

SMC 5000/6000



The little giants



Smallest central inverter

For outdoor and indoor installation

Best efficiency of a transformer inverter with a maximum of 96 %

With OptiCool® ventilation system – suitable for outside installation

Best cost-performance ratio in its class

Nominal power of 5 and 6 kW up to an ambient temperature of 45 °C

Electric separation with transformer

Extended temperature range -25 °C to +65 °C

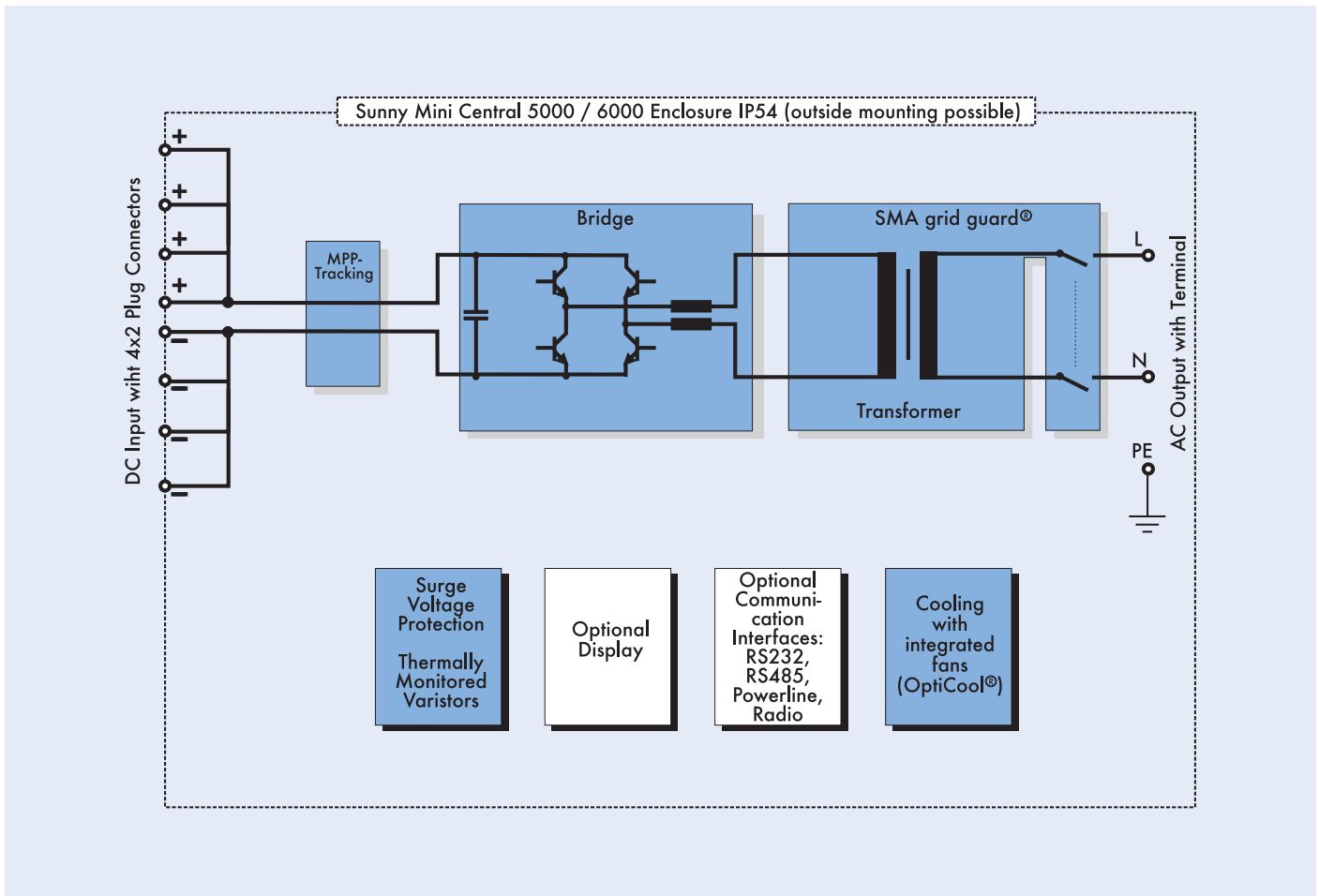
Connection on the DC side with snap cable connectors

Diagnosis and communication via Powerline Communication, radio transmission or via data cable (RS232 or RS485)

Surge voltage protection with integrated thermally monitored varistors

We designed the Sunny Mini Centrals to show that high system outputs don't necessarily have to mean a large central inverter housing. Featuring SMA's patented OptiCool® cooling system, the new double-chamber housing allows outstanding temperature management as well as safely protecting the electronics from the wind and weather. While the SMC 5000 is suitable for use in solar power systems with 5, 10 or 15 kW, its big brother the SMC 6000 is intended for large systems exceeding 20 kWp. At the same time the units achieve 96 % efficiency. Previously unheard of for transformer-based units, this ensures maximum energy yields with minimum investment costs.





Schematic diagram of the Sunny Mini Central 5000/6000

Technical Data

	SMC 5000	SMC 6000
Input		
Recc. maximum PV-power (P_{PV})	6350 W _p	7000 W _p
PV-voltage range, MPPT (U_{PV}) at 230 V AC	246 V - 600 V	246 V - 600 V
PV-voltage range, MPPT (U_{PV}) at 250 V AC	270 V - 600 V	270 V - 600 V
Max. input current ($I_{PV, max}$)	26 A	26 A
DC voltage ripple (U_{pp})	< 10 %	< 10 %
Max. number of strings (parallel)	4	4
DC disconnection	Snap cable connectors	Snap cable connectors
Overtoltage protection	yes	yes
Thermally monitored varistors	yes	yes
Ground fault monitoring	yes	yes
Pole confusion protection	Short circuit diode	Short circuit diode
Output		
Continuous AC power ($P_{AC, max}$)	5500 W at 45 °C	6000 W at 45 °C
Nominal AC power ($P_{AC, nom}$)	5000 W	5500 W
THD of grid current	< 4 %	< 4 %
Default range of AC voltage (U_{AC})	198 V - 260 V	198 V - 260 V
Possible range of AC voltage	180 V - 265 V	180 V - 265 V
AC frequency (f_{AC})	49.8 Hz - 50.2 Hz	49.8 Hz - 50.2 Hz
Possible range of AC frequency	45.5 Hz - 54.5 Hz	45.5 Hz - 54.5 Hz
Phase shift ($\cos \varphi$)	1	1
Short circuit proof	yes, current control	yes, current control
Connection to utility	AC screw terminal	AC screw terminal
Efficiency		
Max. efficiency	96 %	96 %
Euro-eta	95.1 %	95.1 %
Enclosure		
accord. to DIN EN 60529	IP54	IP54
Mechanical Data		
Width / height / depth in mm	430 / 600 / 250	430 / 600 / 250
Weight	approx. 63 kg	approx. 63 kg