



SUNNY TOWER-US

ST36 / ST42 / ST48



UL Certified

- UL certified (UL 1741/IEEE-1547)

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

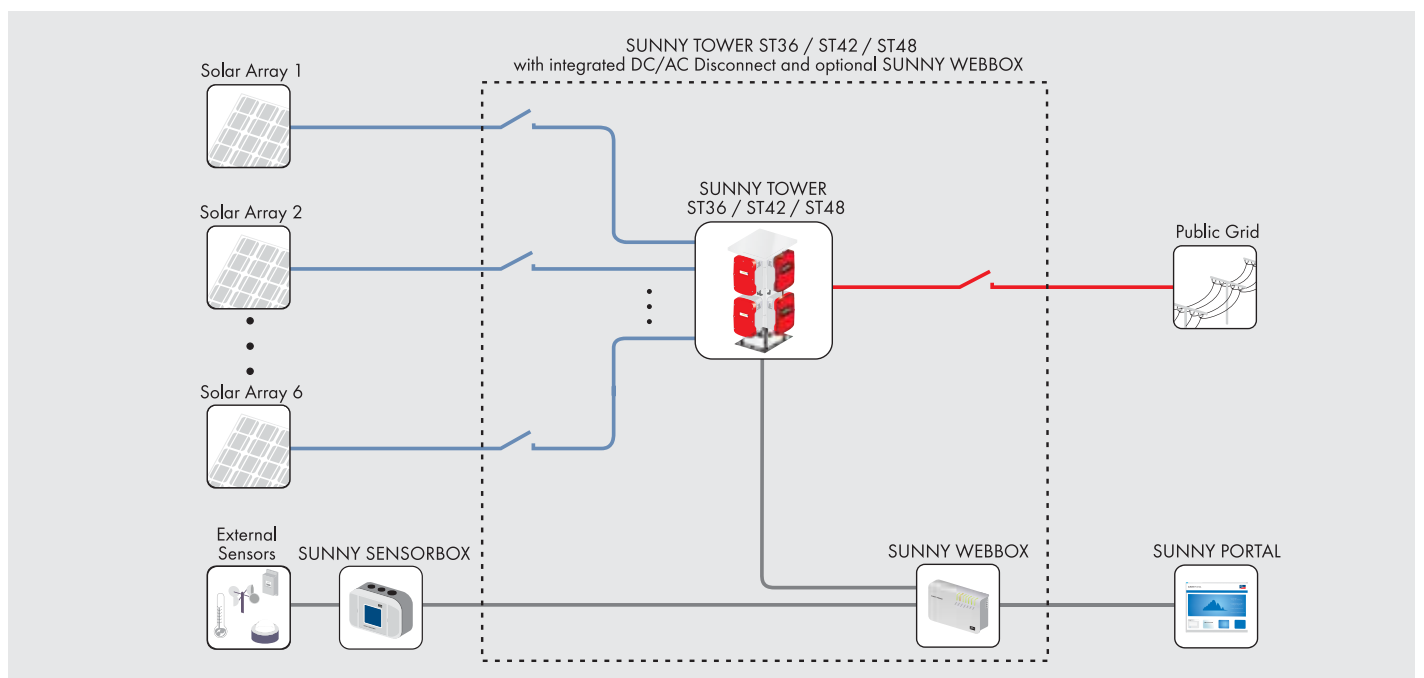
- Internet-ready with Sunny WebBox
- Integrated fused series string combiner
- Ideal for commercial applications

SUNNY TOWER-US

The UL certified, 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-certified inverter system is pre-configured for a per-tower capacity of 36, 42 or 48 kW and 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 with 6 Sunny Boy 6000-US	Sunny Tower with 6 Sunny Boy 7000-US	Sunny Tower with 6 Sunny Boy 8000-US
Input (DC)			
Recommended maximum PV power (module STC)	45.0 kW	52.5 kW	60 kW
DC maximum voltage	600 V	600 V	600 V
Peak power tracking voltage	250 – 480 V	250 – 480 V	250 – 480 V
DC maximum input current	150 A	180 A	180 A
DC voltage ripple	< 5%	< 5%	< 5%
Number of fused string inputs	24 x 15 A (AC / DC disconnect)	24 x 15 A (AC / DC disconnect)	24 x 15 A (AC / DC disconnect)
PV start voltage (adjustable)	300 V	300 V	300 V
Output (AC)			
AC nominal power / maximum power	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)	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	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
Power factor (nominal)	0.99	0.99	0.99
Efficiency			
Peak inverter efficiency	97.0%	97.1%	96.3% @ 240 V 96.5% @ 277 V
CEC weighted efficiency	95.5% @ 208 V, 240 V 96.0% @ 277 V	95.5% @ 208 V 96.0% @ 240 V, 277 V	96.0%
General data			
Dimensions (W / H / D) in mm (in)	1100 / 1810 / 990 (43 / 71 / 39)	1100 / 1810 / 990 (43 / 71 / 39)	1100 / 1810 / 990 (43 / 71 / 39)
Weight	384 kg (846 lb)	384 kg (846 lb)	384 kg (846 lb)
Ambient temperature range	-13 to 113 °F	-13 to 113 °F	-13 to 113 °F
Internal consumption: standby / nighttime	< 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
Cooling concept	OptiCool, forced active cooling	OptiCool, forced active cooling	OptiCool, forced active cooling
Mounting location: indoor / outdoor (NEMA 3R)	●/●	●/●	●/●
LCD display	●	●	●
Lid color: aluminum / red / blue / yellow	●/○/○/○	●/○/○/○	●/○/○/○
Features			
Communication: RS485 / wireless	○/○	○/○	○/○
Warranty: 10 years	●	●	●
Compliance: IEEE-929, IEEE-1547, UL 1741, UL 1998, FCC Part 15 A & B	●	●	●
Data at nominal conditions			
● Standard features ○ Optional features			
Type designation	ST36	ST42	ST48



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