

The solar module SUSE CM6B

Inexpensive and powerful beginner's solar module with test jacks

On the roof-shaped bent module base plate made of plexiglass (overall dimension 155 x 80 mm) the solar cell with the dimensions 52 x 52 mm (embedded break-proof in the solar module SUSEmod2) is visible on the left.

On the right-hand side the two binding posts are positioned, here lab wires can be plugged in or bell wire can be clamped to conduct experiments. Voltages and short-circuit currents can be measured here or additional devices can be connected (solar motors or other devices SUSE CM6B in series connection).

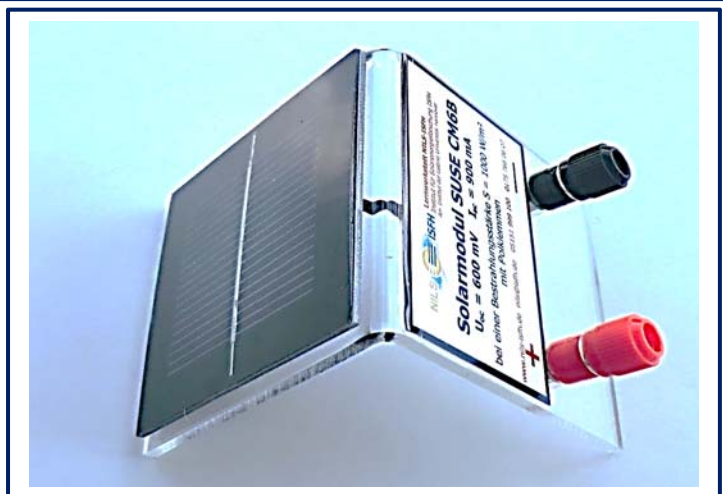
Metal fasteners may also be used for the series connection, as shown in the adjacent photo.

Here two modules SUSE CM6B are connected in series, the connected voltmeter shows the sum voltage of 1.20 V in the sunlight.

The module is well suited for photovoltaics experiments in class levels 3 to 10. Experiments and manuals for Elementary schools as well as Secondary Schools were developed with NILS-ISFH for this purpose.

The open-circuit voltage and the short-circuit current can be measured at the binding posts. Additionally several modules SUSE CM6B may be connected in series with wires or metal connectors.

The **short-circuit current** is a direct measure of the light intensity and proportional to the irradiance S , it is **900 mA** for bright sunshine ($S = 1000 \text{ W/m}^2$), the **open-circuit voltage** is **0.6 V**.



Top: The solar module SUSE CM6B, on the left the solar cell SUSEmod2
Bottom: 2 devices CM6B in series connection with metal connector



V(S) and I(S) characteristic curves of the solar module SUSE CM6B
Open circuit voltage in V Short-circuit current in A against the irradiance S

