Product datasheet (en)

Version: 2030_18.02.2016

Photo:

Name:

leXsolar-Minikit Basic

Item number:

2030

Youtube link:

Area of application:

Physics
Chemistry
Technology Training

Dimensions (cm x cm x cm):

Weight (kg):

User group:

Middle School / Junior High School

Key facts:

Necessary accesory for experimenting with the leXsolar-Basics
Adapted to the requirements of primary school
Mainly qualitative experiments

List of components:

1 x 1602-01 Base unit small
1 x 1602-02 Hand generator

1 x 2030-01 Carton 2030
1 x L2-06-014 Test lead black 50 cm
1 x L2-06-015 Test lead red 50 cm
2 x L2-06-033 Short-circuit plug
1 x L3-01-180 Insert Minikit Basic 2030
1 x L3-03-210 Layout diagram Minikit Basic 2030
1 x L3-03-258 Info sheet initial startup

Extras needed:

No extras needed, all included.

Extras available:

1130 leXsolar-PV Basic
1230 leXsolar-H2 Basic
1430 leXsolar-Wind Basic
1830 leXsolar-EMobility Basic
1930 leXsolar-Hydropower Basic

Description:

For experimenting with the leXsolar basics in elementary school you need the leXsolar-Minkit 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.

Experiments:

Mainly qualitative experiments with the leXsolar-Basics

Specifications of components:

1602-01 Base unit small:

1602-02 Hand generator:

2030-01 Carton 2030:

L2-06-014 Test lead black 50 cm:
The black test lead is used for the electrical connection of the modules. The cable is directly plugged into the base plate or alternatively directly into the plug connection of the modules. The cables have two different colors to distinguish between the positive and the negative pole. The black cables are plugged into the negative pole.

L2-06-015 Test lead red 50 cm:
The red test lead is used for the electrical connection of the modules. The cable is directly plugged into the base plate or alternatively directly into the plug connection of the modules. The cables have two different colors to distinguish between the positive and the negative pole. The red cables are plugged into the positive pole.

L2-06-033 Short-circuit plug:

L3-01-180 Insert Minikit Basic 2030:

L3-03-210 Layout diagram Minikit Basic 2030:

L3-03-258 Info sheet initial startup:

Specifications extras needed:

No extras needed, all inclusive.

Specifications extras available:

1130 leXsolar-PV Basic:
What is a solar cell and what is a solar panel? What can be powered with a solar cell? How should you align the solar cell to the sun? These questions and many more can be answered using leXsolar-PV Basic. All experiments are designed in a qualitative way and are specifically adapted for young students in Elementary School as well as Junior High School.
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.

1230 leXsolar-H2 Basic:
What is a fuel cell and what does it do? What is an electrolyzer and, using this device, how can water be broken down to its component elements? What can be powered with a fuel cell? These questions and many others can be answered doing the experiments with the leXsolar-H2 Basic. All experiments are designed in a qualitative way for young students from Elementary and Junior High School. The product is equipped with a reversible PEM-fuel cell combining electrolyzer mode and PEM fuel cell mode in one handy and robust unit.
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.

1430 leXsolar-Wind Basic:
leXsolar-Wind Basic is the optimal beginner package for the topic of wind energy. Even for a small price it allows the most important basic experiments regarding wind energy. Thus, various parameters such as number or shape of rotor blades and rotor blade pitch can be studied with the help of the innovative leXsolar-wind rotors. Therefore, the product playfully provides an understanding of the operation of wind turbines.
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.

1830 leXsolar-EMobility Basic:
With leXsolar-EMobility Basic the students experience electric mobility close to the action. The electric model car can rush through the classroom with the supercapacitor or can be powered by the solar module directly from the sun. Thus, leXsolar-EMobility Basic combines storage technologies and an electric vehicle in one experimental kit. Based on illustrative experiments the kit imparts the basic knowledge about those topics. Combined with leXsolar-H2 Basic a fuel cell car can be built.
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.

1930 leXsolar-Hydropower Basic:
leXsolar-Hydropower Basic is the optimal beginner package for the topic of hydroelectricpower. 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.