

# SUNNY BOY 2500TL / 3000TL SINGLE TRACKER



SB 2500TLST-21 / SB 3000TLST-21



## Economical

- Maximum DC input voltage of 750 V
- Cost saving due to fewer parallel strings
- Shade management with OptiTrac Global Peak

## Flexible

- Compatible with all PV modules available on the market
- Variable applications due to the use as main or complementary device

## Simple

- Without fan
- Easier wall mounting
- SUNCLIX DC plug-in system
- Fast connection, no tools required

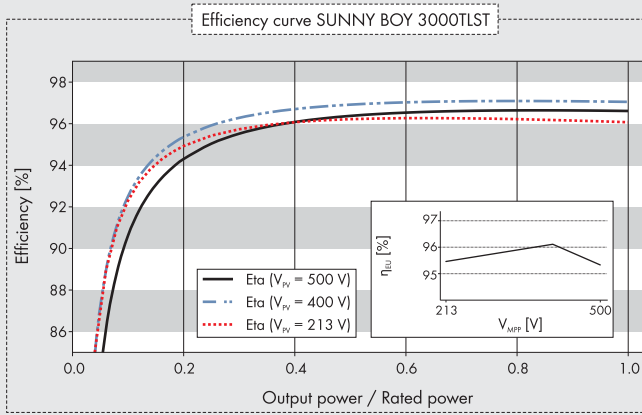
## Communicative

- Simple country configuration
- Bluetooth® technology

## SUNNY BOY 2500TL / 3000TL SINGLE TRACKER

Now also available as an economical specialist for small, simple plants

Just like before. But new. The Sunny Boy TL is now available with only one MPP tracker and in principle offers all the benefits of its multistring brothers 3000TL, 3600TL, 4000TL and 5000TL: with economical operation, advanced technology and convenient operation, the special strengths of the Sunny Boy Single Tracker make it a standout. Not only is it a cost-efficient specialist for small, simple rooftop installations, but thanks to its reactive power capability, it's also the perfect addition to existing systems.



## Accessories



RS485 interface  
DM-485CB-10



Webconnect interface  
SWDM-10



Multi-function relay  
MFR01-10



Additional Fan Kit  
FANKIT01-10



Power Control Module  
PWCMOD-10

<sup>1</sup> Does not apply to all national appendices of EN 50438

<sup>2</sup> Scheduled

| Provisional technical data   | Sunny Boy 2500TL<br>Single Tracker   | Sunny Boy 3000TL<br>Single Tracker             |
|--|--|--|
| <b>Input (DC)</b>  |  |  |
| Max. DC power (@ cos φ = 1)  | 2650 W   | 3200 W   |
| Max. input voltage   | 750 V  | 750 V  |
| MPP voltage range / rated input voltage  | 180 - 500 V / 400 V  | 213 - 500 V / 400 V                            |
| Min. input voltage / start input voltage   | 125 V / 150 V  | 125 V / 150 V                                  |
| Max. input current   | 15 A   | 15 A   |
| Max. input current per string  | 15 A   | 15 A   |
| Number of independent MPP inputs / strings per MPP input   | 1 / 2  | 1 / 2  |
| <b>Output (AC)</b>   |  |  |
| Rated power (@ 230 V, 50 Hz)   | 2500 W   | 3000 W   |
| Max. apparent AC power   | 2500 VA  | 3000 VA  |
| Nominal AC voltage   | 220 V / 230 V / 240 V  | 220 V / 230 V / 240 V                          |
| Nominal AC voltage range   | 180 V - 280 V  | 180 V - 280 V                                  |
| AC power frequency / range   | 50 Hz, 60 Hz / -5 Hz, +5 Hz  | 50 Hz, 60 Hz / -5 Hz, +5 Hz                    |
| Rated power frequency / rated grid voltage   | 50 Hz / 230 V  | 50 Hz / 230 V                                  |
| Max. output current  | 10.9 A   | 13.1 A   |
| Power factor at rated power  | 1  | 1  |
| Displacement power factor, adjustable  | 0.8 overexcited ... 0.8 underexcited   | 0.8 overexcited ... 0.8 underexcited           |
| Feed-in phases / connection phases   | 1 / 1  | 1 / 1  |
| <b>Efficiency</b>  |  |  |
| Max. efficiency / European weighted efficiency   | 97% / 96.0%  | 97% / 96.1%                                    |
| <b>Protective devices</b>  |  |  |
| DC-side disconnection device   | ○  | ○  |
| Ground fault monitoring / grid monitoring  | ● / ●  | ● / ●  |
| DC reverse polarity protection / AC short-circuit current capability / galvanically isolated                 | ● / ● / -  | ● / ● / -                                      |
| All-pole-sensitive residual-current monitoring unit  | ●  | ●  |
| Protection class (as per IEC 62103) / overvoltage category (as per IEC 60664-1)                              | I / III  | I / III  |
| <b>General data</b>  |  |  |
| Dimensions (W / H / D)   | 490 / 519 / 185 mm<br>(19.3 / 20.4 / 7.3 inch)   | 490 / 519 / 185 mm<br>(19.3 / 20.4 / 7.3 inch) |
| Weight   | 23 kg / 50.6 lb  | 23 kg / 50.6 lb                                |
| Operating temperature range  | -25 °C ... +60 °C / -13 °F ... +140 °F   | -25 °C ... +60 °C / -13 °F ... +140 °F         |
| Noise emission (typical)   | 25 dB(A)   | 25 dB(A)                                       |
| Self-consumption (at night)  | 1 W  | 1 W  |
| Topology / cooling concept   | transformerless / convection   | transformerless / convection                   |
| Degree of protection (per IEC 60529)   | IP65   | IP65   |
| Climatic category (as per IEC 60721-3-4)   | 4K4H   | 4K4H   |
| Maximum permissible value for relative humidity (non-condensing)   | 100%   | 100%   |
| <b>Features</b>  |  |  |
| DC connection / AC connection  | SUNCLIX / spring clamp terminal  | SUNCLIX / spring clamp terminal                |
| Display  | chart  | chart  |
| Interfaces: RS485 / Bluetooth® / Webconnect / Speedwire <sup>2</sup>   | ○ / ● / ○ / ○  | ○ / ● / ○ / ○                                  |
| Multi-function relay / Power Control Module  | ○ / ○  | ○ / ○  |
| Warranty: 5 / 10 / 15 / 20 / 25 years  | ● / ○ / ○ / ○ / ○  | ● / ○ / ○ / ○ / ○                              |
| Certificates and approvals (more upon request)   | CE, VDE 0126-1-1, VDE-AR-N 4105, C10/11, G83/1-1, G59/2  |  |
| Certificates and approvals (planned)   | RD 1699/2011, PPC, RD 661/2007, AS 4777, EN 50438 <sup>1</sup> , PPDS, IEC61727, SI4777, UTE C15-712-1, CEI 0-21 |  |
| Version: November 2012 / ● Standard features ○ Optional features - Not available, Data at nominal conditions |  |  |
| Type designation   | SB 2500TLST-21   | SB 3000TLST-21                                 |