

# Sunny Boy SB 3300 / SB 3800



The best in their class



Best efficiency for transformer inverters in the 4 kW class

OptiCool®:  
Maximum power up to an ambient temperature of 45 °C due to dual compartment cooling system

SMA grid guard® 2:  
Automatic disconnection

Electronic Solar Switch ESS:  
Integrated DC circuit breaker (optional)

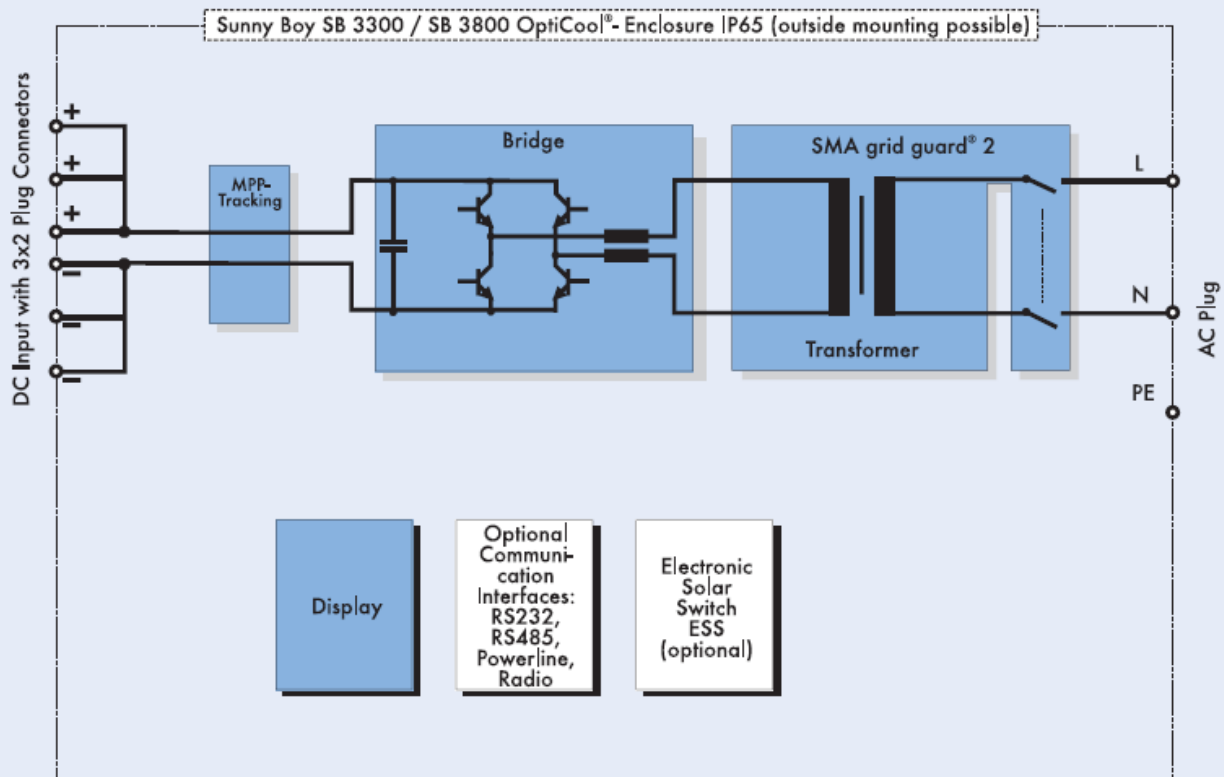
Flexible application

5 years SMA Warranty

One of the most important criteria for PV inverters is the efficiency. The higher the efficiency, the lower the losses that are produced when converting DC current from the solar modules into AC current for the grid. SMA has set a new record for transformer-based units by achieving a maximum efficiency of 95.6 %.

Additionally the OptiCool® system developed by SMA in a sturdy aluminium housing with a double-chamber design safely protects the electronic components from dust and water for long term performance of your inverter.





Schematic diagram of the Sunny Boy 3300/3800

## Technical Data

	SB 3300	SB 3800
<b>Input</b>		
Max. DC power ( $P_{DC, max}$ )	3820 W	4040 W
Max. DC voltage ( $U_{DC, max}$ )	500 V	500 V
PV voltage range, MPPT ( $U_{Mpp}$ )	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, ESS	Snap cable connectors, ESS
Thermally monitored varistors	yes	yes
Ground fault monitoring	yes	yes
Pole confusion protection	Short circuit diode	Short circuit diode
<b>Output</b>		
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 %
Nominal AC voltage ( $U_{AC, nom}$ )	220 V - 240 V	220 V - 240 V
Nominal AC frequency ( $f_{AC, nom}$ )	50 Hz / 60 Hz	50 Hz / 60 Hz
Power factor ( $\cos \varphi$ )	1	1
Short circuit proof	yes, current control	yes, current control
Connection to utility	AC Plug	AC Plug
<b>Efficiency</b>		
Max. efficiency	95.2 %	95.6 %
Euro-eta	94.4 %	94.7 %
<b>Enclosure</b>		
accord. to DIN EN 60529	IP65	IP65
<b>Mechanical Data</b>		
Width / height / depth in mm	450 / 352 / 236	450 / 352 / 236
Weight	41 kg	41 kg