

# SUNNY TOWER-US



## UL Certified

- UL certified (UL 1741/IEEE-1547)
- CSA compliant (C22.2 No.107.1-0)

## Reliable

- 10-year standard warranty
- Sealed electronics enclosure and rugged stainless steel outdoor-rated structure
- Opticool™ temperature management system

## Simple

- Prewired at factory for three-phase utility interconnection
- Integrated load-break rated lockable AC/DC disconnect switch

## Flexible

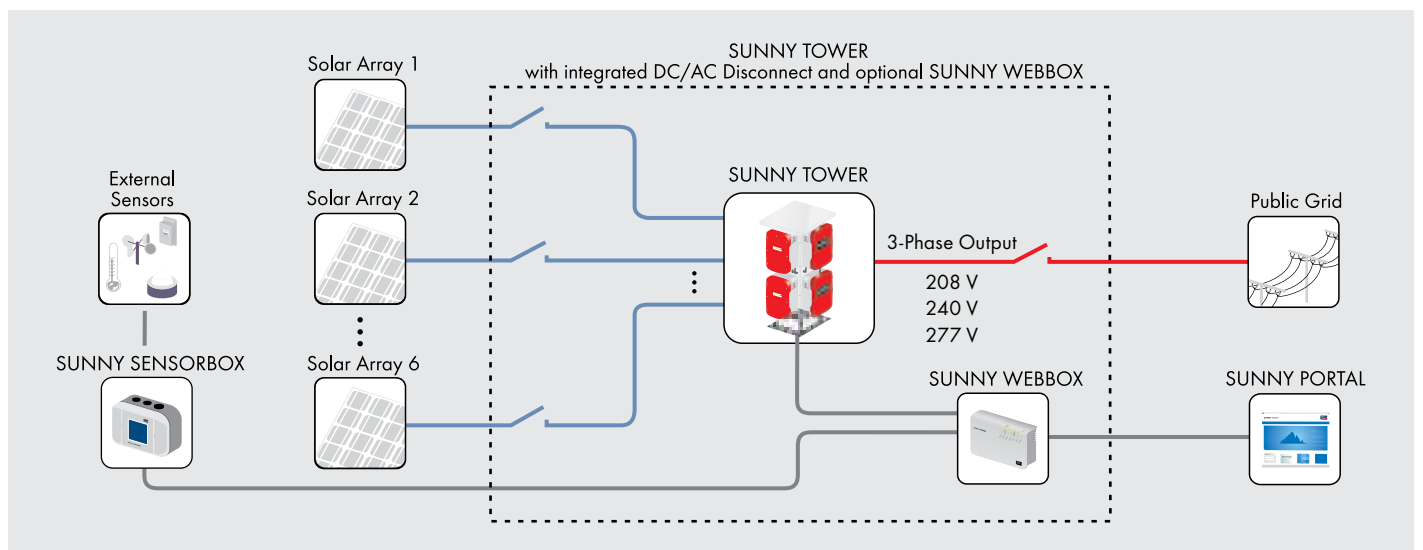
- Internet-ready with Sunny WebBox
- Integrated fused series string combiner
- Ideal for commercial applications

## SUNNY TOWER-US

The flexible solution for commercial PV systems

Designed with the installer in mind, SMA has combined ease of installation, a low cost per watt and high efficiency in the Sunny Tower-US. The UL and CSA compliant inverter system can be pre-configured in any combination between 30–48 kW. Its modular design eliminates the need for cost-prohibitive heavy machinery, as is required for large central inverters. It allows installers to apply their existing experience and tools in the residential market to attract commercial-grade projects, all while benefiting from the Sunny Boy's world-class efficiency and SMA's industry-best reliability.

Technical data	Sunny Tower for 6 Sunny Boy 5000-US	Sunny Tower for 6 Sunny Boy 6000-US	Sunny Tower for 6 Sunny Boy 7000-US	Sunny Tower for 6 Sunny Boy 8000-US
<b>Input (DC)</b>				
Recommended Maximum PV Power (Module STC)	437.5 kW	45.0 kW	52.5 kW	60 kW
DC Maximum Voltage	600 V	600 V	600 V	600 V
Peak Power Tracking Voltage	250 - 480 V	250 - 480 V	250 - 480 V	300 - 480 V
DC Maximum Input Current	126 A	150 A	180 A	180 A
DC Voltage Ripple	< 5%	< 5%	< 5%	< 5%
Number of Fused String Inputs	24 x 15 A (AC / DC disconnect)			
PV Start Voltage (Adjustable)	300 V	300 V	300 V	300 V
<b>Output (AC)</b>				
AC Nominal Power / Maximum Power	30.0 kW / 30.0 kW	36.0 kW / 36.0 kW	42.0 kW / 42.0 kW	48.0 kW / 48.0 kW
AC Maximum Output Current (per phase @ 208, 240, 277 V)	144 A, 126 A, 108 A	100 A, 87 A, 44 A	117 A, 101 A, 51 A	N/A, 116 A, 58 A
AC Nominal Voltage Range (3-Phase)	183 - 229 V @ 208 V Delta or WYE 244 - 305 V @ 277 V WYE			N/A 244 - 305 V @ 277 V WYE
AC Frequency: nominal / range	60 Hz / 59.3 - 60.5 Hz	60 Hz / 59.3 - 60.5 Hz	60 Hz / 59.3 - 60.5 Hz	60 Hz / 59.3 - 60.5 Hz
Power Factor (Nominal)	0.99	0.99	0.99	0.99
Phase conductors / connection phases	3 / 3 @ 208 V, 240 V, 277 V	3 / 3 @ 208 V, 240 V, 277 V	3 / 3 @ 208 V, 240 V, 277 V	3 / 3 @ 240 V, 277 V
<b>Efficiency</b>				
Peak Inverter Efficiency	96.8%	97.0%	97.1%	97.0%
CEC Weighted Efficiency	95.0% @ 208 V, 240 V 95.0% @ 277 V	95.5% @ 208 V, 240 V 96.0% @ 277 V	95.5% @ 208 V 96.0% @ 240 V, 277 V	96.0%
<b>Protection devices</b>				
DC reverse-polarity protection	●	●	●	●
AC short circuit protection	●	●	●	●
Galvanically isolated / all-pole sensitive monitoring unit	●/-	●/-	●/-	●/-
Protection class / overvoltage category	I / III	I / III	I / III	I / III
<b>General data</b>				
Dimensions: W / H / D in inches	43.3 / 70.5 / 39	43.3 / 70.5 / 39	43.3 / 70.5 / 39	43.3 / 70.5 / 39
Weight: Tower / 6 Inverters / Total Shipping	330 lbs / 846 lbs / 1388 lbs	330 lbs / 846 lbs / 1388 lbs	330 lbs / 846 lbs / 1388 lbs	330 lbs / 846 lbs / 1388 lbs
Ambient Temperature Range	-13 to 113 °F	-13 to 113 °F	-13 to 113 °F	-13 to 113 °F
Power Consumption: standby / nighttime	< 42 W / 0.6 W	< 42 W / 0.6 W	< 42 W / 0.6 W	< 42 W / 0.6 W
Topology	Low frequency transformer, true sinewave	Low frequency transformer, true sinewave	Low frequency transformer, true sinewave	Low frequency transformer, true sinewave
Cooling Concept	OptiCool™, forced active cooling			
Mounting Location: indoor / outdoor (NEMA 3R)	●/●	●/●	●/●	●/●
<b>Features</b>				
LCD Display	●	●	●	●
Communication: RS485 / wireless	○/○	○/○	○/○	○/○
Warranty: 10-year	●	●	●	●
Compliance: IEEE-929, IEEE-1547, UL 1741, UL 1998, FCC Part 15 A & B	●	●	●	●
● Standard ○ Optional				
Data at nominal conditions				
NOTE: US inverters ship with gray lids.				
Type Designation	ST30	ST36	ST42	ST48



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