Wind to Hydrogen Science Kit





Product Description

The Wind to Hydrogen Science Education Kit enables students to invent their own clean energy applications using a small electric motor powered by a fuel cell. Hydrogen is produced through water electrolysis by a reversible PEM fuel cell that is itself powered by a wind turbine with profiled blades based on NASA aeronautics. This hydrogen is then converted to electrical energy by the fuel cell and can be used to power a small fan.

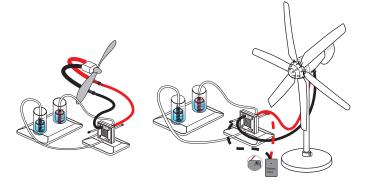


- ✓ Turn wind power into hydrogen energy
- \checkmark Build your own hydrogen fuel cell powered inventions
- ✓ Features revolutionary new Horizon wind turbine
- \checkmark Includes Horizon's complete curriculum on renewable energy on CD
- ✓ Demonstrate the principles of wind energy, hydrogen fuel cells, electrolysis and basic electronics

Language Pack

- ✓ CD Experiment Manual:
- ✓ Assembly Guide :
- 🗸 Technical Support Guide: 💥

Experiments & Activities



\checkmark Energy from Hydrogen Experiments

- 1. Electrolysis Mode Generating H₂ and O₂
- 2. Fuel Cell Mode Generating Electricity from H, and O,
- 3. Determining the Minimum Water Decomposition Voltage
- 4. Polarization States for Hydrogen Fuel Cells

✓ Wind Energy Experiments

- 1. How Many Blades Are Best 1, 2, 3 ... More?
- 2. Using Three Different Curved Blade Shapes
- 3. Using Blades You Make Yourself
- 4. Turbine Efficiencies
- 5. Measuring RPM
- 6. Tuning For Maximum Power
- 7. How Blade Angle or Pitch Affects Output Power
- 8. To Generate Hydrogen





Kit Content

✓ Wind Energy Science Kit (FCJJ-39)

- ✓ LED Module
- ✓ Reversible PEM fuel cell module
- ✔ Water/gas storage tanks module
- \checkmark Tubing, connecting leads, and accessories
- \checkmark Motor with fan propeller blade
- ✓ 9 profiled blades for turbine (3 sets of 3 types)
- ✓ Assembly guide
- ✔ Renewable Energy Curriculum CD

Certification

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

*All the information in this datasheet is subject to change without notice. In case of doubt please contact the Horizon sales team.

Packing Information

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1			
8			
cardboard			
2180			
4450			
31	/	12.20	
31.9	/	12.56	
9.7	/	3.82	
9.6	/	0.010	
1.28	/	2.82	
63	/	24.80	
44	/	17.32	
35	/	13.78	
97.0	/	0.097	
13	/	28.66	
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*The cartons' size may vary between ±1-2 cm.

Logistics Information

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Shanghai, China	
Prague, Czech Republic	
Los Angeles, USA	
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