

Sunny Boy 2500/3000



The bestsellers



Team mode compatible

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

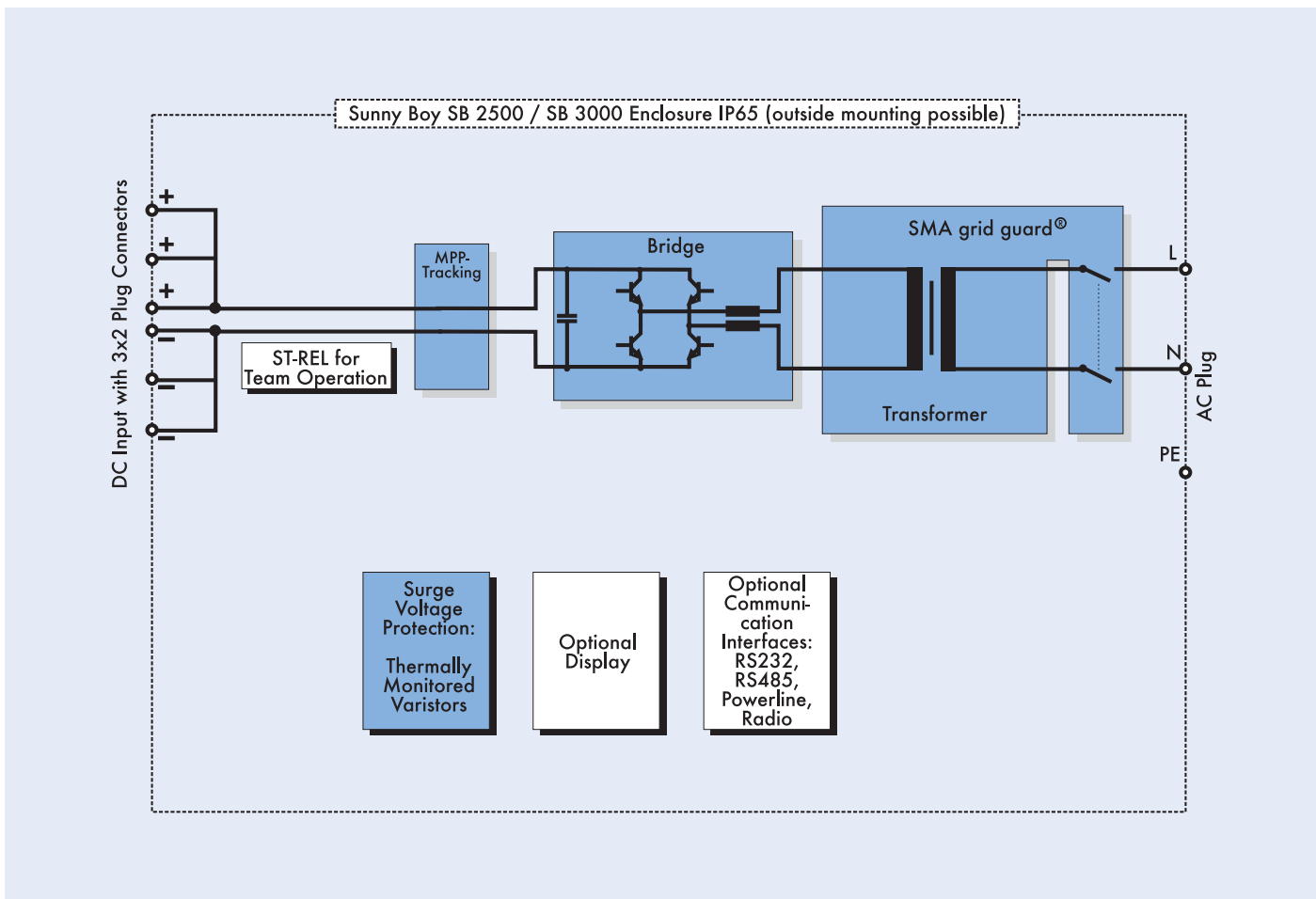
For outdoor and indoor installation

Connection on the AC- and DC-side with connectors

Surge voltage protection with integrated thermally monitored varistors

The fact that a product has sold more units worldwide than any other in its class doesn't necessarily say anything about its quality. But both the SB 2500 and the SB 3000 guarantee excellent energy yields because they operate with extremely low losses. Their extremely solid engineering and innovative circuitry concept is ideal for the most frequently occurring system sizes of grid-tied solar power systems. The inverters' high efficiency can be increased still further in combination with multiple units using SMA's patented team circuitry. The wide input power range also enables all kinds of combination options with all current cell technologies.





Schematic diagram of the Sunny Boy 2500/3000

Technical Data

	SB 2500	SB 3000
Input		
Recc. maximum PV-power (P_{PV})	approx. 3000 W _P *)	approx. 3600 W _P *)
Max. DC power ($P_{DC, max}$)	2700 W	3200 W
Max. DC voltage ($U_{DC, max}$)	600 V	600 V
PV-voltage range, MPPT (U_{PV})	224 V - 600 V	268 V - 600 V
Max. input current ($I_{PV, max}$)	12 A	12 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 ($P_{AC, max}$)	2500 W	3000 W
Nominal AC power ($P_{AC, nom}$)	2300 W	2750 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	94.1 %	95 %
Euro-eta	93.2 %	93.6 %
Enclosure		
accord. to DIN EN 60529	IP65	IP65
Mechanical Data		
Width / height / depth in mm	434 / 295 / 214	434 / 295 / 214
Weight	approx. 30 kg	approx. 32 kg

*) for PV-Plants in Germany