



### Urban Green Energy 10 kW Vertical Axis Wind Turbine Specifications

#### **Physical:**

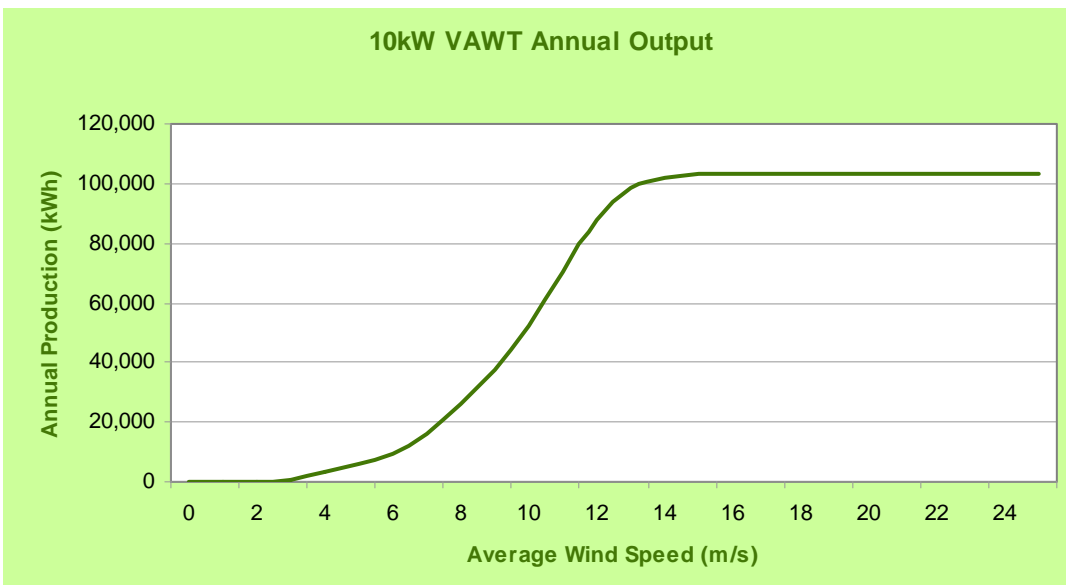
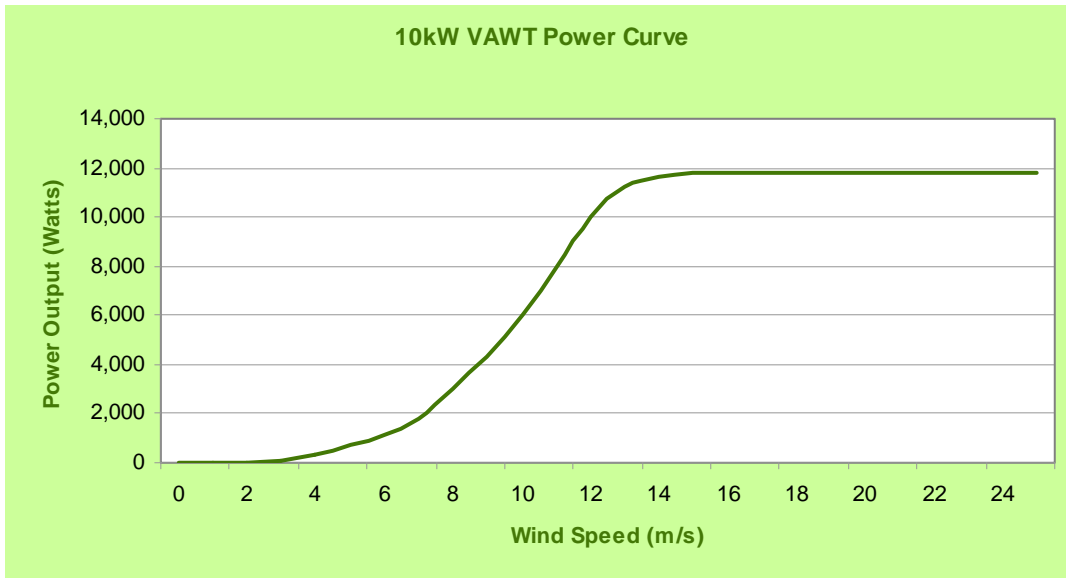
Mill dimensions	6.0 m x 6.2 m (236" x 244")
Tower height (standard)	11 m (36')
Gross weight (No tower)	1,700 kg (3,740 lbs)
Gross weight (With tower)	3,000 kg (6,600 lbs)

#### **Performance Parameters:**

Cut-in-wind speed	4 m/s (8.9 mph)
Cut-out-wind speed	25 m/s (56 mph)
Rated wind speed	12 m/s (27 mph)
Max (survival) wind speed	55 m/s (123 mph)
Noise level within 3 meters	
@ < 7 m/s	< 27 DB
@ 7 – 10 m/s	< 32 DB
@ 10 – 13 m/s	< 37 DB

#### **Certifications:**

Wind Turbine System	CE Certified
In-Grid Inverter	Ordered to match local utility requirements



**Generator:**

Type	Permanent magnet DC generator
Rated temperature	-40°C to 115°C
Drive System	Direct Drive

**System information:**

System output	110 VDC (off-grid), 280-580 VDC (grid-tie)
Grid tie available?	Yes
Braking	Mechanical (failsafe)

Off-grid DC controller	
Model	PK10
Power Rating (kW)	10
Voltage (VDC)	110
Quantity (PC)	9
Battery (Ah)	200

Grid-tie DC controller	
Model	PK10
Power Rating (kW)	10
Voltage Range (VDC)	280-580

Off-grid Inverter Data		
Model		PK10
Input (DC)	Capacity (KVA)	10
	Voltage	110
Output	Rated Voltage (A)	380/190
	Phases	3
	Rating frequency (Hz)	50/60
	Over load	150% 10 second
	Voltage precision (V AC )	± 3%
	Frequency precision	± 4%
	(THD)	≤ 3 %
	Dynamic answer (0~100%)	5%
	Power factor (PF)	0.8
	Inverter efficiency	92%
	Peak value coefficient (CF)	3:1
Use Circumstance	Insulated intension (VAC) (input & output)	1500 1 minute
	Noise ( dB @1 meter)	≤ 45
	Using temperature ( °C )	-25~+55
	Use altitude (m)	≤ 6000
Battery	Quantity(PC)	9
	Capacity(AH)	200



**Note 1:** Urban Green Energy is constantly working to improve its products; therefore, product specifications are subject to change without notice.

**Note 2:** Power curves show typical power available at the controller based on a combination of measured and calculated data. Annual Power Output is based on estimated power produced based on a simplified scenario.

**Note 3:** For design options to accommodate severe environmental conditions please contact Urban Green Energy.