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

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

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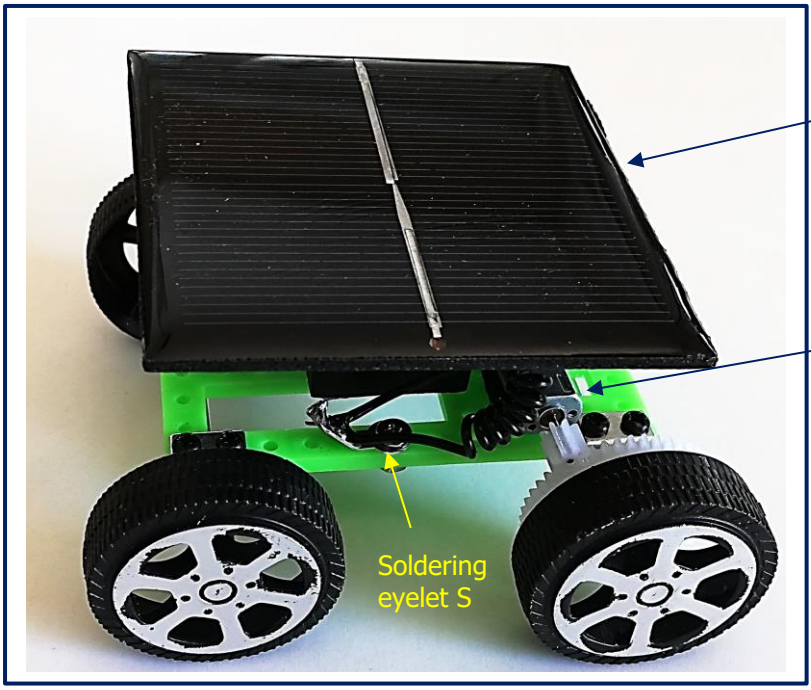
The solar runabout turbo

Simple beginner's solar vehicle for primary school and lower secondary school



The basis for the vehicle is the construction kit of the solar runabout. In the "turbo" version a bigger and more powerful solar module with a bigger area and 6 times the power (compared to the basic version) is used, mounted on a spacer block. Thus we reach a higher speed with bright sunshine and even a drive under a slightly clouded sky becomes possible. The module voltage and the short-circuit current can be measured at the two soldering eyelets S, where the poles of the solar module are soldered on.

Technical data:

Vehicle
Vehicle length: 80 mm
Vehicle width: 65 mm
Vehicle height: 43 mm

Drive
Mini electric motor with reduction gear

Solar module
Module dimensions: 60 x 60 mm
2 solar cells in internal series connection
V_{oc} = 1,26 V I_{sc} = 480 mA P_P = 475 mW

At standard testing conditions
S = 1000 W/m², T = 25°C, AM = 1,5

The vehicle is available for delivery as a construction kit or a ready-to-use device.
Required tools for the construction kit:
Cross tip screwdriver (included in construction kit), long-nosed pliers, soldering station with lead free tin solder.
Experiments: The vehicle comes with an extensive experimentation manual.