

SUNNY TRIPOWER 15000TL / 20000TL ECONOMIC EXCELLENCE



STP 15000TL-10 / STP 20000TL-10



Economical

- Maximum efficiency 98.5%
- OptiTrac for best MPP tracking efficiency

- Active temperature management with OptiCool
- Bluetooth® communication

Simple

- Three-phase feed-in
- Cable connection without tools
- SUNCLIX DC plug-in system

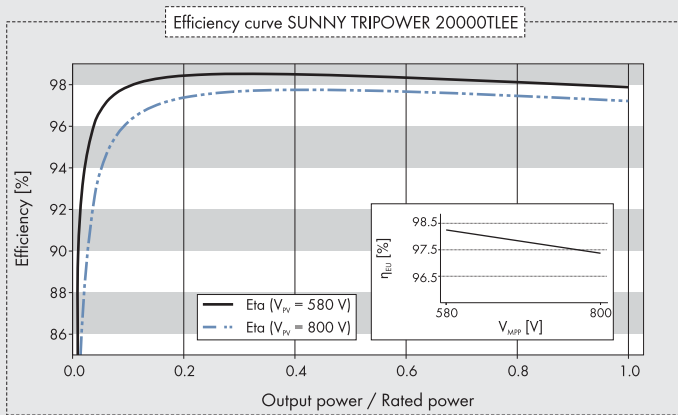
Flexible & future-proof

- DC input voltage up to 1 000 V
- Integrated grid management functions
- Reactive power capability

SUNNY TRIPOWER 15000TL / 20000TL ECONOMIC EXCELLENCE

The expert cost saver for high-yield, commercial plants

Peak performance at a significantly reduced specific price: the new Sunny Tripower TL Economic Excellence is the next logical step in the development of the Sunny Tripower series in terms of achieving an optimum price-performance ratio. On the one hand, it brings with it a considerable reduction in investment costs, while on the other hand guaranteeing exceptionally high yields with an efficiency of 98.5%. Hence, the Sunny Tripower TL Economic Excellence is the ideal inverter solution for uniformly structured PV plants on the medium to very large scale. The focus is on the essentials and meets all requirements, including reactive power provision, grid support, and grid management integration.



Accessories



RS485 interface
DM-485CB-10



Multi-function relay
MFR01-10

* Planned

** Does not apply to all national appendices of EN 50438

● Standard features ○ Optional features – Not available
Provisional data, as of May 2012

Data at nominal conditions

| Provisional Technical Data | Sunny Tripower 20000TL | Sunny Tripower 15000TL |
|--|---|---|
| Input (DC) | | |
| Max. DC power (@ $\cos \varphi = 1$) | 20 450 W | 15 260 W |
| Max. input voltage | 1 000 V | 1 000 V |
| MPP voltage range with a line voltage of 230 V/rated input voltage | 580 V – 800 V / 580 V | 580 V – 800 V / 580 V |
| Min. input voltage / start input voltage | 570 V / 620 V | 570 V / 620 V |
| Max. input current | 36 A | 36 A |
| Max. input current per string | 36 A | 36 A |
| Number of independent MPP inputs / strings per MPP input | 1 / 6 | 1 / 6 |
| Output (AC) | | |
| Rated power (@ 230 V, 50 Hz) | 20 000 W | 15 000 W |
| Max. apparent AC power | 20 000 VA | 15 000 VA |
| Nominal AC voltage | 3 / N / PE, 230 V / 400 V | 3 / N / PE, 230 V / 400 V |
| Nominal AC voltage range | 160 V – 280 V | 160 V – 280 V |
| AC power frequency / range | 50 Hz, 60 Hz / -6 Hz, +5 Hz | 50 Hz, 60 Hz / -6 Hz, +5 Hz |
| Rated power frequency / rated grid voltage | 50 Hz / 230 V | 50 Hz / 230 V |
| Max. output current | 29 A | 24 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 | 3 / 3 | 3 / 3 |
| Efficiency | | |
| Max. efficiency / European weighted efficiency | 98.5 % / 98.2 % | 98.5 % / 98.3 % |
| Protective devices | | |
| DC-side disconnection device | ○ | ○ |
| Ground fault monitoring / grid monitoring | ● / ● | ● / ● |
| DC surge arrester (type II), can be integrated | – | – |
| 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 |
| General data | | |
| Dimensions (W/H/D) | 665 / 680 / 265 mm (26.2 / 26.8 / 10.4 inch) | 665 / 680 / 265 mm (26.2 / 26.8 / 10.4 inch) |
| Weight | 45 kg / 99.2 lb | 45 kg / 99.2 lb |
| Operating temperature range | -25°C ... +60 °C / -13 °F ... 140 °F | -25°C ... +60 °C / -13 °F ... 140 °F |
| Noise emission (typical) | 51 dB(A) | 51 dB(A) |
| Self-consumption (at night) | 1 W | 1 W |
| Topology / cooling concept | Transformerless / OptiCool | Transformerless / OptiCool |
| Degree of protection: electronics / connection area (per IEC 60529) | IP65 / IP54 | IP65 / IP54 |
| Climatic category (as per IEC 60721-3-4) | 4K4H | 4K4H |
| Maximum permissible value for relative humidity (non-condensing) | 100 % | 100 % |
| Features | | |
| DC terminal | SUNCLIX | SUNCLIX |
| AC connection | spring clamp terminal | spring clamp terminal |
| display | chart | chart |
| Interfaces: RS485 / Bluetooth® | ○ / ● | ○ / ● |
| Warranty: 5 / 10 / 15 / 20 / 25 years | ● / ○ / ○ / ○ / ○ | ● / ○ / ○ / ○ / ○ |
| Multi-function relay | ○ | ○ |
| Certificates and approvals (more available on request) | CE, VDE 0126-1-1, VDEAR-N 4105, PPC, RD 661/2007, UTE C15-712-1, EN 50438**, PPDS, RD 1699, AS 4777, BDEW 2008, C10/11, CEI 0-21*, G59/2, IEC61727* | |
| Type designation | STP 20000TLEE-10 | STP 15000TLEE-10 |