



## WINDY BOY 5000US / 6000US / 7000US / 8000US



WB 8000US AVAILABLE IN 2010

- UL 1741/IEEE-1547 compliant
- 5-year limited standard warranty
- CEC efficiency of up to 96%

- Sealed electronics enclosure & OptiCool™
- Comprehensive SMA communications and data collection options

- Rugged cast aluminum outdoor rated enclosure



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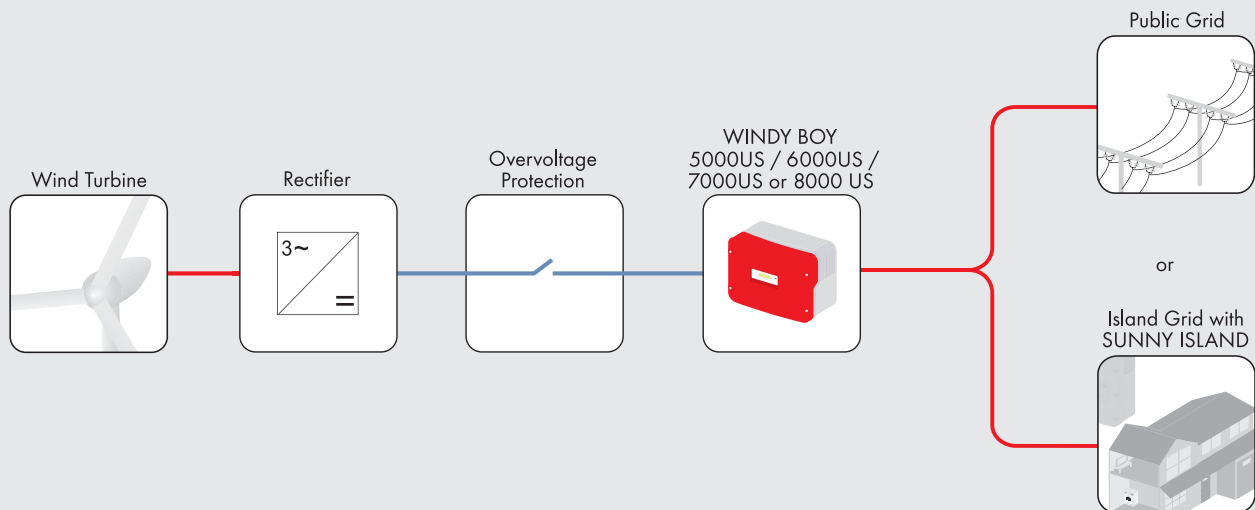
The customized solution for wind turbine systems

Windy Boy inverters combine the same proven technology present in all 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. Contact your local wind turbine supplier for information on compatible wind turbine models and system design considerations.

# Technical Data

	Windy Boy 5000US	Windy Boy 6000US	Windy Boy 7000US	Windy Boy 8000US
Maximum Recommended DC Input Power	5300 W	6350 W	7450 W	8000 W @ 240 V <sub>AC</sub> 8400 W @ 277 V <sub>AC</sub>
Maximum DC Voltage	600 V	600 V	600 V	600 V
Peak Power Tracking Voltage	250 – 550 V	250 – 550 V	250 – 550 V	300 – 550 V
DC Maximum Input Current	21 A	25 A	30 A	30 A
DC Voltage Ripple	< 10%	< 10%	< 10%	< 10%
Number of Fused String Inputs	4	4	4	4
DC Start Voltage (adjustable)	300 V	300 V	300 V	300 V
AC Nominal Power	5000 W	6000 W	7000 W	7680 W @ 240 V <sub>AC</sub> 8000 W @ 277 V <sub>AC</sub>
AC Maximum Output Power	5100 W	6100 W	7100 W	7680 W @ 240 V <sub>AC</sub> 8100 W @ 277 V <sub>AC</sub>
AC Maximum Output Current (@ 208, 240, 277 V)	27.9 A, 24.2 A, 20.9 A	33.3 A, 28.9 A, 25.0 A	34.0 A, 34.0 A, 32.0 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	N/A 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	60 Hz/59.3–60.5 Hz
Power Factor	1	1	1	1
Peak Inverter Efficiency	96.8%	97%	97.1%	96.5%
CEC Weighted Efficiency (208/240/277 V)	95.5% / 95.5% / 95.5%	95.5% / 96.0% / 96.0%	95.5% / 95.5% / 96.0%	N/A / 96.0% / 96.0%
Dimensions W / H / D in inches	18.4 / 24.1 / 9.5	18.4 / 24.1 / 9.5	18.4 / 24.1 / 9.5	18.4 / 24.1 / 9.5
Weight / Shipping Weight	141 lbs / 148 lbs	141 lbs / 148 lbs	141 lbs / 148 lbs	148 lbs / 152 lbs
Ambient Temperature Range	-13 °F to 113 °F	-13 °F to 113 °F	-13 °F to 113 °F	-13 °F to 113 °F
Power Consumption (standby)	< 7 W (0.1 W)	< 7 W (0.1 W)	< 7 W (0.1 W)	< 7 W (0.1 W)
Topology	Low frequency transformer, true sine wave	Low frequency transformer, true sine wave	Low frequency transformer, true sine wave	Low frequency transformer, true sine wave
Cooling Concept	OptiCool™, forced active cooling	OptiCool™, forced active cooling	OptiCool™, forced active cooling	OptiCool™, forced active cooling
Mounting Location In-/Outdoor (NEMA 3R)	●/●	●/●	●/●	●/●
LCD Display	●	●	●	●
Communication: RS485 / Wireless	○/○	○/○	○/○	○/○
Warranty: 5-year / 10-year	●/○	●/○	●/○	●/○
Compliance: IEEE-929, IEEE-1547, UL 1741, UL 1998, FCC Part 15 A & B	●	●	●	●
● Standard equipment ○ Optional				
Data at nominal conditions				

NOTE: US inverters ship with gray lids.



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