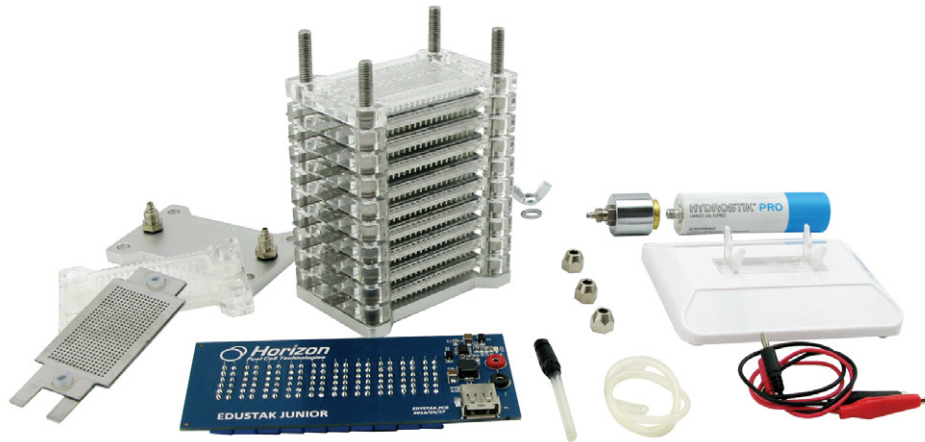


## FCSU-32

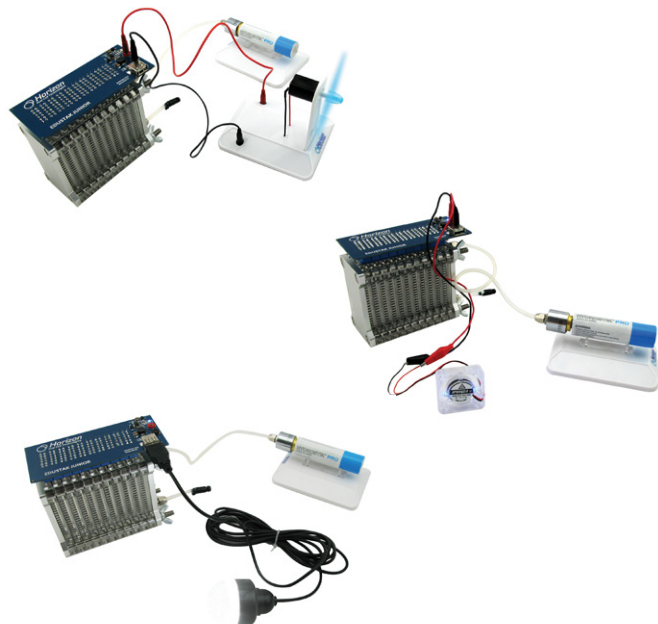


## Product Description

EDUSTAK Junior provides fuel cell technology for the classroom without using compressed hydrogen. Investigate the power potential of hydrogen technology by constructing your own 4W fuel cell stack. HYDROSTIK PRO metal hydride cartridges provide instant hydrogen fuel and no tools are required to assemble a stack. EDUSTAK is the perfect technology to conduct advanced research into MEAS, investigate thermal effects within stacks and is even a shortcut to starting your own fuel cell lab.

## Features

- ✓ Easy-assembly – no tooling required
- ✓ The stack power is readily scalable and it's straightforward to integrate sensors
- ✓ Rated output power up to 4W
- ✓ Optimal thermal management with air cooling circulation in each plate
- ✓ Includes HYDROSTIK PRO with tubing and adapted pressure regulator
- ✓ Comes with a complete instruction guide



## Language Pack

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

## Add-on

Create your own hydrogen powered devices that can be completely self-sufficient, with the optional addition of the HYDROFILL PRO hydrogen station.





## Content

- ✓ EDUSTAK JUNIOR
- ✓ HYDROSTIK PRO
- ✓ Manometer
- ✓ Electronic PCB card
- ✓ Blower fan
- ✓ Air pump
- ✓ HYDROSTIK PRO base
- ✓ Purging valve with tube
- ✓ Screws
- ✓ Three port connector
- ✓ 3 silicon tubes
- ✓ Clamp with tube
- ✓ Pressure regulator
- ✓ HYDROSTIK PRO support
- ✓ Wires

## Specifications

<b>Type of fuel cell</b>	PEM
<b>Number of cells</b>	10
<b>Rated power</b>	4W
<b>Performance</b>	6V at 0.7A
<b>Reactants</b>	hydrogen and air
<b>External temperature</b>	5 to 35°C
<b>Max stack temperature</b>	55°C
<b>H<sub>2</sub> pressure</b>	0.45-0.55bar
<b>Hydrogen purity</b>	≥99.995% dry H <sub>2</sub>
<b>Humidification</b>	self-humidified
<b>Cooling</b>	air (integ. cooling fan)
<b>Dimension</b>	125 X 60 X 95mm
<b>Weight</b>	510 g
<b>Flow rate at max output<sup>[1]</sup></b>	0.05 L/min
<b>Start up time</b>	≤30s at room temp.
<b>Efficiency of stack</b>	40% at full power
<b>Low voltage shut down</b>	5V
<b>Over current shut down</b>	1A
<b>Over temp. shut down</b>	50°C

<sup>[1]</sup>The flow rate may change with the power output. The specifications are subject to change without notice.

\*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):	1
<b>Packaging Type:</b>	cardboard
<b>20' Container</b> (units):	790
<b>40' Container</b> (units):	1615
<b>Unit Box Length</b> (cm/in):	44 / 17.32
<b>Unit Box Width</b> (cm/in):	33 / 12.99
<b>Unit Box Height</b> (cm/in):	23 / 9.06
<b>Unit Volume</b> (Litres/Cubic Meters):	33.4 / 0.033
<b>Unit Box Weight</b> (kg/lbs):	2.5 / 5.51
<b>Case Pack Length</b> (cm/in):	44 / 17.32
<b>Case Pack Width</b> (cm/in):	33 / 12.99
<b>Case Pack Height</b> (cm/in):	23 / 9.06
<b>Case Pack Volume</b> Litres/Cubic Meters):	33.4 / 0.033
<b>Case Pack Weight</b> (kg/lbs):	2.5 / 5.51

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

## Logistics Information

<b>Item UPC-Code:</b>	6942503405170
<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>	1