SUNdidactics
SolarEnergyDidactics
SolarEducation
SolarEngineering

innovative Solarsysteme für Schule und Ausbildung
innovative solar- systems for school, college, technical education

- Solardidaktik
- Solarzellen
- Solarmodule
- Photovoltaik- Experimentiergeräte
- Photovoltaik- Gerätentwicklung
- Experimentieranleitungen didaktische Konzepte
- Solarberatung
- Solar- Workshops
- Solar- Fortbildung für Lehrkräfte
- solare Aus- und Weiterbildung
- Solarspielzeuge

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- solar cells
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- photovoltaic -experiment - devices
- solar- experiment- manuals
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- solar consulting
- solar education
- solar training for teachers
- solar toys

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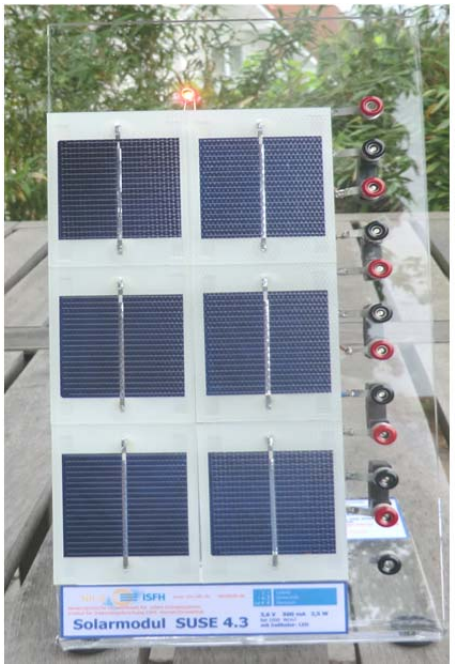
ILS ISFH cooperation www.nils-isfh.de

The solar module SUSE 4.3

Solar module with 6 cells in series connection with connection plugs 3.6 V/900 mA

Plug connector with integrated measurement jacks and function control through indicator LED



The solar module **SUSE 4.3** is a high-quality 3.6 V – 0.9 A – 2.5 W solar module on a stable plexiglass base plate with 6 solar cells with 1 jack pair each, which are connected to each other in series by 5 removable connector plugs (with integrated 4mm measurement jack).
In series connection the module gives a voltage of **3.6 V**, a current of **0.9 A** and a power of **2.5 W** (with 1000 W/m²). Each solar cell has its own jack pair for measurements. To increase the voltage several modules can even be connected to each other in series. **The module has an indicator LED, that shows operational readiness.** The indicator LED glows brightly even indoors. The 6 jack pairs on the right-hand side are the electric contacts for each solar cell, these are connected in series by connector plugs with measurements jacks (visible on the back side behind the jacks).
With this module electric devices (Radio, MP3 player, toys) can be operated, that are designed for 3 V DC. With the extensive experimentation manual for **SUSE 4.3** a lot of experiments on solar cells and photovoltaic system technology can be conducted, outdoors in the natural daylight or indoors on the basic device SUSE 4.0.

- All Experiments (without solar motor) of the module **SUSE 4.2**, using **<u>one</u>** cell of the module **SUSE 4.3**
- Extensive experiments on photovoltaic system technology, viz. parallel and series connections of solar cells, characteristic curves, determination of the efficiency factor and several more experiments with the extensive experimentation manual for the device **SUSE 4.3**
- The module can be used for the solar operation of devices with **3 V operating voltage**, radio, MP3 player,....., 1.2 V rechargeable batteries can be charged with the module as well.

Because of the 75° angle the device can be placed upright in the winter half-year and for the operation with halogen lamps (position 1), in the summer half-year with a high solar altitude the device is placed flat on the ground outdoors, adjusted towards the sun, or on a desk (position 2). An integrated indicator LED shows operational readiness with the connective plugs plugged in.