

Ratings of Small and Medium Wind Turbine Models in Compliance with DWEA's Recommended Certification Criteria – as of May 2014

Demonstrating compliance with criteria recommended by the Distributed Wind Energy Association (DWEA), 13 small wind turbine models are fully certified to the AWEA Standard with power performance ratings, sound level ratings and design and duration test compliance, and 2 medium wind turbine models with nameplate ratings up through 100 kW are listed by the Interstate Turbine Advisory Council with published power performance and acoustics reports by accredited U.S. certification organizations, as shown below. In addition, 8 other small and medium wind turbines carry limited or conditional certifications in the U.S., and more than 20 others have conducted testing or are pending certification applications.

Applicant	Turbine	Annual Energy ¹ @ 5 m/s	Certified Power Rating ² @ 11 m/s	Certification Status
Bergey Windpower	Excel 6	9,920 kWh	5.5 kW	Fully Certified by SWCC
Bergey Windpower	Excel 10	13,800 kWh	8.9 kW	Fully Certified by SWCC
Endurance Wind Power	Endurance S-343	8,910 kWh	5.4 kW	Fully Certified by SWCC
Endurance Wind Power	Endurance E-3120	117,000 kWh	56.8 kW	Power Performance and Acoustics Certified by SWCC
Evance Wind Turbines	Evance R9000	9,160 kWh	4.7 kW	Fully Certified by SWCC
Eveready Diversified Products	Kestrel e400nb	3,930 kWh	2.5 kW	Fully Certified by SWCC
Kingspan Environmental	KW6	8,950 kWh	5.2 kW	Fully Certified by SWCC
Northern Power Systems	NPS 100-21	152,000 kWh	79 kW	Power Performance and Acoustics Certified by DNV
Osiris Technologies	Osiris 10	23,700 kWh	9.8 kW	Fully Certified by Intertek
Sonkyo Energy	Windspot 3.5	4,820 kWh	3.2 kW	Fully Certified by Intertek
Sumec Hardware & Tools Co., LTD	PWB01-30-48	2,920 kWh	1.2 kW	Fully Certified by Intertek
Sumec Hardware & Tools Co., LTD	PWA03-44-250	6,400 kWh	3.2 kW	Fully Certified by Intertek
Sumec Hardware & Tools Co., LTD	PWB02-40-48	4,660 kWh	1.7 kW	Fully Certified by Intertek
Sumec Hardware & Tools Co., LTD	PWA05-50-280	9,240 kWh	5.0 kW	Fully Certified by Intertek
Xzeres Wind Corporation	Skystream 3.7	3,420 kWh	2.1 kW	Fully Certified by SWCC

¹ Estimated annual energy production assuming an annual average wind speed of 5 m/s (11.2 mph), a Rayleigh wind speed distribution, sea-level air density, and 100% availability. Actual production will vary depending on site conditions.

² Power output at 11 m/s (24.6 mph) at standard sea-level conditions. Manufacturers may describe or name their wind turbine models using a nominal power which may reference output at a different wind speed (e.g. 50 kW E-3120).

For full certification listings and other details see: www.cleanenergystates.org/projects/ITAC/itac-unified-list-of-wind-turbines, www.smallwindcertification.org/certified-turbines, and www.intertek.com/wind/small/directory.