frequency / rated power voltage	50 Hz / 230 V	
Max. output current	48 A	
Power factor at rated output power	1	
Adjustable displacement factor	0.8 overexcited ... 0.8 underexcited	
Feed-in phases / connection phases	1 / 1	
Power balancing	●	
Efficiency		
Max. efficiency / European efficiency	97.7% / 97.2%	
Protection		
Reverse current protection / input-side disconnection device	Optional (fuses) / ●	
Ground fault monitoring / grid monitoring	● / ●	
DC reverse-polarity protection / AC short-circuit current capability / galvanically isolated	● / ● / -	
All-pole sensitive residual current monitoring unit	●	
Protection class (according to IEC 62103) / overvoltage category (according to IEC 60664-1)	I / III	
General Data		
Dimensions (W / H / D)	468 / 613 / 242 mm (18.4 / 24.1 / 9.5 in)	
Weight	35 kg / 77.16 lb	
Operating temperature range	-25 °C ... +60 °C / -13 °F ... +140 °F	
Noise emission (typical)	46 dB(A)	
Self-consumption (night)	0.25 W	
Topology	Transformerless	
Cooling concept	OptiCool	
Degree of protection (according to IEC 60529)	IP65	
Degree of protection of connection area (according to IEC 60529)	IP65	
Climatic category (according to IEC 60721-3-4)	4K4H	
Maximum permissible value for relative humidity (non-condensing)	100 %	
Features		
DC terminal	SUNCLIX	
AC terminal	Screw terminal	
Display	Text line	
Interface: RS485 / Bluetooth	○ / ○	
Warranty: 5 / 10 / 15 / 20 / 25 years	● / ○ / ○ / ○ / ○	
Certificates and approvals (more available on request)	CE, VDE0126-1-1, RD 1663/2000, RD 661/2007, EN 50438*, C10/11, PPDS, IEC 61727, UTE C15-712-1	
Type designation	SMC 11000TLRP-10	