STP 20000TL-30 / STP 25000TL-30

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
- Optional display

Innovative
- Cutting-edge grid management functions with Integrated Plant Control
- Reactive power available 24/7 (Q on Demand 24/7)

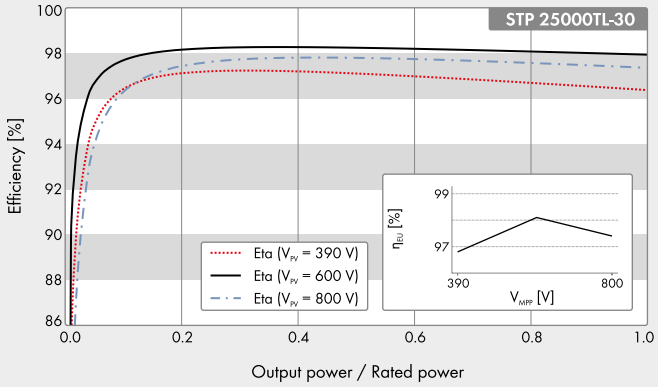
SUNNY TRIPOWER 20000TL / 25000TL

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 (Q on Demand 24/7).

Efficiency curve



Accessories


RS485 interface
DM-485CB-10


Power Controle Module
PWCMOD-10


DC surge arrester (Type II), inputs A and B DCSPD KIT3-10


Speedwire/Webconnect interface SWDM-10


Multifunction relay
MFR01-10

● Standard features ○ Optional features – Not available
Data at nominal conditions
Status: July 2015

Technical Data	Sunny Tripower 20000TL	Sunny Tripower 25000TL
Input (DC)		
Max. DC power (@ cos φ = 1) / DC rated power	20440 W / 20440 W	25550 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 V / 380 V 3 / N / PE; 230 V / 400 V 3 / N / PE; 240 V / 415 V	
AC voltage range	180 V to 280 V	
AC grid frequency / range	50 Hz / 44 Hz to 55 Hz 60 Hz / 54 Hz to 65 Hz	
Rated power frequency / rated grid voltage	50 Hz / 230 V	
Max. output current / Rated output current	29 A / 29 A	36.2 A / 36.2 A
Power factor at rated power / Adjustable displacement power factor	1 / 0 overexcited to 0 underexcited	
THD	≤ 3 %	
Feed-in phases / connection phases	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 62109-1) / overvoltage category (according to IEC 62109-1)	I / AC: III; DC: II	
General data		
Dimensions (W / H / D)	661 / 682 / 264 mm (26.0 / 26.9 / 10.4 inch)	
Weight	61 kg (134.48 lb)	
Operating temperature range	–25 °C to +60 °C (–13 °F to +140 °F)	
Noise emission (typical)	51 dB(A)	
Self-consumption (at night)	1 W	
Topology / cooling concept	Transformerless / Opticool	
Degree of protection (as per IEC 60529)	IP65	
Climatic category (according to IEC 60721-3-4)	4K4H	
Maximum permissible value for relative humidity (non-condensing)	100%	
Features / function		
DC connection / AC connection	SUNCLIX / spring-cage terminal	
Display	○	
Interface: RS485, 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	● / ●	
Guarantee: 5 / 10 / 15 / 20 / 25 years	● / ○ / ○ / ○ / ○	
Certificates and permits (more available on request) * Does not apply to all national appendices of EN 50438	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, NBR 16149, NEN EN 50438, NRS 097-2-1, PEA 2013, PPC, RD 1699/413, RD 661/2007, Res. n°7:2013, SI4777, UTE C15-712-1, VDE 0126-1-1, VDE-AR-N 4105, VFR 2014	
Type designation	STP 20000TL-30	STP 25000TL-30