

## SUNNY BOY 5000US / 6000US / 7000US

- > UL 1741/IEEE-1547 compliant
- > 10 year standard warranty
- > Highest CEC efficiency in its class
- > Integrated load-break rated DC disconnect switch
- > Integrated fused series string combiner
- > Sealed electronics enclosure & Opticool™
- > Comprehensive SMA communications and data collection options
- > Ideal for residential or commercial applications
- > Sunny Tower compatible



# SUNNY BOY 5000US / 6000US / 7000US

The best in their class

Our US series inverters utilize our latest technology and are designed specifically to meet IEEE-1547 requirements. Sunny Boy 6000US and Sunny Boy 7000US are also compatible with the Sunny Tower. Increased efficiency means better performance and shorter payback periods. All three models are field-configurable for positive ground systems making them more versatile than ever. With over 750,000 fielded units, Sunny Boy is the benchmark for PV inverter performance and reliability throughout the world.

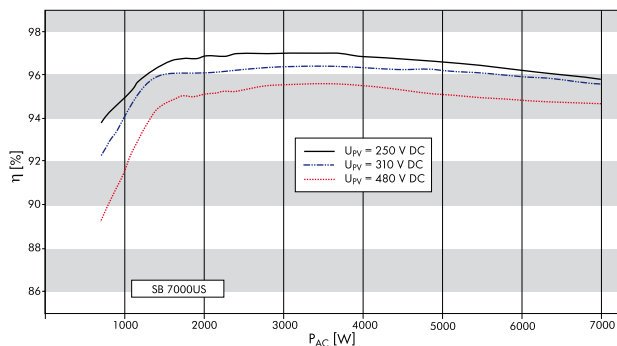


# Technical Data

## SUNNY BOY 5000US / 6000US / 7000US

	SB 5000US	SB 6000US	SB 7000US
Recommended Maximum PV Power (Module STC)	6250 W	7500 W	8750 W
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	21 A	25 A	30 A
DC Voltage Ripple	< 5%	< 5%	< 5%
Number of Fused String Inputs	3 (inverter), 4 x 20 A (DC disconnect)	3 (inverter), 4 x 20 A (DC disconnect)	3 (inverter), 4 x 20 A (DC disconnect)
PV Start Voltage	300 V	300 V	300 V
AC Nominal Power	5000 W	6000 W	7000 W
AC Maximum Output Power	5000 W	6000 W	7000 W
AC Maximum Output Current (@ 208, 240, 277 V)	24 A, 21 A, 18 A	29 A, 25 A, 22 A	34 A, 29 A, 25 A
AC Nominal Voltage Range	183 - 229 V @ 208 V 211 - 264 V @ 240 V 244 - 305 V @ 277 V	183 - 229 V @ 208 V 211 - 264 V @ 240 V 244 - 305 V @ 277 V	183 - 229 V @ 208 V 211 - 264 V @ 240 V 244 - 305 V @ 277 V
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
Peak Inverter Efficiency	96.8%	97.0%	97.1%
CEC Weighted Efficiency	95.5%	95.5% @ 208 V 95.5% @ 240 V 96.0% @ 277 V	95.5% @ 208 V 96.0% @ 240 V 96.0% @ 277 V
Dimensions: W x H x D in inches	18.4 x 24.1 x 9.5	18.4 x 24.1 x 9.5	18.4 x 24.1 x 9.5
Weight / Shipping Weight	141 lbs / 148 lbs	141 lbs / 148 lbs	141 lbs / 148 lbs
Ambient Temperature Range	-13 to 113 °F	-13 to 113 °F	-13 to 113 °F
Power Consumption: standby / nighttime	< 7 W / 0.1 W	< 7 W / 0.1 W	< 7 W / 0.1 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	●/○/○/○	●/○/○/○	●/○/○/○
Communication: RS485 / wireless	○/○	○/○	○/○
Warranty: 10-year	●	●	●
Compliance: IEEE-929, IEEE-1547, UL 1741, UL 1998, FCC Part 15 A & B	●	●	●

### Efficiency Curves



www.SMA-America.com  
 Phone 916 625 0870  
 Toll Free 888 4 SMA USA

SMA America, Inc.