



SUNNY BOY 9000TL-US / 10000TL-US / 11000TL-US

SB 9000TLUS-12 / SB 10000TLUS-12 / SB 11000TLUS-12



NOW AVAILABLE FOR 240 V



Innovative

- First transformerless SMA inverter to be certified in accordance with UL 1741
- First inverter with arc-fault circuit interrupter listed according to UL 1699B

Economical

- Maximum efficiency of 98.7%
- Class-leading CEC efficiency of 98.5%
- Superior MPP tracking with OptiTrac™
- Transformerless, with H5 topology

Reliable

- OptiCool™ active temperature management

Convenient

- Integrated DC disconnect
- SMA Power Balancer for three-phase grid connection
- WebConnect compatible

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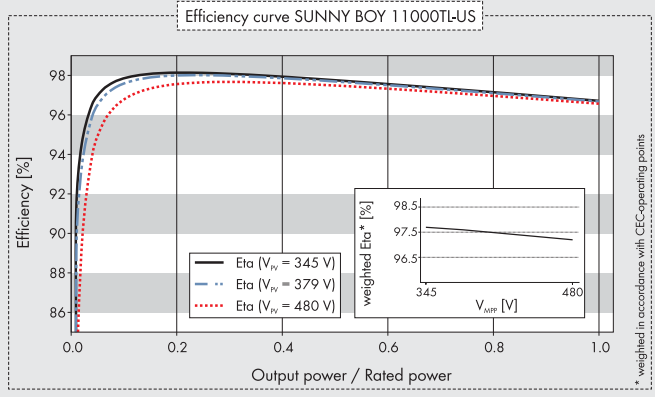
Transformerless design, maximum energy production

The Sunny Boy TL-US series is UL listed for North America and features SMA's innovative H5 topology, resulting in superior efficiencies of more than 98 percent and unmatched solar power production. The transformerless design reduces weight, increases the speed of payback and provides optimum value for any residential or decentralized commercial PV system. The Sunny Boy TL-US series for North America is the ideal choice in transformerless technology.



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Technical data	Sunny Boy 9000TL-US	
	208 V	240 V
Input (DC)		
Max. usable DC power (@ $\cos \varphi = 1$)	9400 W	9400 W
Max. input voltage	600 V	600 V
MPP voltage range / rated input voltage	300 V - 480 V / 345 V	345 V - 480 V / 379 V
Min. input voltage / initial input voltage	300 V / 360 V	345 V / 360 V
Max. input current	31.0 A	27.1 A
Max. input current per string	31.0 A	27.1 A
Number of independent MPP inputs	1	1
Strings per MPP input @ Combiner Box	6	6
Output (AC)		
Rated power / max. apparent AC power	9000 W / 9000 VA	
Nominal AC voltage / nominal AC voltage range	208 V / 183 V - 229 V	240 V / 211 V - 264 V
AC power frequency / range	60 Hz / 59.3 Hz ... 60.5 Hz	60 Hz / 59.3 Hz ... 60.5 Hz
Max. output current	43.3 A	37.5 A
Power factor at rated power	1	
Feed-in phases / connection phases	1 / 2	
Efficiency		
CEC efficiency / max. efficiency	98 % / 98.6 %	98 % / 98.7 %
Protective devices		
DC reverse polarity protection	●	
AC short-circuit current capability	●	
Galvanic isolation	-	
All-pole-sensitive residual-current monitoring unit	●	
Arc-fault circuit interrupter (according to UL 1699B)	●	
Protection class	I	
Overvoltage category	IV	
General data		
Dimensions (W / H / D)	470 / 615 / 240 mm (18.4 / 24.1 / 9.5 inch)	
Dimensions of DC Disconnect (W / H / D)	187 / 297 / 190 mm (7.28 / 11.7 / 7.5 inch)	
Weight	35 kg / 78 lb	
Weight of DC Disconnect	3.5 kg / 8 lb	
Operating temperature range	-40 °C ... +60 °C / -40 °F ... +140 °F	
Noise emission (typical)	46 dB(A)	
Self-consumption (night)	0.15 W	
Topology	Transformerless H5	
Cooling concept	OptiCool	
Degree of protection	NEMA 3R	
Degree of protection of connection area	NEMA 3R	
Max. permissible value for relative humidity (non-condensing)	100 %	
Features		
DC connection	Screw terminal	
AC connection	Screw terminal	
Display	Text line	
Interface: RS485 / Bluetooth / WebConnect	○ / ○ / ○	
Warranty: 10 / 15 / 20 years	● / ○ / ○	
Certificates and approvals (more available on request)	UL1741, UL1998, IEEE1547, FCC Part 15 (Class A & B), CAN/CSA C22.2 107.1-1, UL 1699B	
● Standard features ○ Optional features - Not available		
NOTE: US inverters ship with gray lids Data at nominal conditions		
Type designation	SB 9000TLUS-12	



Accessories

	Sunny Boy Combiner Box SBCBT6-10		Bluetooth Piggy-Back BTPBINV-NR with External Antenna BTPB-EXTANT-NR
	Interface RS485 485USPB-NR		SMA Power Balancer Set PBL-SBUS-10-NR
	WebConnect Piggy-Back SWPB-US-10		

● Standard feature
 ○ Optional feature
 – Not available
 Data at nominal conditions

Sunny Boy 10000TL-US		Sunny Boy 11000TL-US
208 V	240 V	240 V
10500 W	10400 W	11500 W
600 V	600 V	600 V
300 V - 480 V / 345 V	345 V - 480 V / 379 V	345 V - 480 V / 379 V
300 V / 360 V	345 V / 360 V	345 V / 360 V
35 A	30.2 A	33.3 A
35 A	30.2 A	33.3 A
1	1	1
6	6	6
10000 W / 10000 VA		11000 W / 11000 VA
208 V / 183 V - 229 V	240 V / 211 V - 264 V	240 V / 211 V - 264 V
60 Hz / 59.3 Hz ... 60.5 Hz	60 Hz / 59.3 Hz ... 60.5 Hz	60 Hz / 59.3 Hz ... 60.5 Hz
48.1 A	41.7 A	45.8 A
	1	1
	1 / 2	1 / 2
98.0 % / 98.6 %	98 % / 98.7 %	98 % / 98.7 %
●	●	●
●	●	●
–	–	–
●	●	●
●	●	●
I	I	I
IV	IV	IV
470 / 615 / 240 mm (18.4 / 24.1 / 9.5 inch)		
187 / 297 / 190 mm (7.28 / 11.7 / 7.5 inch)		
35 kg / 78 lb		
3.5 kg / 8 lb		
-40 °C ... +60 °C / -40 °F ... +140 °F		
46 dB(A)	46 dB(A)	
0.15 W	0.15 W	
Transformerless H5	Transformerless H5	
OptiCool	OptiCool	
NEMA 3R	NEMA 3R	
NEMA 3R	NEMA 3R	
100 %	100 %	
Screw terminal	Screw terminal	
Screw terminal	Screw terminal	
Text line	Text line	
○ / ○ / ○	○ / ○ / ○	
● / ○ / ○	● / ○ / ○	
UL1741, UL1998, IEEE1547, FCC Part 15 (Class A & B), CAN/CSA C22.2 107.1-1, UL 1699B		
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