



SOLAR/WIND ENERGY MODULAR TRAINER



DL SUN-WIND-S

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

Composed of:

- A photovoltaic inclinable module, 90W, 12V, complete with a cell for measuring the solar irradiation and with a temperature sensor.
- A wind turbine
 - Wind turbine 12 Vdc, 160 W
 - Supporting frame 1.5 m.
 - Anemometer and wind direction sensor.
- A set of modules with a supporting frame:
 - A battery control module, 12V, 32A, with battery.
 - A load module with two 12V lamps, dichroic 20W and LED 3W, with independent switches.
 - A load module with two mains voltage lamps, dichroic 35W and LED 3W, with independent switches.
 - An electronic regulation module, with LCD screen.
 - A rheostat.
 - A module for the measurement of solar irradiation (W/m²), solar panel temperature (°C), current, voltage and power.
 - A module for measuring wind speed and direction.
 - A stepper motor kit for indoor use of the wind turbine.
 - A dc to ac converter, with sinusoidal output at mains voltage. Average power: 300 W.

The trainer is complete with connecting cables and experiment manual.

Complete with data acquisition and processing software.

Option:

DL SIMSUN: module with lamps to provide suitable lighting for the solar panel when used indoor.

Alternatives:

DL SUN-WIND: DC motor kit instead of stepper motor.

DL SUN-WIND-ST: Stepper motor kit and solar tracking panel instead of the standard solar panel.

