



WIND ENERGY TRAINER WITH BATTERY CHARGE REGULATOR AND BATTERY



DL WIND-OG

Modular trainer for the theoretical and practical study of the electrical installations with wind energy.

With the wind trainer it is possible to perform experiments to determine the characteristics of a wind generator and study their off-grid operation with a battery charge regulator.



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

DIDACTIC EXPERIENCE

STUDY OF WIND TURBINE

- Identification of wind turbine components
- Operating the Wind Turbine Breaker
- Calculating wind power

STUDY OF OFF-GRID WIND SYSTEM

- Dimensioning of an off-grid wind system.
- Battery regulating and charging
- Supplying DC load with wind power stored in a battery
- Supplying AC load with wind power and a battery.
- Calculating the system autonomy with different loads

TECHNICAL SPECIFICATIONS

- Battery protection module
- DC load module. It includes a 20W dichroic lamp and 3W LED lamps, with independent switches.
- AC load module. It includes a dichroic lamp and LED lamps, with independent switches.
- Motor/generator group for the simulation of a wind turbine. Composed of a brushless motor and a DC permanent magnet generator.
- Control module for brushless motor drive
- Anemometer
- 100Ah battery
- Off-grid inverter module
- Multifunction measurement module for wind applications: It includes four separate instruments to measure all fundamental parameters for the study of a wind-system.
- Wind turbine charge controller with brake system,
- Support frame for modules

Average hours of training:8h