

FCJJ-22



**+ ADD-ON**



FCJJ-24

## HORIZON ENERGY MONITOR

This ideal accessory to FCJJ-22 feeds live experiment data to your PC to be displayed as graphical data.

## Product Description

The Bio-energy Science Kit is a great way to find out how a direct ethanol fuel cell works. Unlike most fuel cells which use either hydrogen or methanol as a fuel source, the Bio-Energy Kit is a working demonstration of the conversion of ethanol to electrical energy. The process is silent, requiring no combustion, and can run for hours. Explore the next generation of fuel cell technology.

## Features

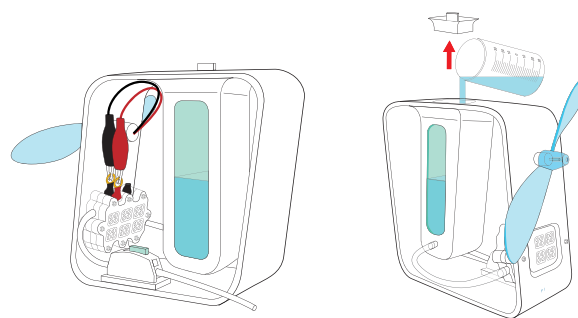


- ✓ Understand the principles behind ethanol fuel cell technology
- ✓ Hands on experimentation with novel technology
- ✓ Includes pH paper to show the change in the physical properties of the consumed ethanol fuel
- ✓ Includes experiment guide on CD as well as a complete manual
- ✓ The fuel solution can be made with household items

## Language Pack

- ✓ Assembly Guide :
- ✓ Technical Support Guide:

## Experiments & Activities



### ✓ Bio-energy experiments

1. Create electricity from ethanol and water
2. Exploring polarity
3. Ethanol fuel consumption
4. Exploring the effect of varying fuel concentrations
5. Create electricity from wine and beer
6. Exploring the effects of temperature



## Kit Content

- ✓ Plastic base with ethanol storage
- ✓ Rubber tubing
- ✓ Purging valve
- ✓ Electric motor
- ✓ Wire leads with clips
- ✓ Fan blade
- ✓ Direct Ethanol Fuel Cell
- ✓ Container for mixing ethanol solution
- ✓ pH paper measuring strips
- ✓ Lid for ethanol storage
- ✓ Renewable Energy Curriculum CD

## Certification

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

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

## Packing Information

<b>Case Pack Quantity</b> (units):	1
<b>Master Pack Quantity</b> (units):	24
<b>Packaging Type:</b>	cardboard
<b>20' Container</b> (units):	6550
<b>40' Container</b> (units):	13355
<b>Unit Box Length</b> (cm/in):	21 / 5.91
<b>Unit Box Width</b> (cm/in):	15 / 8.27
<b>Unit Box Height</b> (cm/in):	10 / 3.94
<b>Unit Volume</b> (Litres/Cubic Meters):	3.2 / 0.003
<b>Unit Box Weight</b> (kg/lbs):	0.37 / 0.8
<b>Case Pack Length</b> (cm/in):	63 / 24.8
<b>Case Pack Width</b> (cm/in):	45 / 17.5
<b>Case Pack Height</b> (cm/in):	35 / 13.8
<b>Case Pack Volume</b> Litres/Cubic Meters):	99.2 / 0.099
<b>Case Pack Weight</b> (kg/lbs):	10.1 / 22.27

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

## Logistics Information

<b>Item UPC-Code:</b>	6942503410037
<b>Item HS-Code:</b>	-
<b>Manufactured in:</b>	Shanghai, China
<b>Local Warehouse</b>	Prague, Czech Republic
<b>FOB Harbor:</b>	Los Angeles, USA
<b>First Ship Date:</b>	available now
<b>Minimum Order:</b>	24