SUN didactics
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

- solardidactics
- solar cells
- solar modules
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- solar workshops
- solar consulting
- solar education
- solar training for teachers
- solar toys

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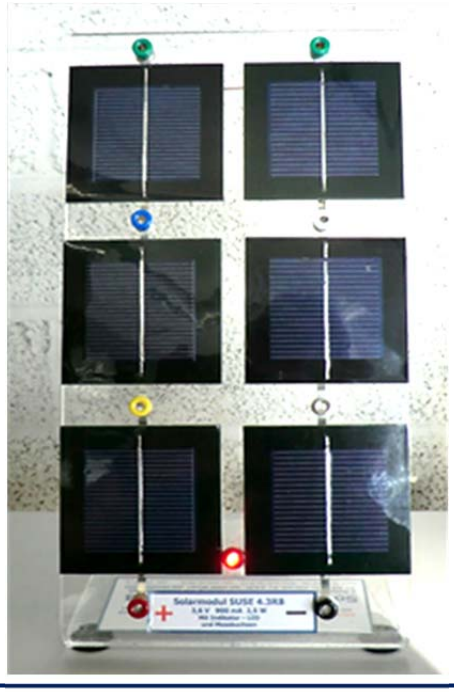
The solar module SUSE 4.3RB

Solar module with 6 solar cells in series connection with 2 test jacks on each cell

3.84 V / 990 mA / 2.7 W at S = 1000 W/m² **Operating display through indicator LED**

The solar module **SUSE 4.3RB** is a high-quality 3.84 V – 0.99 A – 2.7 W solar module on a solid plexiglass base plate (480x160x6 mm) with 6 solar cells in intern series connection with test jack pairs.
In series connection the module delivers a voltage of **3.84 V**, a current of **0.99 A** and a power of **2.7 W** (at 1000 W/m²). Each solar cell has it's own test jack pair for electrical measurements, the total voltage is available at the red-black socket pair. For a further increase of voltage several modules can be connected in series connection. **The module has an indicator LED, which displays the operating state.** The indicator LED inherently glows brightly inside a room and signalizes the energy standby. The 6 jack pairs in front of and behind each solar cell are labeled by color and form the electrical pins for every single solar cell.
With this module electronic devices (radio, solar vehicles,...), which are designed for 3-4 V DC, can be operated, with the extensive **experimentation manual for SUSE 4.3RB** many experiments on solar cells and photovoltaics system technology can be conducted:

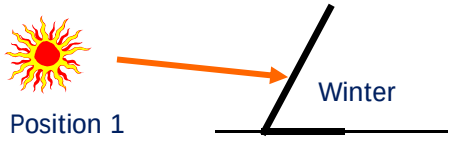


The **solar module SUSE 4.3RB**
In the middle of the lower two solar cells the indicator LED is glowing. The total voltage is available at the lower black-red jack pair.

- All experiments (without solar motor) of the module **SUSE 4.2** using **one** cell of the module **SUSE 4.3RB**
- Extensive experiments on photovoltaics system technology, i.e. series connection of solar cells, characteristic curves, determination of the efficiency factor .....with the extensive experimentation manual for the device **SUSE 4.3RB**
- The module can be used for the solar operation of devices with **3 V operating voltage** (radio), also rechargeable batteries can be charged with the module. If several modules **SUSE 4.3 RB** are connected in series, the voltage increases by 3.84 V respectively, with 2-3 modules the cell phone charging device SUSE 4.17 can be connected to charge cell phones or smartphones.
- Special jacks are used to connect the wires from the back to prevent shadowing of the solar cells by wires on the front while experimenting.

Thanks to the 75° angle the device can be positioned erect in the winter term and while operating in a lab with halogen lamps (position 1), in the summer term with a high altitude of the sun the device is positioned flat on the ground outside facing the sun or on a table (position 2). An integrated LED displays the operating state, it glows inherently inside a room. The hole on the base area is intended for mounting the device on the basic device SUSE 4.0

Low altitude of the sun



High altitude of the sun