



## PHOTOVOLTAIC SOLAR ENERGY TRAINER



**DL SOLAR-A**

Didactic system for the theoretical and practical study of photovoltaic solar energy facilities.

It is mounted on a mobile structure that allows it to be moved to the venue for practical sessions and allowing the photovoltaic panel to receive solar radiation.

Complete with connecting cables and experiment manual.

### TRAINING OBJECTIVES

- Identification of all components of the trainer and how they are associated with its operation
- Measurement of solar irradiation
- Measurement of the voltage and power parameters of the photovoltaic panel
- Programming the load regulator
- Analysis of the installation of the trainer
- Direct current supply
- Alternating current supply

BASE DIMENSIONS: 400 x 610 mm.  
HEIGHT WITH THE PANEL AT 45°: 900 mm.  
Net weight: 50 kg.

The photovoltaic panel, which can be inclined through a range of 0° to 90°, and the calibrated cell used to measure solar irradiation, are on one side, and all of the components of a basic photovoltaic facility used to provide 12 V of direct current and 230 V of alternating current are on the other side.

### TECHNICAL SPECIFICATIONS

- 50 W, 12 V photovoltaic panel.
- Cell for measuring solar irradiation.
- Programmable electronic load regulator, with a large LCD screen.
- 150 Wp semi sinusoidal inverter to obtain 230 V of alternating current.
- 17 A/h battery.
- Lamps used with loads of 12 V and 230 V
- Instrument used to measure solar irradiation in W/m<sup>2</sup>.
- Instrument used to measure the charging current.
- Two protective magneto-thermal switches.