

FCJJ-16



Product Description

The Solar Hydrogen Science Kit lets students invent their own clean energy applications using fuel cells and renewable hydrogen created using solar energy and water. The kit also comes with a small electric motor and propeller blade as the starting point for the motorized applications you can build using your futuristic solar energy storage device. The set comes with a complete curriculum on renewable energy with easy to follow experiment manual, assembly guide, flash animations, and background history on the technology.

Features

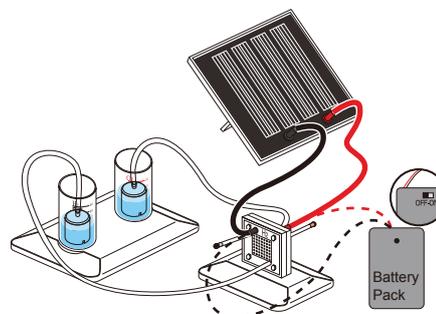


- ✓ Turn Solar Energy Into Hydrogen Energy!
- ✓ Includes Horizon's complete curriculum on renewable energy on CD-ROM
- ✓ Lessons on solar energy, hydrogen fuel cells, electrolysis, and basic electronics
- ✓ Build your own solar powered inventions using a fuel cell

Language Pack

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

Experiments & Activities



✓ Solar energy experiments

1. The effect of heat and cooling on solar panels
2. The effect of shade on solar panels
3. The effect of tilt angle on solar panels
4. Finding the solar panel's maximum power point

✓ Hydrogen energy experiments

1. Electrolysis mode: generating hydrogen and oxygen from water
2. Fuel cell mode: generating electricity from hydrogen and oxygen
3. Determining the minimum voltage for water decomposition
4. Polarization states for hydrogen fuel cells



Kit Content

- ✓ Reversible PEM fuel cell
- ✓ Reversible PEM fuel cell base
- ✓ Hydrogen and oxygen tanks
- ✓ Inner gas containers
- ✓ Water/gas tank module base
- ✓ Transparent silicon tubing
- ✓ Flexible 2mm banana connecting leads
- ✓ Plastic plug pins for fuel cell
- ✓ Battery pack with connecting leads
- ✓ Syringe
- ✓ Motor and fan with propeller blade
- ✓ 1 Watt solar panel
- ✓ Assembly instructions
- ✓ CD with curriculum manuals

Certification

ROHS, EN71:PART1;PART2;PART3, EN62115, PHTH-EU, ASTM F963, CPSIA-LEAD, CPSIA-LEAD, CPSIA-PHTHALATES, REACH, EMC.

Packing Information

| | |
|---|--------------|
| Case Pack Quantity (units): | 1 |
| Master Pack Quantity (units): | 24 |
| Packaging Type: | cardboard |
| 20' Container (units): | 65500 |
| 40' Container (units): | 13355 |
| Unit Box Length (cm/in): | 21 / 8.27 |
| Unit Box Width (cm/in): | 15 / 5.91 |
| Unit Box Height (cm/in): | 10 / 3.94 |
| Unit Volume (Litres/Cubic Meters): | 3.2 / 0.003 |
| Unit Box Weight (kg/lbs): | 0.56 / 1.23 |
| Case Pack Length (cm/in): | 63 / 24.80 |
| Case Pack Width (cm/in): | 44 / 17.32 |
| Case Pack Height (cm/in): | 35 / 13.78 |
| Case Pack Volume (Litres/Cubic Meters): | 97.0 / 0.097 |
| Case Pack Weight (kg/lbs): | 16.1 / 35.49 |

*The cartons' size may vary between $\pm 1-2$ cm.

Logistics Information

| | |
|-------------------------|------------------------|
| Item UPC-Code: | 6942503401028 |
| Item HS-Code: | - |
| Manufactured in: | Shanghai, China |
| Local Warehouse | Prague, Czech Republic |
| FOB Harbor: | Los Angeles, USA |
| First Ship Date: | available now |
| Minimum Order: | 1 |