

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

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## The basic device SUSE 4.0

Plexiglass plate 480 x 160 x 6 mm with halogen spot light 120 W with device support (screw fitting with washer and wing nut) for SUSE photovoltaic devices 4.xx

The basic device SUSE 4.0 consists of a plexiglass plate with the dimensions  $480 \times 160 \times 6 \text{ mm}$  with a 230 V - 120 W halogen spot light and serves as device support for SUSE 4.xx photovoltaics experiments to conduct experiments indoors or in times of no direct sunlight. Included in delivery is a switchable desk socket to switch up to 3 SUSE 4.0 devices on or off.

- The rotatable solar modules are attached to the plexiglass plate with the screw fittings and the wing nut, first put the module over the nut, then put the washer on top of the solar module over the screw, then put on and tighten the wing nut with caution!
- The 230 V / 120 W halogen spot lamp produces an irradiance S of about 140-200 W/m² for the SUSE PV experimentation devices at the attachment site.

 The lamp can be brought into line with the solar cells, with an ideal adjustment the short-circuit current of the solar cell is at its maximum.

 The lamp should be switched on and off by a switchable desk multi-pole socket, only switch it on for measurements/ experiments!
 When irradiated too long, the solar cell heats up and its power decreases!

The basic device SUSE 4.0 with the solar module SUSE 4.2 On the left-hand side there is the 120 W halogen spot light, on the right-hand side the screw fitting with wing nut is visible, with which the solar modules are attached.

## **Safety instructions**

- 1. Caution, the lamp gets hot in operation! Risk of burns! Do not touch lamp!
- 2. Do not carry or tear at the cable!
- 3. Follow the warnings of the lamp manufacturer!
- 4. Do not place modules closer to the lamp than the screw fitting distance!
- 5. Turn on lamp *only for experiments*! Do not let it glow for a long time or unwatched!
- 6. Do not bring flammable items close to the lamp, fire hazard!