

# H<sub>2</sub>-TRAINER junior



## Hydrogen-/ Fuel Cell-experimental kit for teaching at schools

The available experimental materials allow the carrying out of all basic experiments in the field of hydrogen-/ fuel cell technology.

Because the experiments are built up modularly the adaptation to the actual teaching is possible according to the requirement.

The materials are arranged clearly and optically attractive in a specific red suitcase. Everything is always completely at hand, extra material is not necessary.

The experiments can be built up and removed fast. The pupils are able to carry out the experiments by themselves with the help of the easily understandable experimentation instruction.

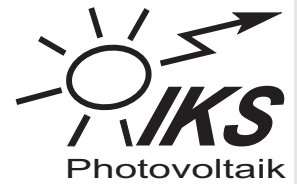
The teacher gets further information to do the exercises and to understand the physics.



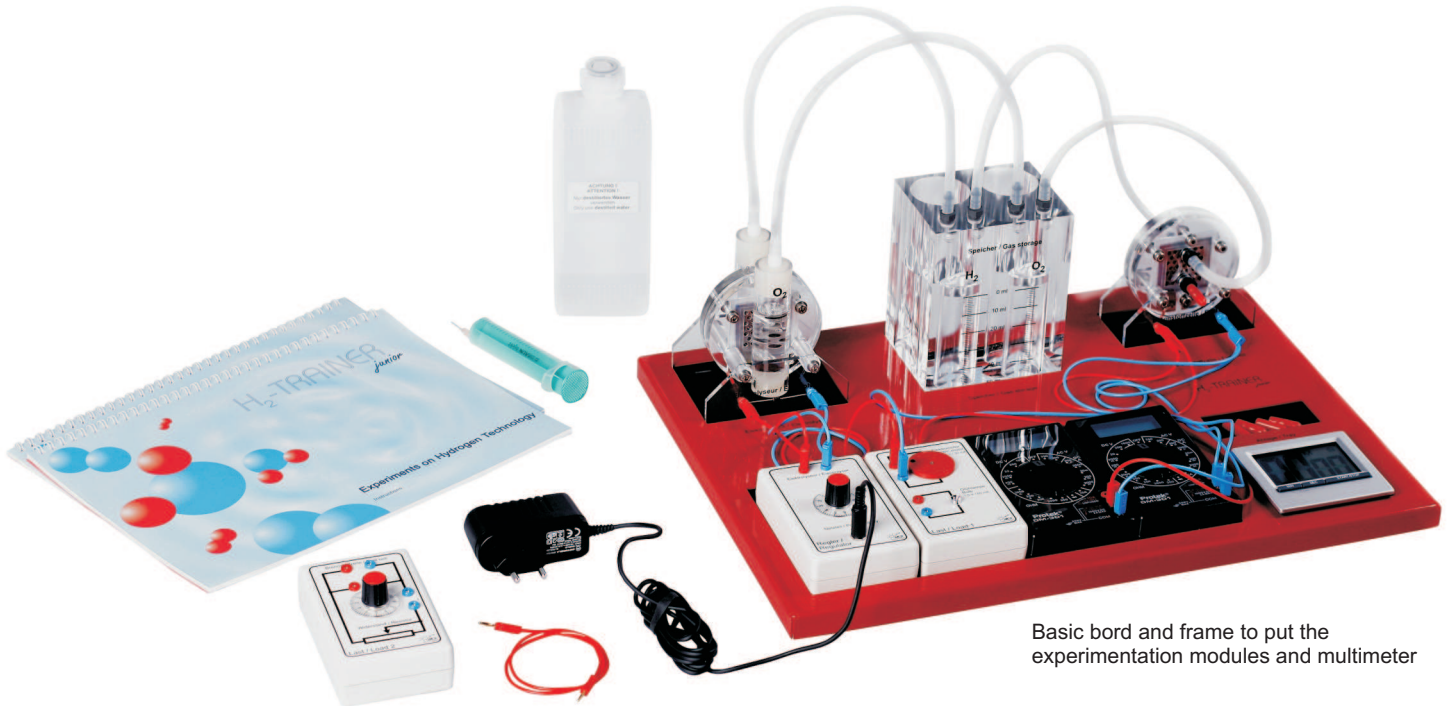
### With the set of equipment supplied, the following experiments are possible:

- Measuring of the volume ratio of the generated gases
- Measuring of the generated volumes of the gases per unit of time depending on the current
- Determination of the power efficiency and the Faraday efficiency of the electrolyser
- Determination of the U/I- characteristic of the electrolyser
- Determination of the power efficiency and the Faraday efficiency of the fuel cell
- Determination of the U/I- characteristic of the fuel cell
- Building up of a stand alone operation net
- In combination with the Solartrainer junior: Operation of the electrolyser with solar cells
- In combination with the Windtrainer junior: Operation of the electrolyser with windenergy
- In combination with the Solartrainer junior and the Windtrainer junior: Operation of the electrolyser with solar cells and windenergy as a hybrid system

# H<sub>2</sub>-TRAINER junior



Elektrolyser, gas storage and fuel cell



Basic board and frame to put the experimentation modules and multimeter

Power supply and accessory

## Set of equipment supplied:

- Specific red suitcase with shaped part made of foam plastic
- Basic board with frame to put the experimental boxes und multimeters
- Elektrolyser
- Power supply
- Current control box
- Gas storage
- Fuel cell
- 2 multimeters with 2 mm connectors
- Load box with electric motor and light bulb
- Measuring box with variable resistor
- Connecting cords, highly flexible, contacts brass/hard copper gold plated
- Connecting hoses/caps
- Distilled water
- Syringe
- Experimental instructions / Experimental solutions

Subjekt to alteration. State: 2014-06

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