

**Product datasheet (en)**

Version: 1930\_03.12.2015

Photo:

Name:

leXsolar-Hydropower Basic

Item number:

1930

Youtube link:

Area of application:

Dimensions (cm x cm x cm):

Physics  
Chemistry  
Technology Training

Weight (kg):

User group:

Middle School / Junior High School

Key facts:

Playful understanding of hydropower  
Qualitative and quantitative experiments

List of components:

1 x 1100-25 Buzzer module  
1 x 1900-01 Water wheel module  
1 x 1930-01 Carton 1930

1 x L3-01-182 Insert Hydropower Basic 1930  
1 x L3-03-214 Layout diagram Hydropower Basic 1930  
1 x L2-02-051 Silicone tube 12 mm  
1 x L3-03-258 Info sheet initial startup

Extras needed:

1 x 2030 leXsolar-Minikit Basic  
1 x 2031 leXsolar-Kit Basic

Extras available:

No extras available.

Description:

leXsolar-Hydropower Basic is the optimal beginner package for the topic of hydroelectric power. By playful experiments, students learn the basic characteristics of a hydropower plant. With the Pelton turbine and the attached hose qualitative and quantitative experiments can be carried out in the classroom but also outdoors.

For using this product you additionally need the leXsolar-Minikit Basic in primary school and the leXsolar-Kit Basic in Junior High School, each of which contains all necessary accessories.

Experiments:

Energy conversions at the water turbine  
Influence of the water head  
Influence of the angle of incidence  
Power of a hydropower plant  
Influence of the water head on the power

Specifications of components:

1100-25 Buzzer module:  
Plug-in Module with piezo buzzer  
Pulse tone buzzer  
Initial voltage: 0.7 V  
Initial current: 0.2 mA  
Layout: plug-in module with 4 mm jacks  
Grid-dimension of the jacks: 70 mm  
Module size: 85 mm x 85 mm

1900-01 Water wheel module:

1930-01 Carton 1930:

L3-01-182 Insert Hydropower Basic 1930:

L3-03-214 Layout diagram Hydropower Basic 1930:

L2-02-051 Silicone tube 12 mm:

L3-03-258 Info sheet initial startup:

#### Specifications extras needed:

##### 2030 leXsolar-Minikit Basic:

For experimenting with the leXsolar basics in elementary school you need the leXsolar-Minikit Basic. It contains a small base unit, cables and short circuit plugs to connect the modules. With a hand crank generator the students produce electrical energy for the experiments themselves. Thus, no extra electrical connection or voltage source is needed.

##### 2031 leXsolar-Kit Basic:

For quantitative experiments with the leXsolar-Basics in Junior High School you need the leXsolar-Kit Basic. With the enclosed Smart Control components, an innovative measuring and control system is available: The power module is the most compact power supply for experiments on the market and the AV module makes voltage and current measurements as simple as possible. A potentiometer, the basic unit and cables complete the product.

#### Specifications extras available:

No extras available.