

WIND FOR SCHOOLS: LOW-COST TURBINE OPTIONS

SMALL WIND TURBINE OPTIONS

Since not every school has the funds to support the Southwest Windpower Skystream turbine, the Wind for Schools team has compiled a list of more affordable turbines. We think every school should have the opportunity to install a small wind turbine on their campus to provide students and the community with the ability to learn about wind energy in a more hands-on manner. We hope that these options make participating in the Wind for Schools program attainable for more schools in the state of Virginia, as well as reenergize those schools that have gotten stuck in the funding phase of the Host School process.

LOW COST TURBINE OPTIONS AT A GLANCE

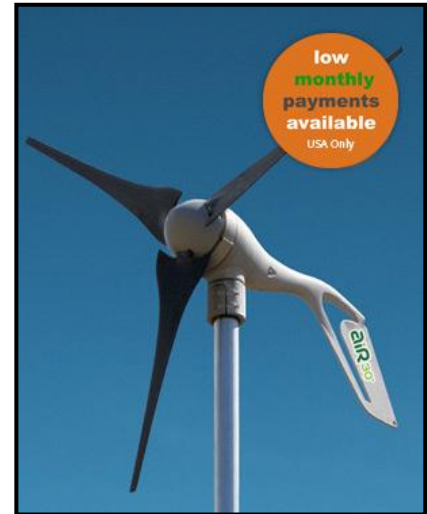
Turbine	AIR 40	AIR 30	Whisper 100	Excel 1 (XL 1)	SkyStream 3.7
List Price*	\$627	\$627	\$2,230	\$4,136	\$6,986
Monthly Energy Potential	~ 40 kWh	~ 30 kWh	~100 kWh	~120 kWh	~400 kWh
Rotor Diameter	46 in (1.17 m)	46 in (1.17 m)	7 ft (2.1 m)	8.2 ft (2.5 m)	12 ft (3.72 m)
Startup Wind Speed	7 mph (3.13 m/s)	8 mph (3.58 m/s)	7.5 mph (3.4 m/s)	6.7 mph (3 m/s)	6.7 mph (3 m/s)
Tower Heights Available	27', 29', 45' or roof mount	27', 29', 45' or roof mount	24', 30', 50', 65', 80'	60', 80', 100'	33', 45', 55, 70'
Data Logging Capabilities	After market data logger	After market data logger	After market data logger	After market data logger	Power, voltage, turbine speed, wind speed, energy output

**30% educational discount included. All pricing is approximate and subject to change*

AIR 30 SPECIFICATIONS

* AIR 30 has a five year limited warranty, 30% educational discount included

Turbine	AIR 30
List Price	~ \$627
Energy Potential	Approx. 30 kWh a month at 13.4 mph (6.0 m/s)
Swept Area	11.5 ft ² (1.07 m ²)
Rotor Diameter	46 in (1.17 m)
Startup Wind Speed	8 mph (3.58 m/s)
Survival Wind Speed	110 mph (49.2 m/s)

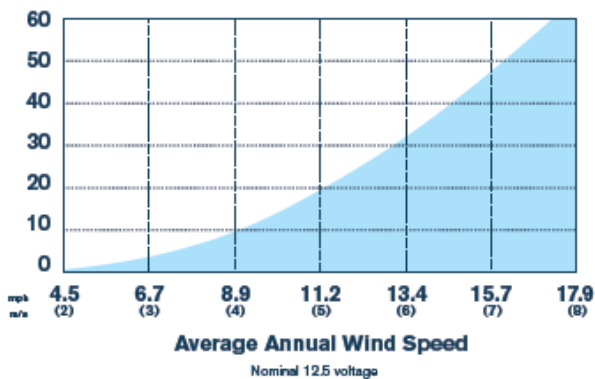


AIR Towers

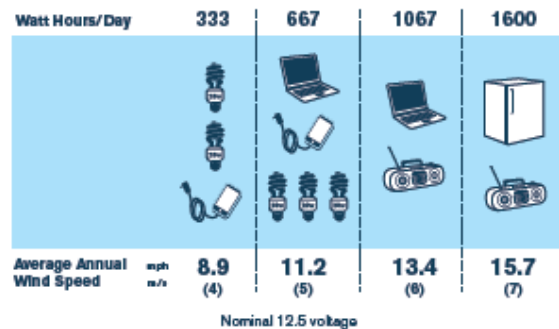
*30% educational discount included

Tower	Price	Notes
27' AIR Guyed Tower Kit	\$161	Cost of anchors and pipe not included
45' AIR Guyed Tower Kit	\$284	Cost of anchors and pipe not included
29' EZ Tower Kit	\$543	
Roof Mount Kit (w/ seal)	\$105	Roof Seal Kit - \$56
Roof Mount Kit (w/o seal)	\$91	

MONTHLY ENERGY (KWH)¹



POWER ALL OF THIS WITH AIR 30¹



AIR 40 SPECIFICATIONS

* AIR 40 has a five year limited warranty, 30% educational discount included

Turbine	AIR 40
List Price	~ \$627
Energy Potential	Approx. 40 kWh a month at 13.4 mph (6.0 m/s)
Swept Area	11.5 ft ² (1.07 m ²)
Rotor Diameter	46 in (1.17 m)
Startup Wind Speed	7 mph (3.13 m/s)
Survival Wind Speed	110 mph (49.2 m/s)

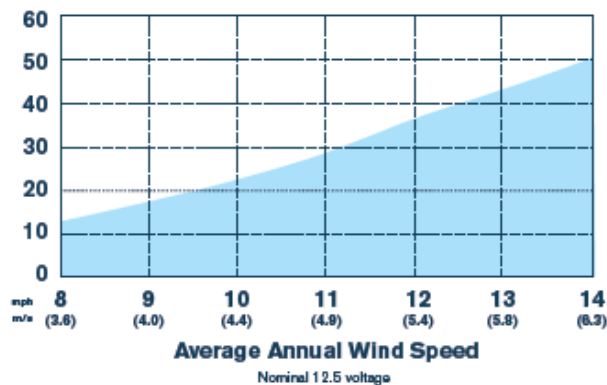


AIR Towers

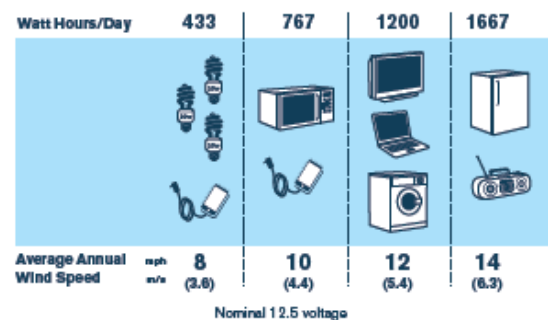
*30% educational discount included

Tower	Price	Notes
27' AIR Guyed Tower Kit	\$161	Cost of anchors and pipe not included
45' AIR Guyed Tower Kit	\$248	Cost of anchors and pipe not included
29' EZ Tower Kit	\$543	
Roof Mount Kit (w/ seal)	\$105	Roof Seal Kit - \$56
Roof Mount Kit (w/o seal)	\$91	

MONTHLY ENERGY (KWH)¹



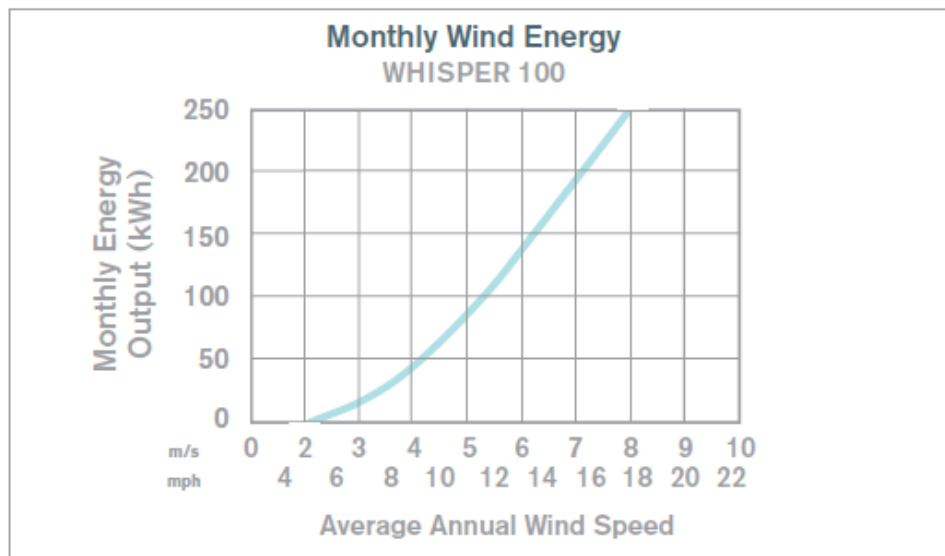
POWER ALL OF THIS WITH AIR 40¹



WHISPER 100	
<i>* Whisper turbines have a 5 year warranty, 30% educational discount included</i>	
List Price	~ \$1,955
Energy Potential	Approx. 100 kWh/month at 12 mph (5.4 m/s)
Rotor Diameter	7 ft (2.1 m)



Whisper 100 Towers	
<i>Cost of anchors and pipes not included</i>	
<i>30% educational discount included</i>	
Tower	Price
24' Whisper Guyed Tower Kit	\$343
30' Whisper Guyed Tower Kit	\$584
50' Whisper Guyed Tower Kit	\$833
65' Whisper Guyed Tower Kit	\$969
80' Whisper Guyed Tower Kit	\$1,357



BERGEY XL1	
<i>*10% educational discount included</i>	
List Price	\$4,136
Energy Potential	1000 Watts at 24.6 mph (11 m/s)
Rotor Diameter	8.2 ft (2.5 m)
Startup Wind Speed	6.7 mph (3 m/s)



Tower Options	
<i>*10% educational discount included</i>	
60ft (18m)	\$1,949
80ft (24m)	\$2,394
100ft (30m)	\$2,817

Bergey XL.1 Power Curve
adjusted to Std Cond (1 min avg)

