

# WINDPITCH EDUCATION KIT

FCJJ-29

- Mini Wind Turbine (wind power generator)
- Blade pitch, blade profile and number of blades can be evaluated
- LED Voltmeter/Music Maker Module for output power demonstration
- Special 3 Phase Alternator for high output power
- Complete educational curriculum on wind energy

Unique New Design!  
Adjustable Blade Pitch 0-55°

Kit for learning about Wind Power Technology



**NEW!**

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# WINDPITCH EDUCATION KIT

## WINDPITCH EDUCATION KIT FEATURES:

FCJJ-29

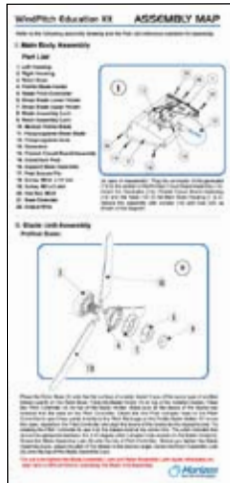
- Mini wind turbine (wind power generator)
- Kit for learning about wind power technology
- Blade pitch, blade profile and no. of blades can be evaluated
- Profile blade type:- BP-28 (3 Pcs) BP-44 (3 Pcs) BP-63 (3 Pcs)
- Sheet blade type:- BS-31 (3 Pc)
- Blade length, area, shape, and number of blades can be evaluated
- Vane aligns the turbine automatically to the direction of wind
- Special 3 phase alternator for higher output power
- LED Voltmeter/Music Maker Module for output power demonstration
- Complete educational curriculum on wind energy



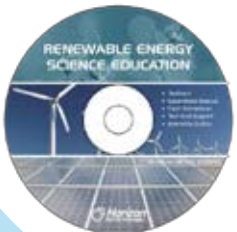
# What is included in the WindPitch Education Kit:



LED Voltmeter/  
Music Maker Module



Assembly Guide



Wind Energy Curriculum CD



Aluminium Post



Screw, M3 x 2 mm

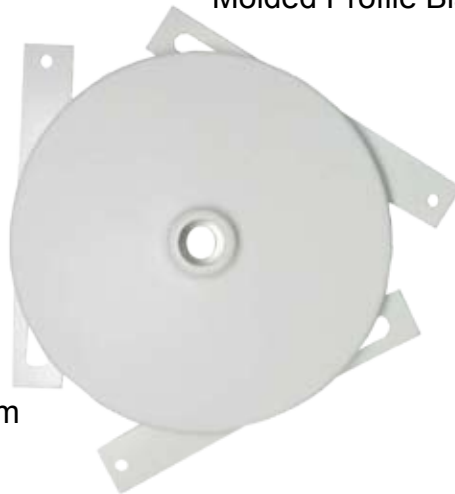


Post Secure Pin



Custom-28 Profile, BP-28    NACA 44 Profile, BP-44    NACA 63 Profile, BP-63

Molded Profile Blade (9 pcs)



Support Base Assembly & Base Extender



Polypropylene Sheet Blade  
(3 pcs)



Turbine Body with 3 Phase Alternator



Rotor Assembly Lock



Blade Assembly Lock



Sheet Blade Upper Holder



Sheet Blade Lower Holder



Profile Blade Holder



Blade Pitch Controller



Rotor Base

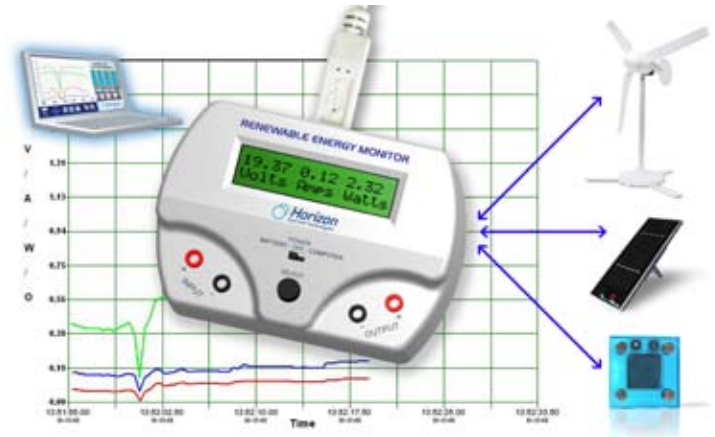
# WINDPITCH EDUCATION KIT

**WindPitch** is a miniature real-working wind turbine (wind power generator) designed for students to evaluate the pitch (setting angle) of the profiled blades. Up to 12 profiled blades can be installed for evaluation. Learn how the blade pitch and number of blades affect the power output of the wind turbine to maximize the output power. Experimentation also teaches about stalling or reduction of the wind turbine's rotational speed to protect itself under strong wind conditions.

**WindPitch** includes 3 different types of profiled blades and 1 type of Polypropylene sheet blades in a complete package that allows many blade parameters to be evaluated. The special 3 Phase alternator used in the WindPitch is similar to the one used in real commercial wind turbine. WindPitch comes with an LED Voltmeter/ Music Maker Module to demonstrate the power created from the wind energy in the form of musical sounds and illuminated LED lights. Contained inside is a complete curriculum on wind energy with easy to follow experiment manual, assembly guide, and background history on the technology and wind power generators.



**NOW AVAILABLE !**



**Renewable Energy Monitor FCJJ-24**

## Take your WindPitch experimentation to the next level!

Combine with Horizon's Renewable Energy Monitor to provide an immediate, graphical way for measuring voltage, current, power, resistance, joules, and RPM speed. Simply attach the WindPitch and load to the Renewable Energy Monitor's terminals and read the measurements directly- with no formulas to calculate!

Experiments that can be done with this kit include:

- Using Different Blade Shapes to Create Power
- How Many Blades Are Best? 1, 2, 3, 4...
- Adjusting Blade Pitch for Best Performance
- How Much Power Can Be Extracted from the Wind
- Using Wind Power to Generate Hydrogen
- Measure Wind Turbine Performance Using RPM
- Build a Wind Farm or Complementary Energy System with Solar Panel
- Maximum Power Point Tracking

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