



### Efficient

- 96.0 % efficiency
- Transformerless

### Safe

- Optional ESS DC load disconnecting unit

### Reliable

- Worldwide SMA service including Service Line
- Attractive SMA warranty program

### Simple

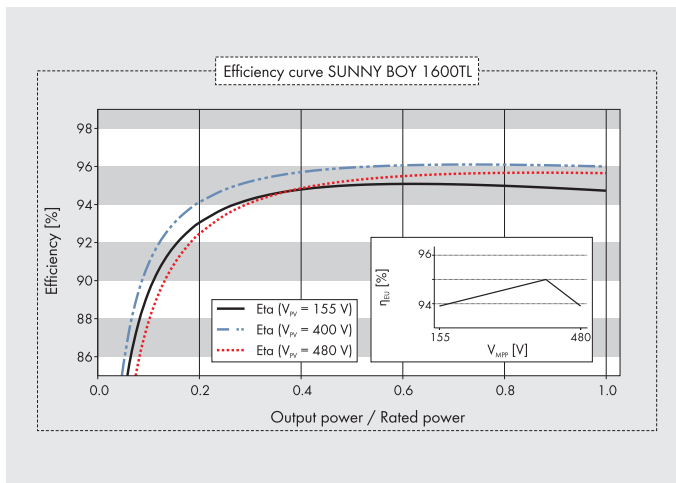
- DC plug system SUNCLIX

## SUNNY BOY 1600TL

The great among the small

With an efficiency level of 96.0 % the transformerless Sunny Boy 1600TL guarantees first-class energy yields and thus an outstanding price/performance ratio. The tried and tested inverter is particularly suitable for use in small PV systems as well as in sub-generators in larger systems. Its low weight and robust housing enable easy installation. In addition, the Sunny Boy is equipped with an all-pole sensitive leakage current monitoring unit, which guarantees safe operation at all times. As with all Sunny Boy, the Sunny Boy 1600TL is also compatible with SMA communication products.

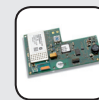
| Technical data   | Sunny Boy 1600TL  |
|--|---|
| <b>Input (DC)</b>  |   |
| Max. DC power (@ $\cos \varphi = 1$ )                                    | 1700 W  |
| Max. DC voltage  | 600 V   |
| MPP voltage range  | 155 V - 480 V   |
| DC nominal voltage   | 400 V   |
| Min. DC voltage / start voltage  | 125 V / 150 V   |
| Max. input current / per string  | 11 A / 11 A   |
| Number of MPP trackers / strings per MPP tracker                         | 1 / 1   |
| <b>Output (AC)</b>   |   |
| AC nominal power (@ 230 V, 50 Hz)  | 1600 W  |
| Max. AC apparent power   | 1600 VA   |
| Nominal AC voltage; range  | 220, 230, 240 V;<br>180 V - 260 V                                 |
| AC grid frequency; range   | 50 Hz; -4.5 Hz, +2.5 Hz   |
| Max. output current  | 11 A  |
| Power factor ( $\cos \varphi$ )  | 1   |
| Phase conductors / connection phases                                     | 1 / 1   |
| <b>Efficiency</b>  |   |
| Max. efficiency / Euro-eta   | 96.0 % / 95.0 %   |
| <b>Protection devices</b>  |   |
| DC reverse-polarity protection   | ●   |
| ESS switch-disconnector  | ○   |
| AC short circuit protection  | ●   |
| Ground fault monitoring  | ●   |
| Grid monitoring (SMA Grid Guard)   | ●   |
| Galvanically isolated / all-pole sensitive fault current monitoring unit | -/●   |
| Protection class / overvoltage category                                  | I / III   |
| <b>General data</b>  |   |
| Dimensions (W / H / D) in mm   | 440 / 339 / 214   |
| Weight   | 16 kg   |
| Operating temperature range  | -25 °C ... +60 °C   |
| Noise emission (typical)   | ≤ 33 dB(A)  |
| Internal consumption (night)   | < 0.1 W   |
| Topology   | transformerless   |
| Cooling concept  | Convection  |
| Electronics protection rating / connection area (as per IEC 60529)       | IP65 / IP65   |
| Climatic category (per IEC 60721-3-4)                                    | 4K4H  |
| <b>Features</b>  |   |
| DC connection: SUNCLIX   | ●   |
| AC connection: screw terminal / plug connector / spring-type terminal    | -/●/-   |
| Display: text line / graphic   | ●/-   |
| Interfaces: RS485 / Bluetooth®   | ○/○   |
| Warranty: 5 / 10 / 15 / 20 / 25 years                                    | ●/○/○/○/○   |
| Certificates and permits (more available on request)                     | CE, VDE 0126-1-1, EN 50438*, C10/C11, PPDS, UTE C15-712-1, AS4777 |
| * Does not apply to all national deviations of EN 50438                  |   |
| ● Standard features ○ Optional features – not available                  |   |
| Data at nominal conditions   |   |
| Type designation   | SB 1600TL-10  |



## Accessories



RS485 interface of type 485PB-NR



Bluetooth® Piggy Back BTPBINV-NR