

TECHNICAL SPECIFICATION DATA

Counter-rotating small wind turbines

Nominal Power		500 watt		1kW		3kW		6kW	10kW	50kW
		Horizontal	Vertical	Horizontal	Vertical	Horizontal	Vertical	Horizontal	Horizontal	Horizontal
Model		SubH5	SubV5	KKH1	KKV1	KKH3	KKV3	KKH5	KKH10	KKH50
Generator	Type	Permanent Magnet Generator								
	Rated Power	700 watt	700 watt	1.2kW	1.2kW	3.6kW	3.6kW	6.6kW	11kW	55kW
	Rotational Speed Range - front or top blade set	0-300 rpm	0-200 rpm	0-250 rpm	0-180 rpm	0-200 rpm	0-160 rpm	0-200 rpm	0-200 rpm	0-150 rpm
	Rotational Speed Range - back or bottom blade set	0-300 rpm	0-200 rpm	0-250 rpm	0-180 rpm	0-200 rpm	0-160 rpm	0-200 rpm	0-200 rpm	0-150 rpm
	Net Rotational Speed Range	0-600 rpm	0-400 rpm	0-500 rpm	0-360 rpm	0-400 rpm	0-320 rpm	0-400 rpm	0-400 rpm	0-300 rpm
	Voltage	12-24	12-24	100-150	100-150	200-300	200-300	400-500	400-500	400-600
Blade	Blade sets	2								
	Blade Number (front/back or top/bottom)	2/2								
	Diameter (front/back or top/bottom) - approx.	1.5 m / 2 m	2.0 m / 2.0 m	2.3 m / 3 m	2.5 m / 2.5 m	4.0 m / 4.8 m	5.0 m / 5.0 m	6.0 m / 7.2 m	8.0 m / 9.6 m	15.0 m / 18.0 m
	Height	N/A	2.0 m	N/A	4.0 m	N/A	5.6 m	N/A	N/A	N/A
	Hub material	Carbon Steel								
	Blade Material	Fiber Glass								
	Swept Area	1.8 m ² /3.1 m ²	2.0 m ² /2.0 m ²	4.2 m ² /7.1 m ²	5 m ² /5 m ²	12.6 m ² /18.1. m ²	14.0 m ² /14.0 m ²	28.3 m ² /40.7 m ²	50.3 m ² /72.4 m ²	176.7 m ² /254.5 m ²
Tower	Type	Monopole / Hydraulic Monopole								
	Height (optional)	Various depending on location & Mounting Type								
	Material	Metal with UV coating								
Operating Conditions	Cut-in Wind Speed	2.5 m/s	2.5 m/s	2.5 m/s	2.5 m/s	2.5 m/s	2.5 m/s	2.5 m/s	2.5 m/s	2.5 m/s
	Rated Wind Speed	8 m/s	9 m/s	8 m/s	9 m/s	8 m/s	9 m/s	8 m/s	8.5 m/s	8.5 m/s
	Furling Wind Speed	15 m/s	15 m/s	15 m/s	15 m/s	15 m/s	15 m/s	15 m/s	15 m/s	Electronic yawing
	Survival Wind Speed	55 m/s								
Clutch/Brake	Clutch	No (Direct Drive)								
	Electric Brake (Dump Load)	Yes								
	Extreme Wind Control	Natural Furling plus pitch control								Electronic pitch/ yawing control
Inverter	Type	Grid-Tie Inverter (UL Certified)								
	Rated Power	750 Watt	750 Watt	2.0 kW	2.0 kW	4.0 kW	4.0 kW	6.0 kW	12.0 kW	60.0 kW
	Operating Range/Utility Voltage & Frequency	220 V AC, 1 Phase / 50 Hz or 60 Hz (500 Watt & 1kW turbine has a battery charging option)							380 V AC, 3 Phase / 50 or 60 Hz	
Total Weight (Without Tower) - Approx.		45kg	60kg	48kg	70kg	85kg	136kg	110kg	140kg	920kg