



## GENERAL EXPLANATION

This training set is designed to make sense of the logic of the simple wind turbine cycle.

## EXPERIMENTS

1. Wind turbine power generation-air velocity relationship
2. Calculation of turbine efficiency

## DIMENSIONS

Control Panel  
A x B x H : 880 x 450 x 1500 mm

Wind Turbine  
A x B x H : 800 x 750 x 1595 mm

## OPTIONAL FEATURES

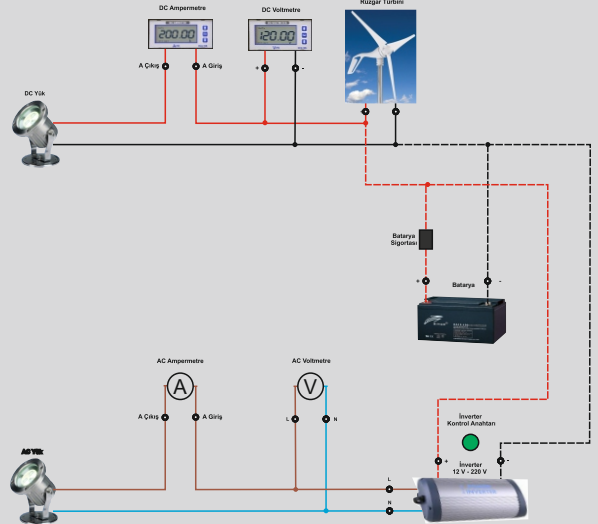
- Touch LCD Display
- USB Computer Connection
- Computer Control

## PACKAGE INCLUDED

Device, device cover, 1 printed experiment report, circuit diagram and product catalog

## TECHNICAL SPECIFICATION

Wind turbines consist of propeller blades, shaft and generator. When the wind blows, the wind hits the wing of the propeller and starts to rotate it. In this view, kinetic (motion) energy is obtained by wind energy. Propellers are designed to turn in the same direction when the wind is blowing. When the propellers turn, the shaft connected to it also begins to turn. When the shaft rotates, movement occurs in the motor and electrical energy is generated at the output of the motor. Electric energy is produced by electromagnetic induction. For the calculation of the energy generated by a wind turbine, the speed of the wind and the diameter of the propeller are needed. Theoretically, it is necessary to increase the diameter of the propeller to increase the generated energy. This means that the height of the wind turbine also increases. It takes more wind and provides a faster spin.



## TECHNICAL DETAILS

- Wind turbine
- Battery
- 220V output inverter
- Fan
- Lamp
- Halogen lamp
- Siren