

SB 4200TL HC / SB 5000TL HC

- > Multi-String
- > Transformerless
- > 96 % efficiency
- > Integrated ESS DC load disconnecting switch
- > Worldwide SMA service and SMA Service Line
- > Extended SMA warranty



SUNNY BOY Multi-String

Maximum module compatibility, optimal yield

Systems with different roof orientation or module types still achieve the highest possible yields with SMA Multi-String inverters. Each individual string connection of the Multi-String inverter is equipped with a separate MPP tracker. A broad input voltage range and a high input current allow the use of any standard crystalline PV module. Flexible module circuit connection, a high efficiency rate of over 96 % through transformerless switching, and extensive monitoring functions make the Multi-String inverter the best choice for your system.

Technical Data

Sunny Boy Multi-String

	SB 4200TL HC Multi-String	SB 5000TL HC Multi-String
Input (DC)		
Max. DC output	4400 W	5300 W
Max. DC voltage	750 V	750 V
PV voltage range, MPPT	125 V - 600 V	125 V - 600 V
Max. input current	2 x 11 A	2 x 11 A
Number of MPP trackers	2	2
Max. number of strings (parallel)	string A: 2 / string B: 1	string A: 2 / string B: 1
Output (AC)		
Nominal AC output	4000 W	4600 W
Max. AC output	4200 W	5000 W
Max. output current	19 A	22 A
Nominal AC voltage / range	220 V - 240 V / 180 V - 260 V	220 V - 240 V / 180 V - 260 V
AC grid frequency / range	50 Hz / 45.5 Hz - 52.5 Hz	50 Hz / 45.5 Hz - 52.5 Hz
Power factor (cos φ)	1	1
AC connection	single-phase	single-phase
Efficiency		
Max. efficiency	96.2 %	96.2 %
Euro ETA	95.4 %	95.5 %
Protective equipment		
DC reverse polarity protection	●	●
DC load disconnecting switch ESS	●	●
AC short-circuit proofing	●	●
Ground fault monitoring	●	●
Grid monitoring (SMA grid guard)	●	●
integrated all-pole sensitive leakage current monitoring unit	●	●
General data		
Dimensions (W / H / D) in mm	470 / 490 / 225	470 / 490 / 225
Weight	31 kg	31 kg
Operating temperature range	-25 °C ... +60 °C	-25 °C ... +60 °C
Consumption: operating (standby) / night	<10 W / 0.25 W	<10 W / 0.25 W
Topology	transformerless	transformerless
Cooling concept	convection	convection
Installation location: indoor / outdoor (IP65)	● / ●	● / ●
Features		
DC connection: MC3 / MC4 / Tyco	● / ○ / ○	● / ○ / ○
AC connection: screw terminal / plug connector	●	●
LCD display	●	●
Cover color: red	●	●
Interfaces: RS485 / radio	○ / ○	○ / ○
Warranty: 5 years / 10 years	● / ○	● / ○
Certificates and approvals	www.SMA.de	www.SMA.de

● Included ○ Option

Values apply for nominal conditions

Efficiency curve

