

JuniorBasic

- All the essentials
- Measurement Set included
- Pre-assembled
- Carrying case



JuniorBasic Item J101

Recommended grades: 5-12

Subjects: Chemistry, Physics, Electrical Engineering / Circuits, General Science


Application uses: Classroom Instruction, Hands-on Learning

Solar hydrogen experimentation system, consisting of solar module, PEM electrolyser, hydrogen and oxygen storage tanks, PEM fuel cell and fan (as electric load); mounted on a black base plate. Textbook included.



J101 Specifications

Electrolyser:	1 W
Fuel cell:	500 mW
Gas storage:	30 cm ³ H ₂ / 30 cm ³ O ₂
Solar module:	2.0 V / 350 mA
Fan:	10 mW
H x W x D:	100 x 300 x 150 mm
Weight:	600 g

 Textbook (Item A138) "Fuel Cell Technology for Classroom Instruction" included.

Experiments possible with J101 – JuniorBasic

For the **blue** experiments you also need the Measurement Set Item No.: A129.

For the **green** experiments you also will need the Solar Wind Set Item No. A164, or Wind Generator Item No. A162.

- Producing and storing hydrogen and oxygen
- Determining characteristic curve of solar panel
- Operating the fuel cell with hydrogen and oxygen 2:1
- Determining characteristic curve of electrolyser
- Determining electrolyser efficiency
- Learning about Faraday's laws
- Determining characteristic curve of fuel cell
- Determining fuel cell efficiency
- Determining decomposition voltage of water
- Storing electrical energy from wind by using hydrogen technology
- Demonstrating a complete renewable hydrogen energy system

ACCESSORIES

Spotlight Item A148

Specifications see accessories page.



Measurement Set

Item A129

Specifications see measurement page.



Wind Generator

Item A162

Specifications see measurement page.

Available from January 2011.

