



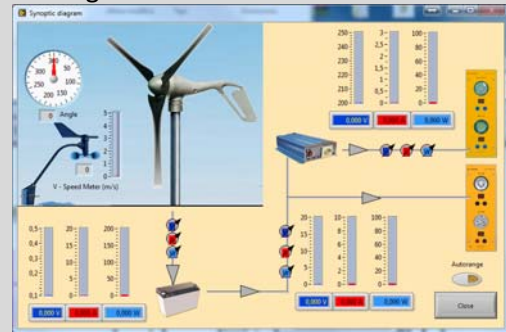
WIND ENERGY MODULAR TRAINER WITH MOTOR DRIVE FOR INDOOR USE



DL WIND-A1S

Didactic system for the theoretical and practical study of wind power facilities.

The device includes a stepper motor kit to drive the wind generator in absence of wind.



Complete with connecting cables, experiment manual and **software for data acquisition and processing**.

TRAINING OBJECTIVES

- Identification of the components
- Installation and testing of the wind turbine
- Installation and testing of the anemometer
- Operating the wind turbine and the anemometer
- Braking in the no load operation/open circuit/free spinning mode
- Braking in the braking mode
- Battery regulating and charging
- Direct current wind energy installation
- Supplying AC load with wind power stored in a battery
- Supplying AC load with wind power and a battery
- Complete system for wind energy

Approx. packing dimensions: 1.11 x 1.11 x 1.12 m.
Weight: 200 kg.

ALTERNATIVES:

DL WIND-A

Trainer with real wind turbine.

DL WIND-A1G

Trainer with connection to mains.

DL WIND-A1

Same as DL WIND-A1S, but with a DC drive motor kit instead of the stepper drive motor kit.

DL WIND-B

Wind power trainer with wind tunnel.

TECHNICAL SPECIFICATIONS

- A wind turbine, 160W, 12V.
- Anemometer and wind direction sensor mounted on a stand.
- A supporting frame for the modules.
- A battery.
- A battery control module, 12V, 32A.
- A load module. It includes two 12V lamps, dichroic 20W and LED 3W, with independent switches.
- A load module. It includes two mains voltage lamps, dichroic 35W and LED 3W, with independent switches.
- A module for the measurement of: wind speed (m/s), wind direction (degrees), current up to 30V, $\pm 15A$ (two dc ammeters), voltage up to 30V and power up to 1000W.
- A dc to ac converter module, with sinusoidal output at mains voltage. Average power: 300 W.
- A step motor driving kit.