

leXsolar-PV Basic (Set of 12 psc)

Order code: **5501.1130**



Cena bez DPH

2.515,00 Eur

Price with VAT

3.043,15 Eur

Parameters

Renewable resources and greenhouse effect

Subject

Quantitative unit

Renewable energy resources

Photovoltaics

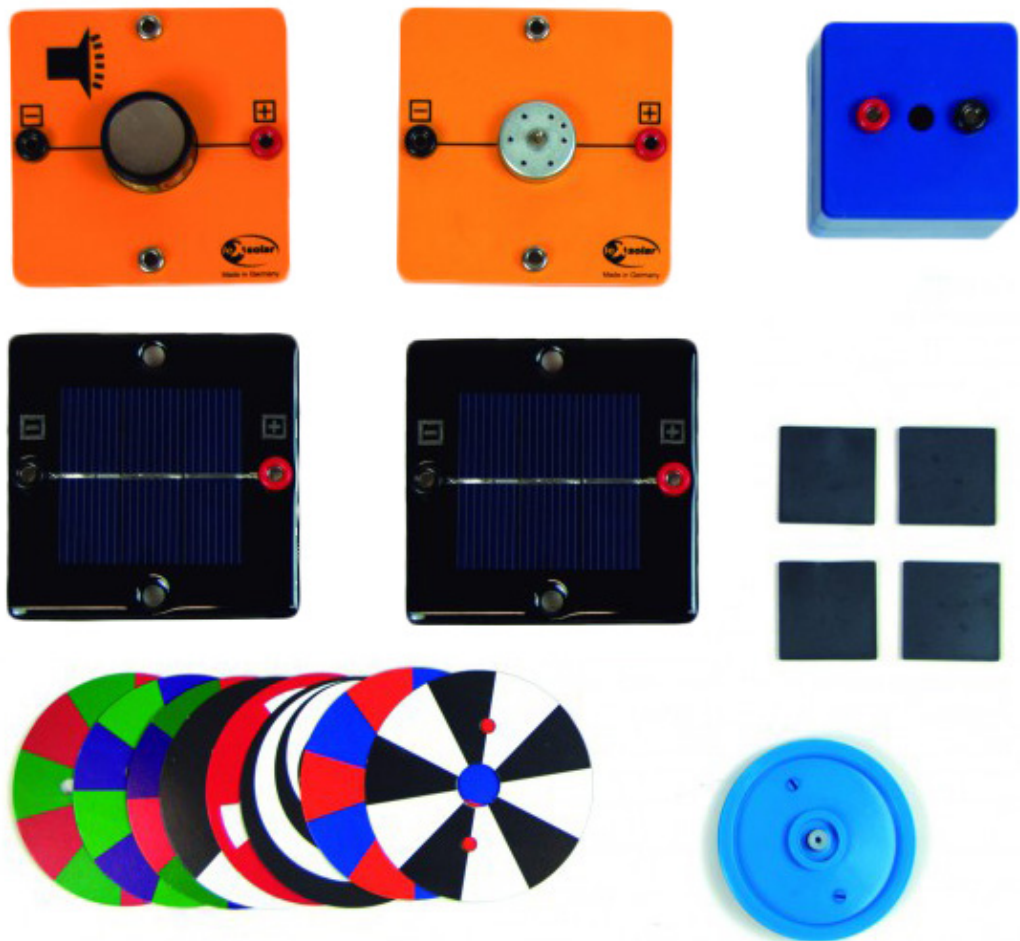
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- What is a solar cell and what is a solar panel?
- What can be powered with a solar cell?
- How should you align the solar cell to the sun?

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.

Note: 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



- The solar cell as energy source
- The solar cell powers the motor
- The solar cell powers the buzzer
- Difference between solar cells and solar panels
- The larger the solar cell, the....?
- Orientation of the solar cell
- How much light does a solar cell need?
- Shading effect of solar panels
- Color mixtures and optical illusions
- Series and parallel connection with solar cells

- Power dependence on the area of the solar cell
- Power dependence on the angle of incidence
- Power dependence on the level of illumination
- Internal resistance of solar cells
- IV characteristic and fill factor of the solar cell
- Power dependence on temperature

List of components:

1 x 1100-02 Solar module 0.5 V, 840 mA
1 x 1100-07 Solar module 1.5 V, 280 mA
1 x 1100-20 Lighting module
1 x 1100-25 Buzzer module
1 x 1100-27 Motor module without gear
1 x 1100-28 Color discs - Set 1
1 x 1100-29 Solar cell cover set (4 pieces)
1 x 1130-01 Carton 1130
1 x L3-01-176 Insert PV Basic 1130
1 x L3-03-202 Layout diagram PV Basic 1130
1 x L3-03-258 Info sheet initial startup

Extras needed:

1 x 5501.2030 leXsolar-Minikit Basic
or
1 x 5501.2031 leXsolar-Kit Basic