

SUNNY TRIPOWER 20000TLEE-JP

STP 20000TLEE-JP-11



Efficient

- Efficiency of 97.5% (as per JIS C 8962)
- Peak efficiency of 98.5%
- Excellent price-performance ratio

Safe

- Maximum robustness and best level of protection thanks to degree of protection IP65 (outdoor)
- Integrated display showing energy yield values and daily power generation trend

Innovative

- Operating temperature range from -25°C to $+60^{\circ}\text{C}$ through active OptiCool temperature management
- Straightforward system visualization and monitoring thanks to Webconnect and Sunny Portal

Convenient

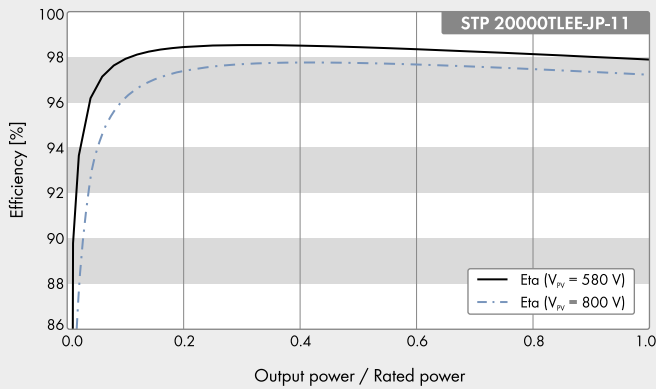
- Efficient remote monitoring and maintenance via SMA Cluster Controller and Sunny Portal for medium-sized and large-scale systems

SUNNY TRIPOWER 20000TLEE-JP

The high-performance solution for medium-voltage applications

The Sunny Tripower 20000TLEE-JP was specifically developed for use in larger, decentralized PV systems in Japan. Its robust outdoor enclosure meets the strict specifications of the IP65 device classification and offers exceptionally solid protection from dirt, water and salt-containing atmospheres. The three-phase inverter enables new design dimensions for large-scale PV power plants through maximum efficiency of 98.5 percent and an expanded input voltage range of up to 1000 V. The optional SMA Cluster Controller enables efficient system monitoring with Sunny Portal and allows personalized parameterization of systems using Modbus.

Efficiency Curve



Accessory



Blue or white cover



Speedwire/Webconnect interface SWDM-10



Multifunction relay MFR01-10



SMA Power Control Module PWCMOD-10

Sunny Tripower 20000TLEE-JP	
Input (DC)	
Max. DC power (@ $\cos \varphi = 1$)	20,450 W
Max. input voltage	1000 V
MPP voltage range at grid voltage (400 V) / rated input voltage	580 V to 800 V / 580 V
Min. input voltage / initial input voltage	570 V / 610 V
Max. input current	36 A
Max. input current per string	36 A
Number of independent MPP inputs / strings per MPP input	1 / 6
Output (AC)	
Rated power (at 400 V, 50 Hz)	20,000 W
Max. apparent AC power	20,000 VA
Nominal AC voltage	3/PE, 400 V
AC voltage range	320 V to 480 V
AC power frequency / range	50 Hz, 60 Hz / $\pm 2\%$
Rated power frequency / rated grid voltage	50 Hz / 400 V
Max. output current	29 A
Power factor at rated power	1
Adjustable displacement power factor	0,8 overexcited to 0.8 underexcited
Feed-in phases / connection phases	3 / 3
Efficiency	
Max. efficiency / efficiency as per JIS C 8962	98.5% / 97.5%
Protective devices	
DC-side disconnection point	●
Ground fault monitoring / grid monitoring	● / ●
DC reverse polarity protection / AC short-circuit current capability / galvanically isolated	● / ● / -
All-pole sensitive residual-current monitoring unit	●
Protection class (as per IEC 61140) / overvoltage category (as per IEC 60664-1)	I / AC: III; DC: II
General Data	
Dimensions (W / H / D)	665 / 680 / 265 mm (26.2 / 26.8 / 10.4 inch)
Weight	45 kg (99.2 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 (as per IEC 60721-3-4)	4K4H
Max. permissible value for relative humidity (non-condensing)	100%
Features	
DC connection	Connecting terminal plate
AC connection	Spring-cage terminal
Display	LC graphic display
Interfaces: RS485, Bluetooth®, Speedwire / Webconnect	○/●/○
Multifunction relay / Power Control Module	○/○
Warranty: 5 / 10 / 15 / 20 years	●/○/○/○
● Standard features ○ Optional features - Not available, data at nominal conditions	
Type designation	STP 20000TLEE-JP-11