# Wind Energy Science Kit



HNFCJJ-39



### **Product Description**

With the Wind Energy Science Kit you can build a miniature power generation system that converts wind into electrical energy. Experiment with the pitch (angle setting) of turbine blades and find out the optimum number of blades for generating electricity. Nine blades, with three types of profiled blade based on NASA aeronautics and one type of poly-propylene sheet blade, provide the opportunity to find the perfect balance of wind resistance, weight and angle.



- ✓ Uniquely designed blade profile based on NASA aeronautics
- ✓ Most realistic wind turbine experimentation available on the market
- √ Complete wind energy curriculum covering vertical and horizontal axis turbines
- √ Blade angle adjustable from 0° to 55 degrees (3 positions)

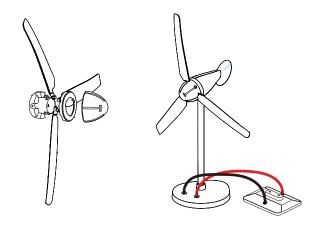
### Language Pack

✓ CD Experiment Manual:



- ✓ Assembly Guide:

# Experiments & Activities



- √ Wind Energy Experiments
- 1. How Many BladesAre Best 1, 2, 3 ... More?
- 2. Using Three Different Curved Blade Shapes
- 3. Using Blades You Make Yourself
- 4. Turbine Efficiencies
- Measuring RPM
- 6. Tuning For Maximum Power
- 7. How Blade Angle or Pitch Affects Output Power



## Wind Energy Science Kit





#### Kit Content

- √ Mini wind turbine (wind power generator)
- ✓ Kit for learning about wind power energy
- ✓ Blade pitch, blade profile and number of blades can be evaluated
- √ Vane aligns the turbine automatically to the direction of the wind
- ✓ Special 3 phase alternator for higher output power
- ✓ LED for output power demonstration
- ✓ Complete educational curriculum on wind energy

#### Certification

ROhS,EN71:PART1;PART2;PART3,EN62115, PHTH-EU, ASTMF963, CPSIA-LEAD, CPSIA-PHTHALATES, REACH,EMC, CA.

## **Packing Information**

Case Pack Quantity (units):	1		
Master Pack Quantity (units):	9		
Packaging Type:	cardboard		
20´ Container (units):	7135		
40´Container (units):	14550		
Unit Box Length (cm/in):	31	1	12.20
Unit Box Width (cm/in):	16	1	6.1
Unit Box Height (cm/in):	6	1	2.4
Unit Volume (Litres/Cubic Meters):	11.3	1	0.011
Unit Box Weight (kg/lbs):	0.74	1	1.6
Case Pack Length (cm/in):	45	1	17.7
Case Pack Width (cm/in):	32	1	12.6
Case PackHeight (cm/in):	23	1	9.1
Case Pack Volume Litres/Cubic Meters):	33.1	1	0.033
CasePackWeight (kg/lbs):	6.8	/	15.0

<sup>\*</sup>The cartons' size may vary between ±1-2 cm.

## **LogisticsInformation**

Item UPC-Code:	6942503404074
Item HS-Code:	-
Manufactured in:	Shanghai,China
Local Warehouse	Prague, Czech Republic
FOBHarbor:	Los Angeles, USA
First Ship Date:	available now
Minimum Order:	10



<sup>\*</sup>Allthe information in this data sheet is subject to change without notice. In case of doubt please contact the Crescendo Lab Supplies sales team.