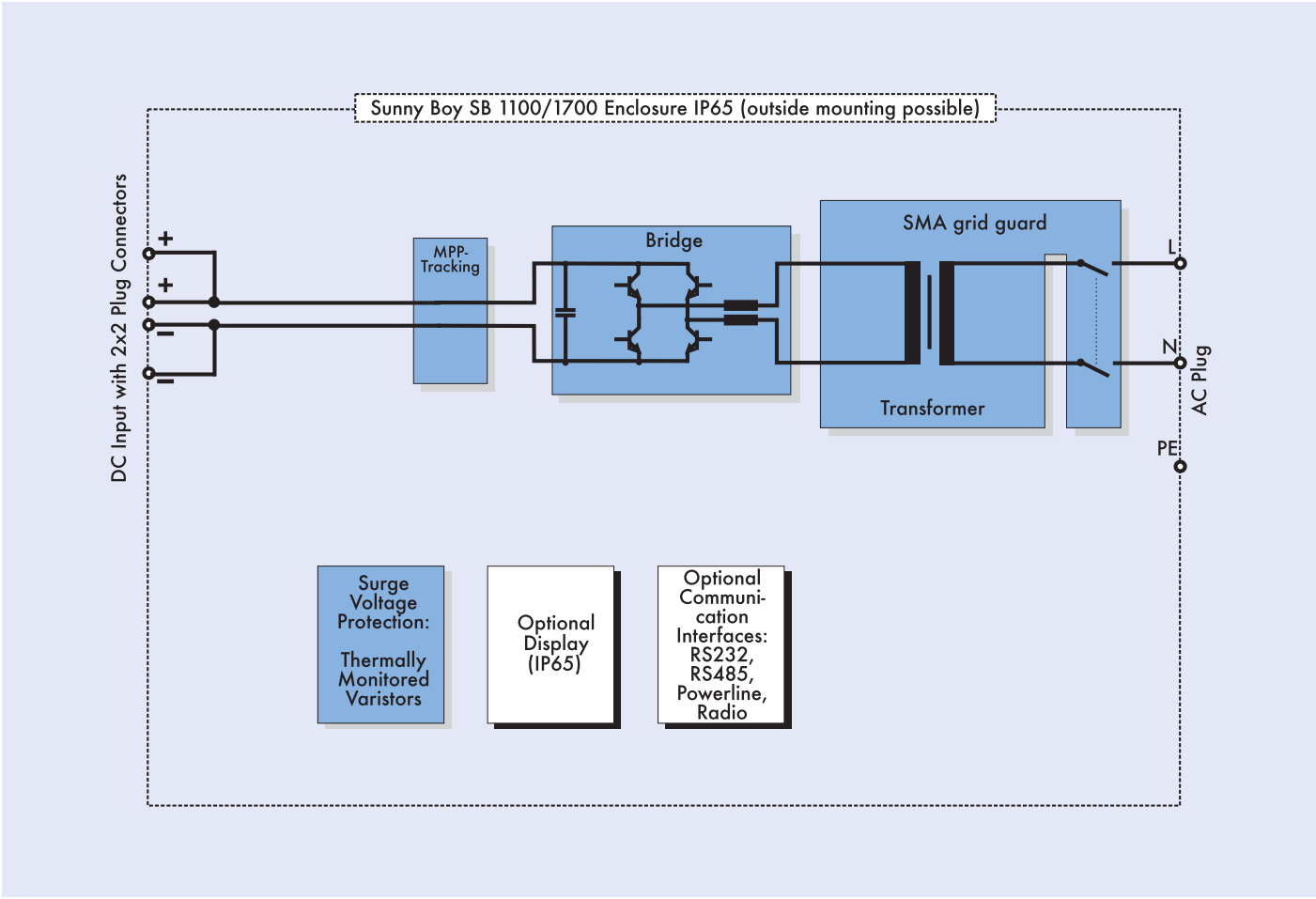
Sunny Boy 1100/1700

The compact 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

When configuring any solar power installation, the aim is to get the optimum match between the solar generator's output power and the inverter's input power. This includes having the widest possible selection of different inverter types. The compact SB 1100 and SB 1700 inverters have proven particularly successful with more than 30,000 units sold worldwide.
Packed full of innovative technologies, these "smaller" Sunny Boys also feature the international SMA grid guard interface. This ensures maximum reliability when operating the solar power system and enables electricity to be fed into mains grids anywhere in the world.



Schematic diagram of the Sunny Boy 1100/1700

Technical Data

	SB 1100	SB 1700
Input		
Recc. maximum PV-power (P_{PV})	approx. 1350 W_P *)	approx. 2050 W_P *)
Max. DC power ($P_{DC, max}$)	1210 W	1850 W
Max. DC voltage ($U_{DC, max}$)	400 V	400 V
PV-voltage range, MPPT (U_{PV})	139 V – 400 V	139 V – 400 V
Max. input current ($I_{PV, max}$)	10 A	12.6 A
DC voltage ripple (U_{PP})	< 10 %	< 10 %
Max. number of strings (parallel)	2	2
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 ($P_{AC, max}$)	1100 W	1700 W
Nominal AC power ($P_{AC, nom}$)	1000 W	1550 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 φ)	1	1
Short circuit proof	yes, current control	yes, current control
Connection to utility	AC Plug	AC Plug
Efficiency		
Max. Efficiency	93 %	93.5 %
Euro-eta	91.6 %	91.8 %
Enclosure		
accord. to DIN EN 60529	IP65	IP65
Mechanical Data		
Width / height / depth in mm	322 / 320 / 180	434 / 295 / 214
Weight	approx . 21 kg	approx . 25 kg

*) for PV-Plants in Germany

Innovations in System Technology
for the Success of Photovoltaics