

Sunny Boy 3300/3800



The best in their class



Easy plant design and reduced installation costs

SMA grid guard® (MSD)

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

Extended temperature range
-25 °C to +60 °C

For outdoor and indoor installation

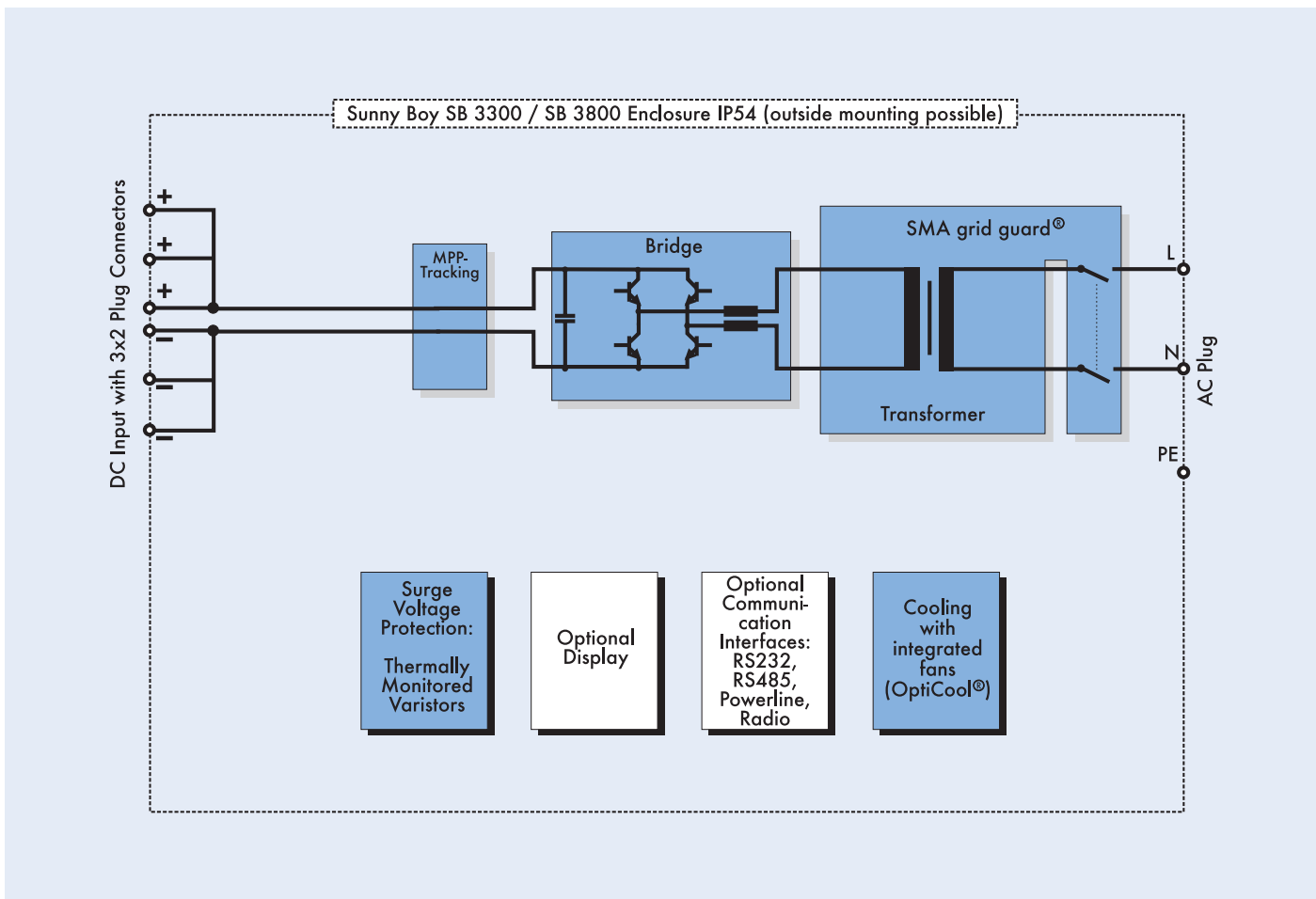
Connection on the AC- and DC-side with connectors

Surge voltage protection with integrated thermally monitored varistors

With OptiCool® ventilation system – suitable for outside installation

One of the most important criteria when purchasing an inverter is its efficiency. The higher the efficiency, the lower the losses that are incurred when converting direct current produced by the solar modules into alternating current. SMA has set a new record for transformer-based units by achieving a maximum efficiency of 95.6 %. As well as ensuring the maximum effectiveness for the OptiCool® active cooling system developed by SMA, an all-new, extra heavy duty extruded aluminium housing with a double-chamber design also safely protects the electronic components from the wind and weather.





Schematic diagram of the Sunny Boy 3300/3800

Technical Data

	SB 3300	SB 3800
Input		
Recc. maximum PV-power (P_{PV})	approx. 4300 W _P *)	approx. 4500 W _P *)
Max. DC power ($P_{DC, max}$)	3800 W	4100 W
Max. DC voltage ($U_{DC, max}$)	500 V	500 V
PV-voltage range, MPPT (U_{PV})	200 V - 500 V	200 V - 500 V
Max. input current ($I_{PV, max}$)	20 A	20 A
DC voltage ripple (U_{pp})	< 10 %	< 10 %
Max. number of strings (parallel)	3	3
DC disconnection	Snap cable connectors	Snap cable connectors
Thermally monitored varistors	yes	yes
Ground fault monitoring	yes	yes
Pole confusion protection	Short circuit diode	Short circuit diode
Output		
Max. AC power ($P_{AC, max}$)	3600 W	3800 W
Nominal AC power ($P_{AC, nom}$)	3300 W	3800 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 Plug	AC Plug
Efficiency		
Max. Efficiency	95.2 %	95.6 %
Euro-eta	94.4 %	94.9 %
Enclosure		
accord. to DIN EN 60529	IP54	IP65
Mechanical Data		
Width / height / depth in mm	450 / 352 / 236	450 / 352 / 236
Weight	approx. 38 kg	approx. 38 kg

*) for PV-Plants in Germany