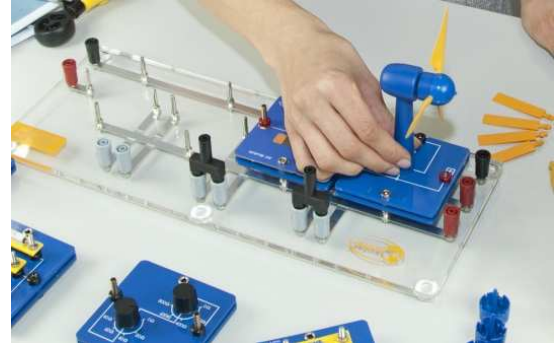


# WIND ENERGY TRAINING SYSTEM



## FEATURES

- Wind Energy Training System offers you practical oriented experiments for technical training while including interesting basic experiments at the same time.
- Wind energy currently covers the highest proportion of renewable energy production.
- The demand for highly qualified staff is at a very high level due to really fast build-up of new wind power plants,
- Wind Energy Training System has many applications & is varied from vocational school to college level.

## EXPERIMENTS

- **Basic Electronic Experiments**
  - Setup of a simple circuit
  - Ohm`s law
  - Series connection of ohmic resistances
  - Parallel connection of ohmic resistances
  - Start-up and idling behavior of a motor
- **Basic Wind Experiments**
  - Examine the wind speed behind the rotor
  - Energy balance sheet and efficiency of a wind turbine
  - Rotational speed and speed ratio of a wind turbine.
  - Change the turbine voltage by connecting a consumer
- **Influence of a Consumer**
  - Characteristic curves and rotational speed of a wind turbine
- **Influence of the Wind Speed**
  - Voltage of a wind turbine dependent on the wind speed
  - Rotational speed and output dependent on the wind speed
  - Voltage dependent on the wind direction
- **Influence of the Wind Direction**
  - Rotational speed and output dependent on the wind direction
- **Influence of the Generator Model**
  - Voltage dependent on the rotor model
  - Rotational speed and output dependent on the rotor model
- **Influence of the Rotor Blade Shape**
  - Voltage dependent on the rotor blade shape
  - Rotational speed and output dependent on the rotor blade shape
- **Influence of the Number of Rotor Blades**
  - Voltage dependent on the number of blades
  - Rotational speed and output dependent on the number of blades
  - Voltage dependent on the rotor blade pitch
- **Influence of the Rotor Blade Pitch dependent on the Rotor Blade Pitch**
  - Start-up speed of a wind turbine dependent on the rotor blade pitch
  - Rotational speed and output dependent on the rotor blade pitch

## COMPONENTS

- Motor module Pro
- Wind turbine module Pro
- Potentiometer module Pro
- Savonius rotor module Pro
- Wind rotor set
- Base Unit Professional
- Wind machine
- Anemometer Pro
- Resistor module (triple) Pro
- Resistor plug element 100 Ohm
- Resistor plug element 10 Ohm
- Resistor plug element 33 Ohm
- AV-Module
- Power Module
- Propeller
- Safety test lead, 50cm, red
- Safety test lead, 50cm, black
- Safety test lead, 25cm, red
- Safety test lead, 25cm, black
- Safety short-circuit plug, with mid socket
- Rotational-speed sensor
- Aluminium case