

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

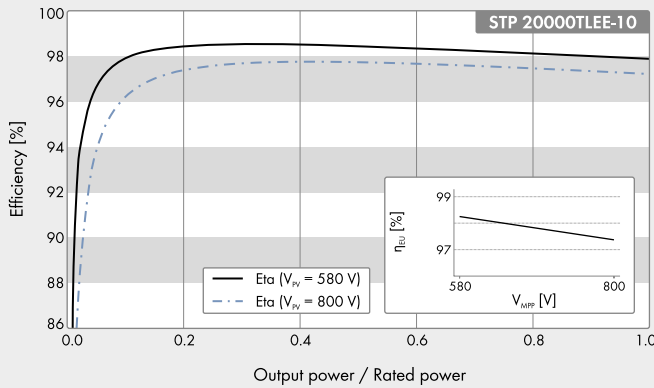
SUNNY TRIPOWER 15000TL / 20000TL

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.

Efficiency curve



Accessories



● Standard features ○ Optional features — Not available
 Data at nominal conditions
 Status: March 2015

Technical Data

Input (DC)

Max. DC power (@ $\cos \phi = 1$) / DC rated power
Max. input voltage
MPP voltage range with a line voltage of 230 V / rated input voltage
Min. input voltage / start input voltage
Max. input current
Max. input current per string
Number of independent MPP inputs / strings per MPP input

Output (AC)

Rated power (@ 230 V, 50 Hz)
Max. apparent AC power
AC nominal voltage
AC voltage range
AC power frequency / range
Rated power frequency / rated grid voltage
Max. output current / Rated output current
Power factor at rated power / Displacement power factor, adjustable
THD
Feed-in phases / connection phases

Efficiency

Max. efficiency / European weighted efficiency
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Protective devices

Input-side disconnection point
Ground fault monitoring / grid monitoring
DC surge arrester (SPD type III / SPD 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 62109-1) / overvoltage category (as per IEC 62109-1)

General data

Dimensions (W/H/D)
Weight
Operating temperature range
Noise emission (typical)
Self-consumption (at night)
Topology / cooling concept
Degree of protection (per IEC 60529)
Climatic category (as per IEC 60721-3-4)
Maximum permissible value for relative humidity (non-condensing)

Features / function

DC terminal / AC connection
Display
Interfaces: RS485, Bluetooth®, Speedwire/Webconnect
Data interface: SMA Modbus / SunSpec Modbus
Multi-function relay / Power Control Module
Integrated Plant Control / Q on Demand 24/7
Off-Grid capable / SMA Fuel Save Controller compatible
Warranty: 5 / 10 / 15 / 20 / 25 years
Certificates and approvals (more available on request)

* Does not apply to all national appendices of EN 50438

Type designation

Sunny Tripower 15000TL

15 260 W / 15 260 W
1 000 V
580 V - 800 V / 580 V
570 V / 620 V
36 A
36 A
1 / 6

Sunny Tripower 20000TL

20 450 W / 20 450 W
1 000 V
580 V - 800 V / 580 V
570 V / 620 V
36 A
36 A
1 / 6

15 000 W
15 000 VA

20 000 W
20 000 VA

3 / N / PE, 230 V / 400 V

160 V - 280 V

50 Hz / 44 Hz ... 55 Hz

60 Hz / 54 Hz ... 65 Hz

50 Hz / 230 V

24 A / 24 A

29 A / 29 A

1 / 0 overexcited ... 0 underexcited

≤ 2,6 %

3 / 3

98.5 % / 98.3 %

98.5 % / 98.2 %

○
 ● / ●
 ● / -
 ● / ● / -
 ●
 I / AC: III; DC: II

665 / 680 / 265 mm (26.2 / 26.8 / 10.4 inch)

45 kg (99.2 lb)

-25 °C ... +60 °C (-13 °F ... +140 °F)

51 dB(A)

1 W

Transformerless / OptiCool

IP65

4K4H

100 %

SUNCLIX / Spring clamp terminal

Chart

○ / ● / ○

○ / ○

○ / ○

● / ●

● / ●

● / ○ / ○ / ○ / ○

ANRE 30, AS 4777, BDEW 2008, C10/11:2012, CE, CEI 0-16, CEI 0-21, EN 50438*, G59/3, IEC 60068-2-x, IEC 61727, IEC 62109-1/-2, IEC 62116, MEA 2013, NEN EN 50438, PEA 2013, PPC, PPDS, RD 1699/413, RD 661/2007, SI4777, UTE C15-712-1, VDE 0126-1-1, VDE-AR-N 4105

STP 15000TLEE-10

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