



- Economical**
 - Maximum efficiency of 98.5%
 - 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

TECHNICAL DATA	Sunny Tripower 15000TL	Sunny Tripower 20000TL
INPUT (DC)		
Max. DC power (@ cos φ=1)	15 260 W	20 450 W
Max. input voltage		1000 V
MPP voltage range with a line voltage of 230 V / rated input voltage		580 V – 800 V / 580 V
Min. input voltage / start input voltage		570 V / 620 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 (@ 230 V, 50 Hz)	15 000 W	20 000 W
Max. apparent AC power	15 000 VA	20 000 VA
Nominal AC voltage		3 / N / PE, 230 V / 400 V
Nominal AC voltage range		160 V – 280 V
AC power frequency / range		50 Hz, 60Hz / -6 Hz ... +5 Hz
Rated power frequency / rated grid voltage		50 Hz / 230 V
Max. output current	24 A	29 A
Power factor at rated power		1
Displacement power factor, adjustable		0.8 overexcited... 0.8 underexcited
Feed-in phases / connection phases		3 / 3
EFFICIENCY		
Max. efficiency / European weighted efficiency	98.5 % / 98.3 %	98.5 % / 98.2 %
PROTECTION		
DC--side disconnection device		opt.
Ground-fault monitoring / grid monitoring		yes / yes
DC surge arrester Type II, can be integrated		—
DC reverse-polarity protection / AC short-circuit current capability / galvanically isolated		yes / yes / —
All-pole sensitive residual current monitoring unit		yes
Protection class (according to IEC 62103) / overvoltage category (according to IEC 60664-1)		I / III
GENERAL DATA		
Dimensions (W / H / D)		665 / 690 / 265 mm
Weight		45 kg
Operating temperature range		-25 °C ... +60 °C / -13 °F ... +140 °F
Noise emission (typical)		51 dB(A)
Self-consumption at night		1 W
Topology / cooling concept		Transformerless / OptiCool
Degree of protection (according to IEC 60529)		IP65
Climatic category (according to IEC 60721-3-4)		4K4H
Maximum permissible value for relative humidity (non-condensing)		100 %
FEATURES		
DC terminal		SUNCLIX
AC terminal		Spring clamp terminal
Display		Chart
Interface: RS485 / Bluetooth® / Webconnect / Speedwire*		opt. / yes / opt. / opt.
Multi-function relay / Power Control Module		opt. / opt.
Warranty: 5 / 10 / 15 / 20 / 25 years		yes / opt. / opt. / opt. / opt.
Certificates and approvals (more available on request)	CE, VDE 0126-1-1, VDE-AR-N 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	
Type designation	STP 15000TLEE-10	STP 20000TLEE-10

*Scheduled **Does not apply to all national appendices of EN 50438

Data at nominal conditions

Short FORM Part #	Description	Price Per	Unit of Measure
STP15000TLEE	SMA 15kW TRI POWER 3 PH INVERTER EE (2 MPPT)	EA	EA
STP20000TLEE	SMA 20kW TRI POWER 3 PH INVERTER EE(2 MPPT)	EA	EA