

WIND POWER SYSTEM

Mod. F-SE/EV

DESCRIPTION

This kit shows the typical configuration of a wind generator of horizontal axis being able to convert the kinetic energy of wind directly into mechanical energy.

TRAINING PROGRAM:

- Studying wind power: calculation of the average power developed by wind in a specific place
- Wind generator: typical structure, installation, orientation. Brushless generator
- Studying the operation of voltage regulator
- Conversion of energy
- Energy storing devices
- Experimental efficiency of a wind power system (optional datalogger and sensors required)
- Noise of a wind power system (Phonometer required - not included, supplied upon request)
- Electromagnetic Compatibility of a wind power system (EMF meter required - not included, supplied upon request)

TECHNICAL SPECIFICATIONS:

- Wind generator of horizontal axis with base
- Measuring panel with voltmeter and ammeter
- Inverter of 300 W (mounted on the panel) for transforming the output voltage of the battery into current at 220 V - 50 Hz
- Various leads for connections
- Lamp of 220 V that will be used when connected with inverter output
- Lead battery (voltage rating: 12 Vcc; capacitance: 100 Ah)

Optional sensors and EVLAB datalogger allow to gather and visualize speed and wind direction, load current of wind turbine, level and load current of battery.

Data gathered with the software, can be viewed in graphics and tabular form, and they can also be exported in Excel file for further analysis.



SUPPLIED WITH

THEORETICAL - EXPERIMENTAL HANDBOOK



OPTIONAL

- EVLAB DATALOGGER mod. EVS-EXP/EV including SOFTWARE EVLAB WORKSPACE mod. SW-F-SE/EV for a total control of interactive experiments
- High current sensor mod. EVS-20/EV
- Anemometer sensor mod. EVS-25/EV
- Voltage sensor mod. EVS-27/EV
- PERSONAL COMPUTER

