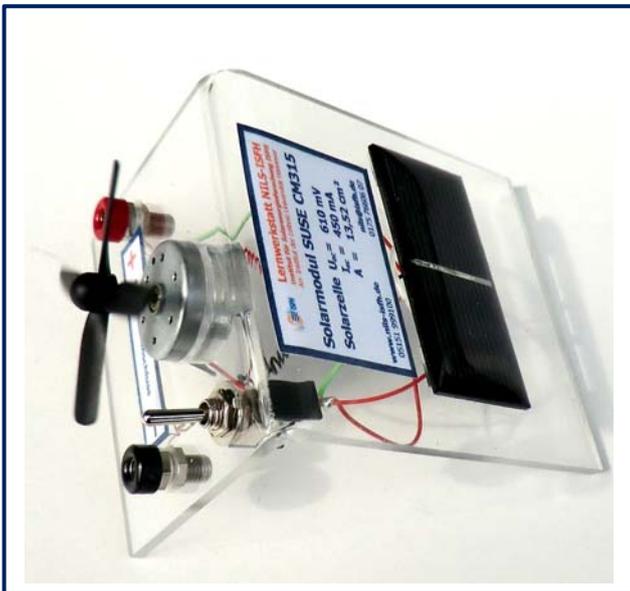


The solar module SUSE CM315

Inexpensive and powerful beginner's solar module

Especially suited for self-construction and student centered experimental class use



The solar module SUSE CM315

On the front of the roof-shaped bent module base plate made of plexiglass (total dimensions 152 x 80 mm) the solar electric motor with the propeller, the test jacks and the switch are visible. On the back side the high-class monocrystalline Si solar cell (module dimensions 60 x 30 mm, solar cell 52 x 26 mm).

Data of the solar cell under standard testing conditions: $V_{oc} = 0.62 \text{ V}$, $I_{sc} = 450 \text{ mA}$. The solar cell and the jacks are connected firmly electrically, at the jacks lab wires can be plugged in to conduct measurements with a multimeter or additional experiments.

With the switch the electric motor can be hooked up or disconnected to operate the solar cell with load or idle. At the jacks voltages and short-circuit currents can be measured. At these measurement points series or parallel connections with several modules can also be established.

The module is suited best for **photovoltaic experiments in class level 4-9**.

The self-construction requires bending the plexiglass base plate to 75° , the installation of the electronical parts and wiring work with soldering. The self-construction by students takes 1 hour max.

To measure the current a multimeter (measurement range 10 A) is used, to measure the voltage a multimeter in the measurement range of 20 V.

The device is available as construction kit or as ready-to-use device.

Parts of the construction kit: Predrilled plexiglass base plate, solar module with solar cell and 2 connective wires, double-faced adhesive tape, solar motor, propeller, 2 jacks red+black, 1 switch, type plates, construction manual and extensive 11 page experimentation manual with theoretical basics, experimentation and test exercises.