

Tutorial HyRunner

- Explore the future of transportation
- Solar car experiments
- Reversible fuel cell for H₂/O₂ or H₂/Air operation
- Easy, modular set-up



Tutorial HyRunner Item T107

Recommended grades: 5-12


Subjects: Chemistry, Physics, Electrical Engineering/Circuits, Automotive

Application uses: Classroom Instruction, Hands-on Learning

This model of a hydrogen car is equipped with a reversible fuel cell that allows the car to produce its own hydrogen when an external voltage is applied. Charging time: approx. 4 min. with Power Supply, approx. 7 min. with Battery Box and approx. 9 min. with Solar Module Tutorial under sunlight. Running time approx. 8 min. Power Supply, Battery Box, Solar Module Tutorial and textbook included.

T107 Specifications

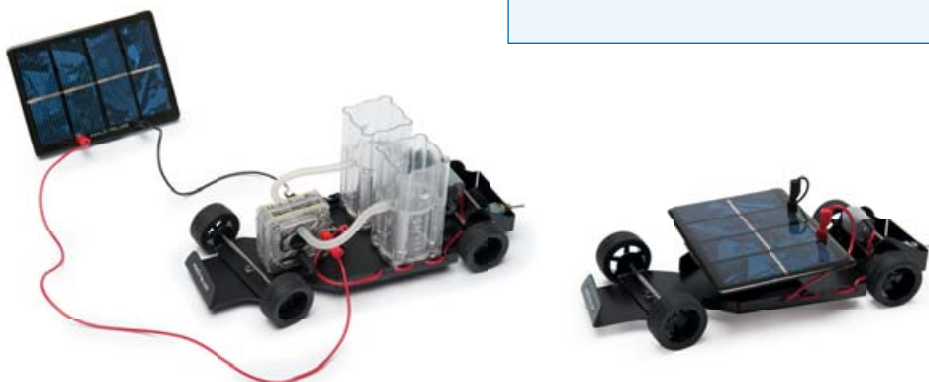
Electrolyser mode:	5 cm ³ /min H ₂ ; 2.5 cm ³ /min O ₂ ; 1.16 W
Fuel cell mode:	H ₂ /O ₂ : 300 mW H ₂ /Air: 100 mW
Gas storage:	30 cm ³ H ₂ / 30 cm ³ O ₂
Solar module:	2.0 V / 600 mA
Battery Box:	4.5 VDC / 0.8 A
Power Supply:	1.2 A
H x W x D:	100 x 115 x 260 mm
Weight:	1.3 kg

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

Experiments possible with T107 – Tutorial HyRunner

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

- Building a model hydrogen car
- Producing and storing hydrogen
- Determining characteristic curve of solar panel
- Hydrogen/oxygen or hydrogen/air operation
- Determining characteristic curve of electrolyser
- Determining electrolyser efficiency
- Learning about Faraday's laws
- Determining characteristic curves of fuel cell
- Determining fuel cell efficiency
- Determining decomposition voltage of water



ACCESSORIES

Spotlight Item A148

Specifications see accessories page.



Measurement Set

Item A129

Specifications see measurement page.

