

Sunny Boy Multi-String

SB 4200TL HC, SB 5000TL HC



Optimal for Different Strings due to Separate MPP-Tracking

Optimal Inverter for 6" and 6"+ Cells

Highly Flexible

Transformerless Topology with integrated all-pole fault current monitoring

SMA grid guard[®] 2: Automatic disconnection

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

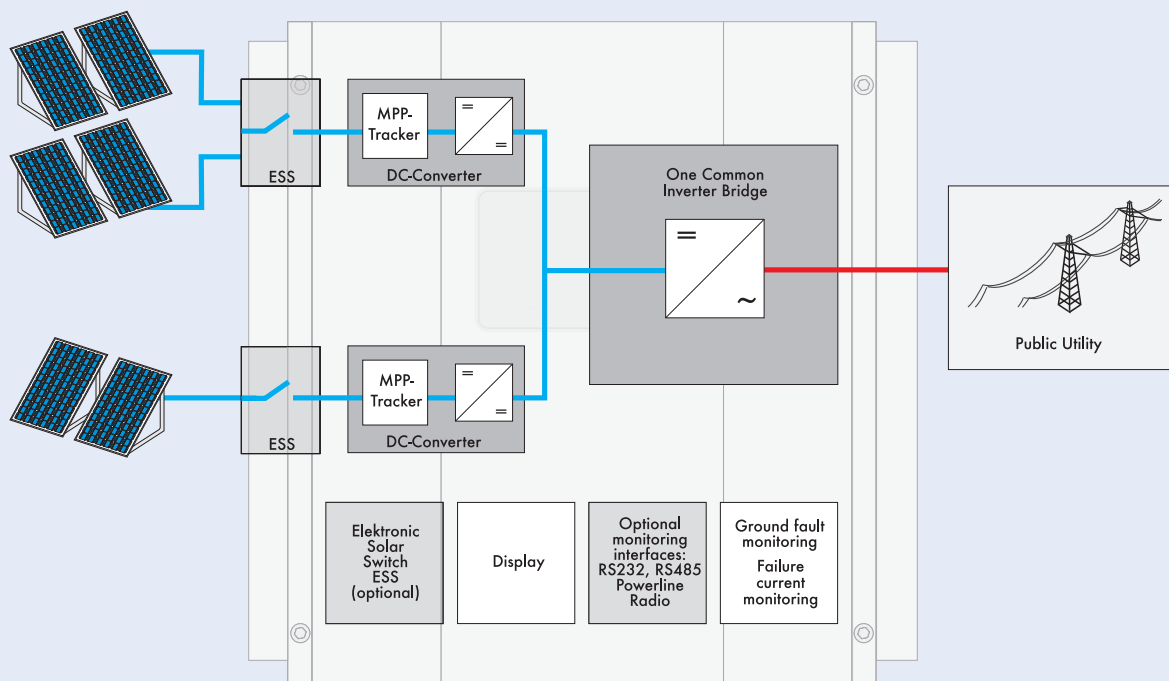
Extended Temperature Range -25 °C to +60 °C

For Inside and Outside Installation

5 Years SMA Warranty

Multi-String Inverters from SMA give you free choice: PV-plants with different orientations or different module types reach highest yields. The string connections are each equipped with separate MPP-trackers and the HC versions of the Multi-Strings allow the use of all standard crystalline technologies, as are 6" and 6"+ cells. The free choice of module types, highest efficiencies with up to 96 % due to a transformerless design, and a comprehensive safety system make the Multi-String the first choice for your plant.





Schematic overview of the Sunny Boy Multi-String with different PV-strings

Technical Data

| | SB 4200TL HC Multi-String | SB 5000TL HC Multi-String |
|--|------------------------------|------------------------------|
| Input | | |
| Max. DC power ($P_{DC, max}$) | 4400 W | 5300 W |
| Max. DC voltage ($U_{DC, max}$) | 750 V | 750 V |
| PV-voltage range, MPPT (U_{PV}) | 125 V – 750 V | 125 V – 750 V |
| Max. input current ($I_{PV, max}$) | 2 x 11 A | 2 x 11 A |
| DC voltage ripple (U_{pp}) | < 10 % | < 10 % |
| Number MPP-Tracker | 2 | 2 |
| 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 |
| Output | | |
| Max. AC power ($P_{AC, max}$) | 4200 W | 5000 W |
| Nominal AC power ($P_{AC, nom}$) | 4000 W | 4600 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 | 50 Hz |
| Power factor ($\cos \varphi$) | 1 | 1 |
| Short circuit proof | yes, current control | yes, current control |
| Connection to utility | Screw-terminal | Screw-terminal |
| Efficiency | | |
| Max. Efficiency | 96.2 % | 96.2 % |
| Euro-eta | 95.4 % | 95.5 % |
| Enclosure | | |
| accord. to DIN EN 60529 | IP65 | IP65 |
| Mechanical Data | | |
| Width / height / depth in mm | 470 / 490 / 225 | 470 / 490 / 225 |
| Weight | 31 kg | 31 kg |