

Communication

- > Bluetooth technology
- > Plant monitoring via PDA
- > Graphic display

Universal

- > Simple country configuration
- > Multi-language display

Easy Installation

- > Convenient front wiring compartment
- > Cabling without tools
- > Ergonomic design

Leading-Edge Technology

- > Maximum efficiency of 97% with wide input voltage range
- > ESS
- > Transformerless with H5 topology
- > OptiCool
- > MPP tracker: OptiTrac
- > Multi-String technology

- > Comprehensive SMA warranty program



SUNNY BOY 4000TL / 5000TL

Perfection Plus. Usability.

The Sunny Boy 4000TL and 5000TL offer more communication options, are easier to use and more efficient than ever – setting new standards in inverter technology. Features include: a modern graphic display, indication of daily values even after sunset, a simplified installation concept and wireless communication via Bluetooth. Both have a peak efficiency of 97% with a wide input voltage range. These multi-string inverters offer exceptional energy capture, maximum plant design flexibility, and comprehensive module compatibility – and they are the inverters of choice for demanding generator configurations.

Technical Data

SUNNY BOY 4000TL / 5000TL

	SB 4000TL	SB 5000TL
Input (DC)		
Max. DC power	4300 W	5300 W
Max. DC voltage	550 V	550 V
PV voltage range, MPPT	125 V - 500 V	125 V - 500 V
Max. input current	2 x 15 A	2 x 15 A
Number of MPP trackers	2	2
Max. number of strings (parallel)	2 x 2	2 x 2
Output (AC)		
Nominal AC output	4000 W	4600 W
Max. AC output	4000 W	5000 W
Max. output current	18 A	22 A
Nominal AC voltage / range	220 V - 240 V / 180 V - 290 V	220 V - 240 V / 180 V - 290 V
AC grid frequency (self-adjusting) / range	50 Hz, 60 Hz / 45 - 65 Hz	50 Hz, 60 Hz / 45 - 65 Hz
Power factor (cos φ)	1	1
AC connection	single-phase	single-phase
Efficiency		
Max. efficiency	97.0%	97.0%
Euro ETA	96.0%	96.0%
Protective equipment		
DC reverse polarity protection	●	●
DC load disconnecting switch ESS	●	●
AC short circuit protection	●	●
Ground fault current monitoring	●	●
Grid monitoring (SMA grid guard)	●	●
Integrated all-pole sensitive RCD	●	●
General Data		
Dimensions (W / H / D) in mm	470 x 445 x 180	470 x 445 x 180
Weight	25 kg	25 kg
Operating temperature range	-25 °C ... 60 °C	-25 °C ... 60 °C
Consumption: operating (standby) / night	< 10 W / < 0,2 W	< 10 W / < 0,2 W
Topology	transformerless	transformerless
Cooling concept	OptiCool	OptiCool
Installation: Indoor / Outdoor	●/●	●/●
Features		
DC connection: MC3 / MC4 / Tyco	●/○/○	●/○/○
AC connection: Terminals	●	●
Graphic display	●	●
Interfaces: Bluetooth / RS485	●/○	●/○
Warranty: 5 years / 10 years	●/○	●/○
Certificates and approvals	www.SMA.de	www.SMA.de
● Standard ○ Optional (preliminary information, dated June 2007)	Values apply for nominal conditions	

