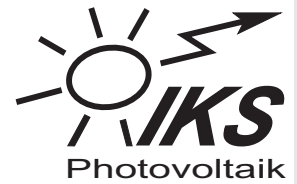


# WINDTRAINER junior



## Windenergy-experimental kit for teaching at schools

The available experimental materials allow the carrying out of all basic experiments in the field of windenergy.

Because the experiments are built up modularly the adaption to the actual teaching is possible according to the requirement.

The materials are arranged clearly and optically attractive in a specific with suitcase. Everything is always completely at hand, extra material is not necessary.

The experiments can be built up and removed fast. The pupils are able to carry out the experiments by themselves with the help of the easily understandable experimentation instruction. The teacher gets further information to do the exercises and to understand the physics.



Picture is showing optional extra



### With the set of equipment supplied, the following experiments are possible:

- Measuring of the wind force in the vicinity of the school
- Measuring of the wind force of the wind machine depending on the adjustment of the control knob
- Power output of the generator depending on the shape of the wing (even / curved)
- Power output of the generator depending on the number of wings (2, 3, 4)
- Power output of the generator depending on the position (angle) of the wing
- Characteristic curve of a generator (U/I) at constant speed
- Characteristic curve of a generator (U/I). Measuring the resistance- and buoyancy rotor at constant wind force

- Power output of the generator depending on the wind force
- Charge of an akku/Gold Cap with the generator
- Discharge an akku/Gold Cap with different loads
- Build up of a stand alone operation net

### With extension kit savonius rotor:

- Characteristic curve of a savonius rotor (U/I) at constant speed
- Power output of the savonius rotor operating with and without aperture

Wind power plant with protection cover and degree scale

Controllable wind machine (low voltage)

Anemometer



Basic board with frame to put the experimental boxes und multimeters

Accessories and tool

### Set of equipment supplied:

- Specific white suitcase with shaped part made of foam plastic
- Basic board with frame to put the experimental boxes und multimeters
- Wind machine with controllable power supply
- Wind power plant with axial rotor, generator without gear, with tacho generator, hub for mounting 2, 3, and 4 wings, angle of the wings adjustable
- 4 wings even, 4 wings curved
- Protection cover, wind shield, tool
- 2 multimeters with 2 mm connectors
- Anemometer
- Load box with electric motor and light bulb
- Storage box with NC accumulator and GoldCap and blocking diode
- Measuring box with variable resistor
- Experimental instruction / experimental solutions / professional informations/CD

### Optional extension kit:

- Savonius-Rotor



Subjekt to alteration. Pictures partially with optional extra.  
State: 2014-06

IKS Photovoltaik GmbH  
An der Kurhessenhalle 16 b  
34134 Kassel / Germany  
Phone +49 (0) 561 / 9538050  
Fax +49 (0) 561 / 9538051  
[www.iks-photovoltaik.de](http://www.iks-photovoltaik.de)  
[info@iks-photovoltaik.de](mailto:info@iks-photovoltaik.de)

Reseller