

# SUNNY TRIPOWER 15000TL

STP 15000TL-10



**NEW** – With Cutting-Edge  
Grid Management Functions

## Efficient

- Maximum efficiency of 98.2 %
- SMA OptiTrac Global Peak MPP tracking for best MPP tracking efficiency

## Reliable

- Triple protection with Optiprotect—electronic string fuse, self-learning string failure detection, integrable DC surge arrester (SPD Type II)

## Flexible

- DC input voltage of up to 1000 V
- Tailor-made system design with Optiflex

## Innovative

- Cutting-edge grid management functions
- Reactive power available 24/7 (Q on Demand)\*

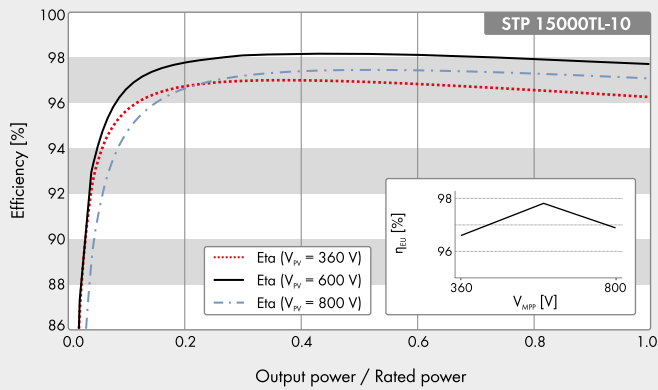
## SUNNY TRIPOWER 15000TL

### The Three-Phase Inverter for Easy PV System Design

The Sunny Tripower 15000TL has new, cutting-edge features: The integration of grid management functions, including Integrated Plant Control, allows the inverter to regulate reactive power at the grid-connection point. This means that upstream regulator units are no longer needed, and system costs are lowered. Another innovation is around-the-clock provision of reactive power (Q on Demand 24/7).

Optiflex technology and the Optiprotect safety concept remain proven standards: Optiflex provides enormous design flexibility with the two MPP inputs in connection with a broad input voltage range - and does it for almost all module configurations. The Optiprotect safety concept, with its self-learning string failure detection, electronic string fuse and integrable DC surge arrester type II, ensures maximum reliability.

## Efficiency Curve



## Accessory



RS485 interface  
DM-485CB-10



SMA Power Control Module  
PWCMOD-10



DC surge arrester (Type II),  
inputs A and B  
DC\_SPD\_KIT\_2-10



Speedwire/Webconnect  
interface SWDM-10



Multifunction relay  
MFR01-10

● Standard features ○ Optional features – Not available  
Data at nominal conditions  
Status: January 2016

## Technical Data

### Input (DC)

Max. DC power (at  $\cos \varphi = 1$ ) / DC rated power  
Max. input voltage  
MPP Voltage range / rated input voltage  
Min. input voltage / initial input voltage  
Max. input current input A / input B  
Max. input current per string input A1 / input B1  
Max. DC short-circuit current input A / input B  
Number of independent MPP inputs/strings per MPP input

### Output (AC)

Rated power (at 230 V, 50 Hz)  
Max. AC apparent power  
Nominal AC 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 / Adjustable displacement power factor  
THD  
Feed-in phases/connection phases

### Efficiency

Max. efficiency / European efficiency

### Protective devices

Input-side disconnection point  
Ground fault monitoring / grid monitoring  
DC surge arrester SPD type III / SPD type II  
DC reverse polarity protection / AC short-circuit current capability / galvanically isolated  
All-pole sensitive residual-current monitoring unit / Electronic string current monitoring  
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 (as per IEC 60529)  
Climatic category (according to IEC 60721-3-4)  
Max. permissible value for relative humidity (non-condensing)

### Features / function

DC connection / AC connection  
Display  
Interface: RS485, Bluetooth®, Speedwire / Webconnect  
Data interface: SMA Modbus / SunSpec Modbus  
Multifunction relay / Power Control Module  
OptiTrack Global Peak/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 (others available upon request)

<sup>1</sup> To be observed in the event of short-circuit of the string fuse.  
<sup>2</sup> Does not apply to all national appendices of EN 50438

Type designation

## Sunny Tripower 15000TL

15340 W / 15340 W  
1000 V  
360 V to 800 V / 600 V  
150 V / 188 V  
33 A / 11 A  
40 A / 12.5 A  
50 A / 17 A  
2 / A;5; B:1

15000 W  
15000 VA  
3 / N / PE; 220 / 380 V  
3 / N / PE; 230 / 400 V  
3 / N / PE; 240 / 415 V  
160 V to 280 V  
50 Hz / 44 Hz to 55 Hz  
60 Hz / 54 Hz to 65 Hz  
50 Hz / 230 V  
24 A / 24 A  
1 / 0 lagging to 0 leading  
 $\leq 3\%$   
3 / 3

98.2% / 97.8%

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

665 / 690 / 265 mm (26.2 / 27.2 / 10.4 inches)

59 kg (130.07 lb)

-25 °C to +60 °C (-13 °F to +140 °F)

51 dB(A)

1 W

Transformerless / OptiCool

IP65

4K4H

100%

SUNCLIX / spring-cage terminal

Graphic

○ / ● / ○

○ / ○

○ / ○

● / ● / ●

● / ●

● / ○ / ○ / ○ / ○

AS 4777, BDEW 2008, C10/11:2012, CE, CEI 0-16, CEI 0-21, EN 50438<sup>1</sup>, G59/3, IEC 60068-2, IEC 61727, MEA 2013, IEC 62109-1/2, NEN EN 50438, PPC, PPSD, RD 661/2007, SI4777, UTE C15-712-1, VDE 0126-1-1, VDE-AR-N 4105, VFR 2013, VFR 2014

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