



## Hydrocar Solar Hydrogen Car Science Kit

Item Code: FCJJ-20



This vehicle coming straight from the year 2099 is running on clean hydrogen fuel using a next generation reversible Polymer Electrolyte Membrane (PEM) fuel cell. Its new design offers a futuristic feel for what transportation could look like in the next decades.

Watch as oxygen and hydro-gen gases are formed in two transparent containers in the back of the vehicle. The kit's fuel cell unit combines water electrolysis and fuel cell functions into one device. The car steers independently of the user once it hits a barrier, and cool blue LED lights flash from inside the cockpit.



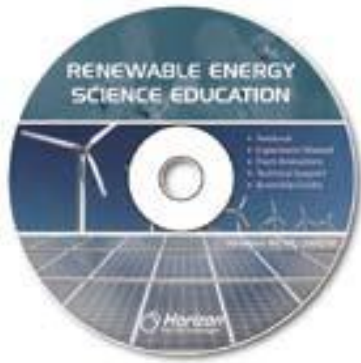
## Key Product Features

- Great entry-level fuel cell car kit, and one of Horizon's best sellers !
- Demonstrates electrolysis of water into oxygen and hydrogen
- Includes solar panel to power electrolysis process
- Includes experiment guide on CD, as well complete manual
- Easy to build and operate, steers independently when meeting obstacles



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### Experiments & Activities

- Assembly and operation of the Hydrocar
- The effect of Heat on Solar Panels
- The effect of Shade on Solar Panels
- The effect of Tilt Angle on Solar Panels
- Finding the Solar Panel's Maximum Power Point
- \*requires variable resistor module-sold separately
- Electrolysis Mode Generating Hydrogen and Oxygen from Water
- Fuel Cell Mode Generating Electricity from Hydrogen and Oxygen
- Determining the Minimum Voltage for Water Decomposition
- Polarization States for Hydrogen Fuel Cells

### Kit Contents:

- Chassis with an LED light and motor
- Reversible (PEM) fuel cell
- 0.75 Watt solar cell
- 2 x 2mm Connecting leads
- Battery pack with connecting leads
- Hydrogen tank
- Oxygen tank
- Inner Gas containers
- Plastic plug pins for fuel cell
- Transparent silicon tubing
- Syringe
- Assembly instructions
- CD-ROM with curriculum manuals

