



Efficient

- Maximum efficiency of 98.4 %

Safe

- DC surge arrester (SPD type II) can be integrated

Flexible

- DC input voltage of up to 1,000 V
- Multistring capability for optimum system design

Innovative

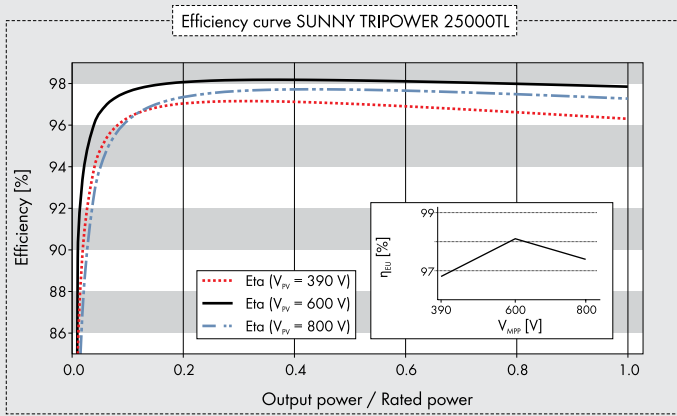
- Cutting-edge grid management functions with Integrated Plant Control*
- Reactive power available 24/7 (QonDemand24/7)*

SUNNY TRIPOWER 20000TL / 25000TL

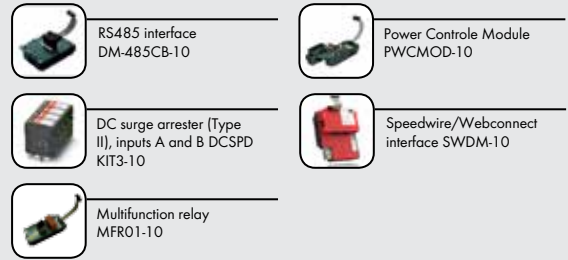
The versatile specialist for large-scale commercial plants and solar power plants

The Sunny Tripower 20000TL/25000TL is the ideal inverter for large-scale commercial and industrial plants. Not only does it deliver extraordinary high yields with an efficiency of 98.4 %, but it also offers enormous design flexibility and compatibility with many PV modules thanks to its multistring capabilities and wide input voltage range.

The future is now: the Sunny Tripower 20000TL/25000TL comes with cutting-edge grid management functions such as Integrated Plant Control*, which allows the inverter to regulate reactive power at the point of common coupling. Separate controllers are no longer needed, lowering system costs. Another new feature—reactive power provision on demand (QonDemand24/7)*.



Accessories



¹ Does not apply to all national appendices of EN 50438

● Standard features ○ Optional features – Not available
Data at nominal conditions
Last updated: August 2014

| Technical Data | Sunny Tripower 20000TL | Sunny Tripower 25000TL |
|--|--|---|
| Input (DC) Input (DC) | | |
| Max. DC power (@ cos φ = 1) | 20440 W | 25550 W |
| Max. input voltage | 1000 V | 1000 V |
| MPP voltage range / rated input voltage | 320 V to 800 V / 600 V | 390 V to 800 V / 600 V |
| Min. input voltage / start input voltage | 150 V / 188 V | 150 V / 188 V |
| Max. input current input A / input B | 33 A / 33 A | 33 A / 33 A |
| Number of independent MPP inputs / strings per MPP input | 2 / A:3; B:3 | 2 / A:3; B:3 |
| Output (AC) | | |
| Rated power (@ 230 V, 50 Hz) | 20000 W | 25000 W |
| Max. AC apparent power | 20000 VA | 25000 VA |
| AC nominal voltage | 3 / N / PE; 220 / 380 V 3 / N / PE; 230 / 400 V 3 / N / PE; 240 / 415 V | 3 / N / PE; 220 / 380 V 3 / N / PE; 230 / 400 V 3 / N / PE; 240 / 415 V |
| Nominal AC voltage range | 160 V to 280 V | 160 V to 280 V |
| AC grid frequency / range | 50 Hz, 60 Hz / -6 Hz to +5 Hz | 50 Hz, 60 Hz / -6 Hz to +5 Hz |
| Rated power frequency / rated grid voltage | 50 Hz / 230 V | 50 Hz / 230 V |
| Max. output current | 29 A | 36.2 A |
| Power factor at rated power | 1 | 1 |
| Adjustable displacement power factor | 0 overexcited to 0 underexcited | 0 overexcited to 0 underexcited |
| Feed-in phases / connection phases | 3 / 3 | 3 / 3 |
| Efficiency | | |
| Max. efficiency / European Efficiency | 98.4 % / 98.0 % | 98.3 % / 98.1 % |
| 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 (according to IEC 62103) / overvoltage category (according to IEC 60664-1) | I / III | I / III |
| General data | | |
| Dimensions (W / H / D) | 665 / 690 / 265 mm (26.2 / 27.2 / 10.4 inch) | 665 / 690 / 265 mm (26.2 / 27.2 / 10.4 inch) |
| Weight | 61 kg (134.48 lb) | 61 kg (134.48 lb) |
| Operating temperature range | -25 °C to +60 °C (-13 °F to +140 °F) | -25 °C to +60 °C (-13 °F to +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 (as per IEC 60529) | IP65 | IP65 |
| Climatic category (according to IEC 60721-3-4) | 4K4H | 4K4H |
| Maximum permissible value for relative humidity (non-condensing) | 100 % | 100 % |
| Features | | |
| DC connection / AC connection | SUNCLIX / spring-cage terminal | SUNCLIX / spring-cage terminal |
| Display | - | - |
| Interface: RS485, Speedwire/Webconnect | ○ / ● | ○ / ● |
| Multifunction relay / Power Control Module | ○ / ○ | ○ / ○ |
| Guarantee: 5 / 10 / 15 / 20 / 25 years | ● / ○ / ○ / ○ / ○ | ● / ○ / ○ / ○ / ○ |
| Planned certificates and permits (more available on request) | AS 4777, BDEW 2008, C10/11, CE, CEI 0-16, CEI 0-21, EN 50438 ¹ , G59/3, IEC61727, IEC 62109-1/2, NEN EN 50438, NRS 097-2-1, PPC, RD 1699, RD 661/2007, SI4777, UTE C15-712-1, VDE 0126-1-1, VDE-AR-N 4105, VFR 2014 | |
| Type designation | STP 20000TL-30 | STP 25000TL-30 |