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Phone: 495 220 229, 495 220 394 Fax: 495 220 154 GSM gate: 602 123 096 E-mail: info@helago-cz.cz Web: http://www.helago-cz.cz 1219 - leXsolar-H2 Ready-to-go

Order code: **5501.1219** 



Information about product price on demand

**Parameters** 

Subject

Fuel cells and "H" technology

Quantitative unit

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leXsolar-H2 Ready-to-go offers the entire spectrum of current fuel cell technology for the classroom. This product was completely reworked and now contains the newest fuel cells for educational purposes. Solar module, electrolyzer, and fuel cell permit the assembling and examination of a solar-hydrogen cycle. Working principles, efficiency and characteristics curves of electrolyzer and fuel cell are just some of

the topics covered. Beside the PEM-fuel cell, it also contains an ethanol-fuel cell in order to compare the different technologies. H2 Charger and H2 Storage allow for the easy generation and storage of hydrogen. True to the traditions of the Ready-to-go series all ancillary equipment is already included in the robust aluminum suitcase.

## **Experiments**

- Set up of an electrolyzer and the different fuel cells
- What does an electrolyzer do?
- Characteristics of an electrolyzer
- Hydrogen production with the H2 Charger
- Hydrogen storage with the H2 Storage technology
- Characteristics of a PEM-Fuel cell
- Characteristics of an Ethanol-Fuel cell
- Faraday and energy efficiency of the electrolyzer
- Faraday and energy efficiency of the PEM-fuel cell
- Parallel- and series connection of PEM-fuel cells

## **Components:**

- 1 x 1100-19 leXsolar-Base unit Large
- 1 x 1100-23 Potentiometer module
- 1 x 1100-27 Motor module without gear
- 1 x 1100-31 Solar module 2.5 V, 420 mA
- 1 x 1200-17 H2 Charger
- 1 x 1200-18 H2 Storage
- 1 x 1213-01 Gas storage module
- 3 x 1218-02 PEM-Fuel cell module
- 1 x 1218-03 Electrolyzer module 2.0
- 1 x 1700-01 leXsolar ethanol fuel cell module
- 1 x 1219-01 Koffer 1219
- 0,15 x L2-02-048 Silicone tube 2 mm
- 1 x L2-02-017 Propeller
- 1 x L2-04-022 Lamp with table clamp
- 2 x L2-06-011 Digital multimeter
- 2 x L2-06-012 Test lead black 25 cm
- 2 x L2-06-013 Test lead red 25 cm
- 1 x L2-06-014 Test lead black 50 cm
- 1 x L2-06-015 Test lead red 50 cm
- 1 x L2-06-132 Valve for H2 Storage
- 1 x L3-01-103 Insert H2 Ready-to-go
- 1 x L3-03-258 Info sheet initial startup
- 1 x L3-03-163 Einräumplan 1219 H2 Ready-to-go 2.0

## **Extras available:**

- L3-03-095 Instructions manual leXsolar-H2 Ready-to-go
- L3-03-100 Teacher's manual leXsolar-H2 Ready-to-go
- 1200-18 H2 Storage
- L2-04-044 electric grid adapter set