

COMPLETES YOUR PROJECT



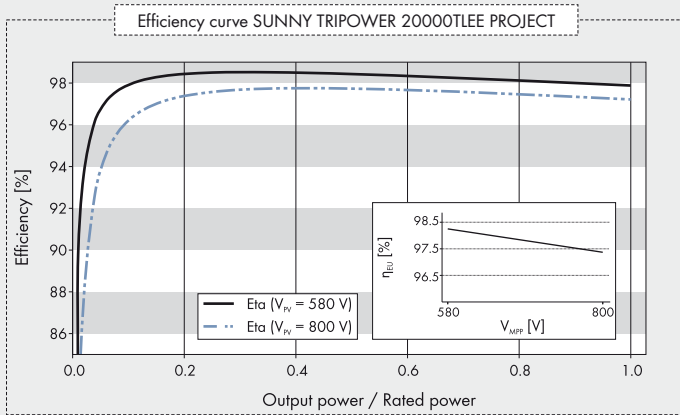
SUNNY TRIPOWER 15000/20000TL ECONOMIC EXCELLENCE **PROJECT**

Developed for the unique requirements of project business and built with experience from more than 25 GW of installed total PV power, the SUNNY TRIPOWER 15000/20000TL ECONOMIC EXCELLENCE PROJECT by SMA offers only the best.

Scaled to the essential features for decentralized large-scale PV systems, it also offers exceptional performance with an efficiency of 98.5 percent.

The SUNNY TRIPOWER 15000/20000TL ECONOMIC EXCELLENCE PROJECT makes it easy for you in every way. With the significantly improved module compatibility (3x higher), system design is more versatile and efficient than ever before. In addition, it is absolutely future-proof by fulfilling all current and planned grid management functions – anywhere in the world¹⁾.

1) Except Canada, Japan and U.S.



Accessories



RS485 interface
DM-485CB-10



Speedwire/Webconnect
interface SWDM-10



Multi-function relay
MFR01-10



Power Control Module
PWCMOD-10

* Does not apply to all national appendices of EN 50438
Provisional data, as of April 2013

Provisional Technical Data	Sunny Tripower 20000TLEE PROJECT	Sunny Tripower 15000TLEE PROJECT
Input (DC)		
Max. DC power (@ cos φ = 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	–	–
Interfaces: RS485 / Bluetooth® / Speedwire / Webconnect	○ / ● / ○ / ○	○ / ● / ○ / ○
Multi-function relay / Power Control Module	○ / ○	○ / ○
Warranty: 5 / 10 / 15 / 20 / 25 years	● / ○ / ○ / ○ / ○	● / ○ / ○ / ○ / ○
Certificates and approvals (more available on request)	AS 4777, BDEW 2008, C10/11, CE, CEI 0-21, EN 50438*, G59/2, IEC 61727, IEC 62109-1/-2, PPC, PPDS, RD 1699, RD 661/2007, SI4777, UTE C15-712-1, VDE 0126-1-1, VDE-AR-N 4105	
● Standard features ○ Optional features – Not available – Data at nominal conditions		
Type designation	STP 20000TLEE-10	STP 15000TLEE-10