



WIND POWER INVERTERS





Technical Data

- Certified to the new UL 1741/ IEEE 1547
- 5-year limited warranty standard
- CEC efficiency of up to 96 %
- Sealed electronics enclosure and OptiCool
- Comprehensive SMA communications and data collection options
- Rugged cast aluminum outdoor rated enclosure

	Windy Boy 5000US	Windy Boy 6000US	Windy Boy 7000US
Input Data (DC)			
Max. Recommended DC Input Power	5300 W	6350 W	7450 W
Max. DC Voltage	600 V	600 V	600 V
Peak Power Tracking Voltage	250 - 600 V	250 - 600 V	250 - 600 V
DC Max. Input Current	21 A	25 A	30 A
DC Voltage Ripple	< 10%	< 10%	< 10%
Number of Fused String Inputs	4	4	4
DC Start Voltage (adjustable)	300 V	300 V	300 V
Output Data (AC)			
AC Nominal Power	5000 W	6000 W	7000 W
AC Maximum Output Power	5100 W	6100 W	7100 W
AC Maximum Output Current (@ 208, 240, 277 V)	33.3 A, 28.5 A, 25.0 A	33.3 A, 28.5 A, 25.0 A	34.0 A, 34.0 A, 32.0 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 / Range	60 Hz / 59.3 - 60.5 Hz	60 Hz / 59.3 - 60.5 Hz	60 Hz / 59.3 - 60.5 Hz
Power Factor	1	1	1
Efficiency			
Peak Inverter Efficiency	96.8 %	97 %	97.1 %
CEC Weighted Efficiency (208/240/277 V)	95.5 %/96.0 %/96.0 %	95.5 %/96.0 %/96.0 %	95.5 %/96.0 %/96.0 %
Mechanical Data			
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)	< 7 W (0.1 W)	< 7 W (0.1 W)	< 7 W (0.1 W)
Topology	PWM, true sine wave, current source	PWM, true sine wave, current source	PWM, true sine wave, current source
Cooling Concept	Convection, regulated fan cooling	Convection, regulated fan cooling	Convection, regulated fan cooling
Mounting Location In-/Outdoor (NEMA 3R)	●/●	●/●	●/●
Features			
LCD Display	●	●	●
Lid Color: red / aluminum	●/○	●/○	●/○
Communication: RS485 / Wireless	○/○	○/○	○/○
Warranty: 5-year / 10-year	●/○	●/○	●/○
Compliance: IEEE-929, IEEE-1547, UL 1741, UL 1998, FCC Part 15 A & B	●	●	●

Specifications for nominal conditions:

● Included

○ Optional

WINDY BOY 5000US / 6000US / 7000US

SMA's larger Windy Boy inverters combine the advanced technology present in our new US series of Sunny Boy inverters with special firmware that permits direct grid-tied operation with a broad range of wind turbines – without batteries. This greatly reduces the overall system cost because components such as the charge controller, batteries and associated switch gear can be eliminated. Increased total energy capture combined with a reduction of balance of system components greatly reduces the installation and operating costs of a grid-tied wind system. We recommend contacting

your local wind turbine supplier for information on compatible wind turbine models and system design considerations.

