

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

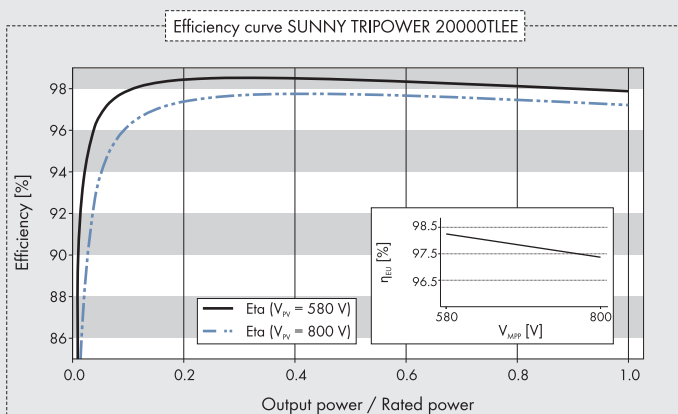
- DC input voltage up to 1 000 V
- Integrated grid management functions
- Reactive power capability

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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



Webconnect interface with
WEBCONDM-10 Speed-
wire function



Interface to Speedwire
fieldbus SPWDM-10



Power Control Module
PWCMOD-10



Multi-function relay
MFR01-10

* Scheduled

** Does not apply to all national appendices of EN 50438
Provisional data, as of July 2012

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 (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 %
Features		
DC terminal	SUNCLIX	SUNCLIX
AC connection	Spring clamp terminal	Spring clamp terminal
Display	Chart	Chart
Interfaces: RS485 / Bluetooth® / Webconnect / Speedwire*	○ / ● / ○ / ○	○ / ● / ○ / ○
Multi-function relay / Power Control Module	○ / ○	○ / ○
Warranty: 5 / 10 / 15 / 20 / 25 years	● / ○ / ○ / ○ / ○	● / ○ / ○ / ○ / ○
Certificates and approvals (more available on request)	CE, VDE 0126-1-1, VDE-ARN 4105, PPC, RD 661/2007, UTE C15-712-1, EN 50438**, PPDS, RD 1699, AS4777, SI4777, BDEW 2008, C10/11, CEI 0-21*, G59/2, IEC61727	
● Standard features ○ Optional features – Not available – Data at nominal conditions		
Type designation	STP 20000TLEE-10	STP 15000TLEE-10