



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



- UL 1741/IEEE-1547 compliant
- 10-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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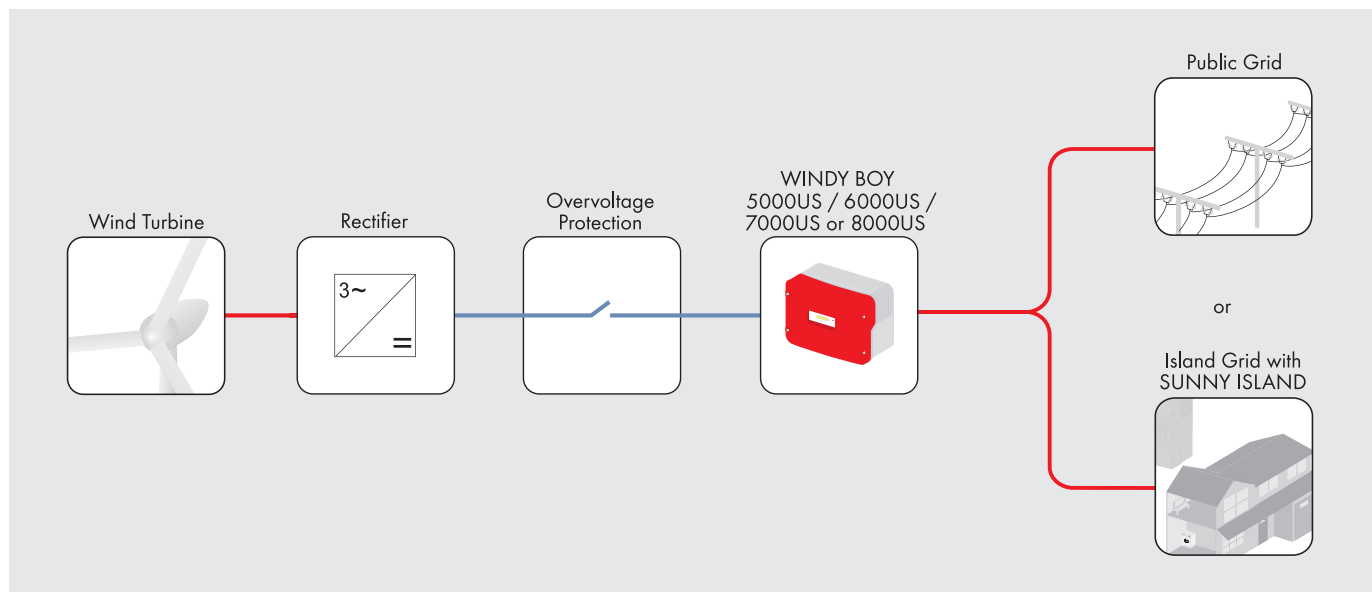
The customized solution for wind turbine systems

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 _{AC} 8400 W @ 277 V _{AC}
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	365 V
AC Nominal Power	5000 W	6000 W	7000 W	7680 W @ 240 V _{AC} 8000 W @ 277 V _{AC}
AC Maximum Output Power	5100 W	6100 W	7100 W	7680 W @ 240 V _{AC} 8100 W @ 277 V _{AC}
AC Maximum Output Current (@ 208, 240, 277 V)	27.9 A, 24.1 A, 20.9 A	33.3 A, 28.9 A, 25.0 A	34.0 A, 34.0 A, 32.0 A	N/A, 32.0 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 in Standby	0.1 W	0.1 W	0.1 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: 10-year / 15-year / 20-year	●/○/○	●/○/○	●/○/○	●/○/○
Compliance: IEEE-929, IEEE-1547, UL 1741, UL 1998, FCC Part 15 A & B	●	●	●	●
NOTE: US inverters ship with gray lids.				
● Standard equipment ○ Optional				
Data at nominal conditions				

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