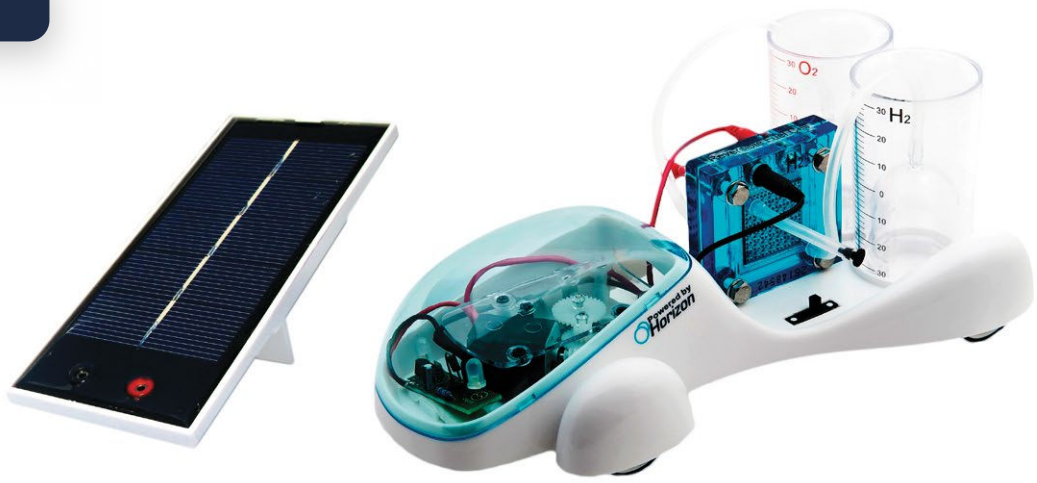
HYDROCAR

FCJJ-20



Product Description

Hydrocar introduces students to the hybrid technology that is fueling today's automotive revolution! Hydrocar demonstrates a complete, clean-energy system with solar to hydrogen power generation. Powered by electricity from sunlight, the reversible fuel cell illustrates the principles of water electrolysis, separating hydrogen from water and then recombining these elements to create power in an extremely efficient process. What's more, the car can steer independently to avoid running into obstacles.

Features

✓ Great entry-level fuel cell car kit, and one of Horizon's best sellers!

✓ Demonstrates electrolysis of water into O_2 and H_2

✓ Includes solar panel to power electrolysis process

✓ Includes experiment guide on CD, as well as a complete assembly manual

✓ Easy to build and operate, steers independently when meeting obstacles

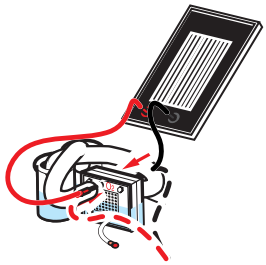
Language Pack

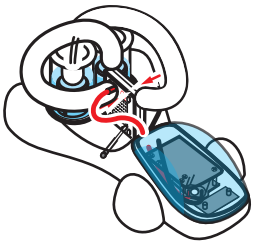
✓ CD Experiment Manual:

✓ Assembly Guide :

✓ Technical Support Guide:

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

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Kit Content

- ✓ 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

Certification

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

Case Pack Quantity (units):	1		
Master Pack Quantity (units):	12		
Packaging Type:	cardboard		
20´ Container (units):	3275		
40´Container (units):	6680		
Unit Box Length (cm/in) :	29.8	/	11.73
Unit Box Width (cm/in):	20.7	/	8.15
Unit Box Height (cm/in):	9.7	/	3.82
Unit Volume (Litres/Cubic Meters):	6.0	/	0.006
Unit Box Weight (kg/lbs) :	0.69	/	1.52
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):	11.2	/	24.69

*The cartons' size may vary between ±1-2 cm.

Logistics Information

Item UPC-Code:	6942503400069
Item HS-Code:	-
Manufactured in:	Shanghai, China
Local Warehouse	Prague, Czech Republic
FOB Harbor:	Los Angeles, USA
First Ship Date:	available now
Minimum Order:	12