

The **SUSE solar vehicle 5** consists of a robust metal frame, a solar electric motor, and a solar module. On the surface the 3-solar-cell solar module with $U_{oc} = 1.8 \text{ V}$ and $I_{sc} = 450 \text{ mA}$ can be seen. The solar module feeds the electric motor with electric energy, which is gained through the transformation of the light's radiation energy. Irradiated by natural sunlight the car drives with high velocity, inside rooms the solar module can be irradiated with halogen spot lights. The vehicle is delivered as construction kit or ready-to-use device.

Technical data:

Vehicle:

Metal chassis, synthetical wheels with rubber tires

Motor and gear:

Solar electric motor DC, single-level reduction gear

Solar module:

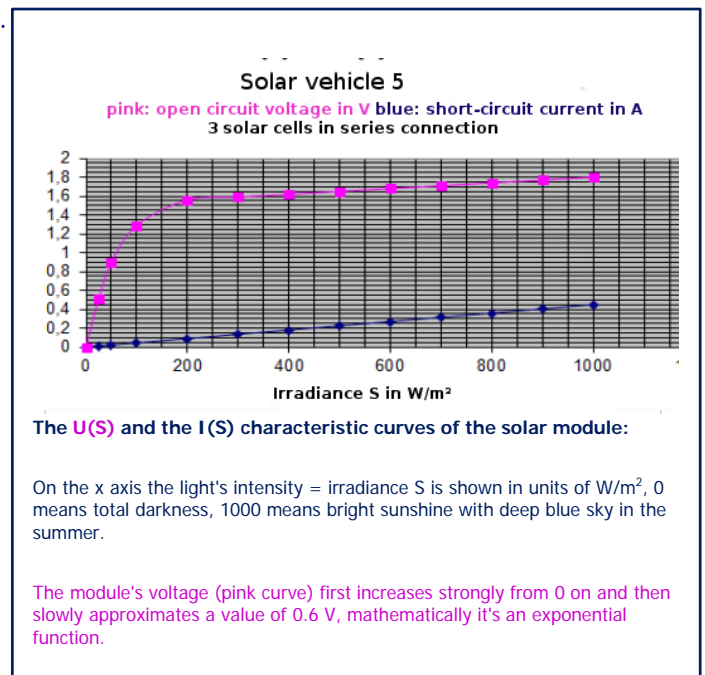
3 mono silicon solar cells 600 mV/450 mA in intern series connection, $U_{oc} = 1.8 \text{ V}$

$I_{sc} = 450 \text{ mA}$ with an irradiance of $S = 1000 \text{ W/m}^2$

Single cell: 52 x 26 mm

Single module: 60 x 30 mm

Whole module: 90 x 60 mm



Extensive Experiments with this vehicle are included in the learning stations A20 (easy) and B22 (sophisticated).