



GENERAL EXPLANATION

This training set is designed to demonstrate the practical working principle of tunnel-type wind turbines.

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

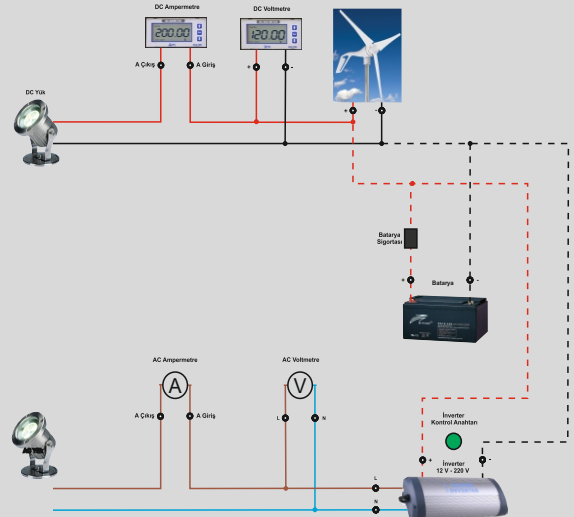
- Touch LCD Display
- USB Computer Connection
- Computer Control

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 propeller slams its wings and starts to turn it. In this way, wind energy and kinetic (motion) energy is obtained. The propellers are designed to rotate in the same direction as the wind blows. With the rotation of the propellers, the shaft, which is connected to it, begins to rotate. With the rotation of the shaft, movement occurs inside the motor and electric energy is generated at the output of the motor. Electrical energy is produced by electromagnetic induction. For the calculation of the energy produced by a wind turbine, wind speed and propeller diameter are needed. In order to increase the energy produced theoretically, it is necessary to increase the propeller diameter. This means that the height of the wind turbine also increases. This results in faster rotation.



TECHNICAL DETAILS

- Wind turbine
- Tunnel type fan
- Tunnel
- Regulator
- Inverter
- Lamp
- Battery