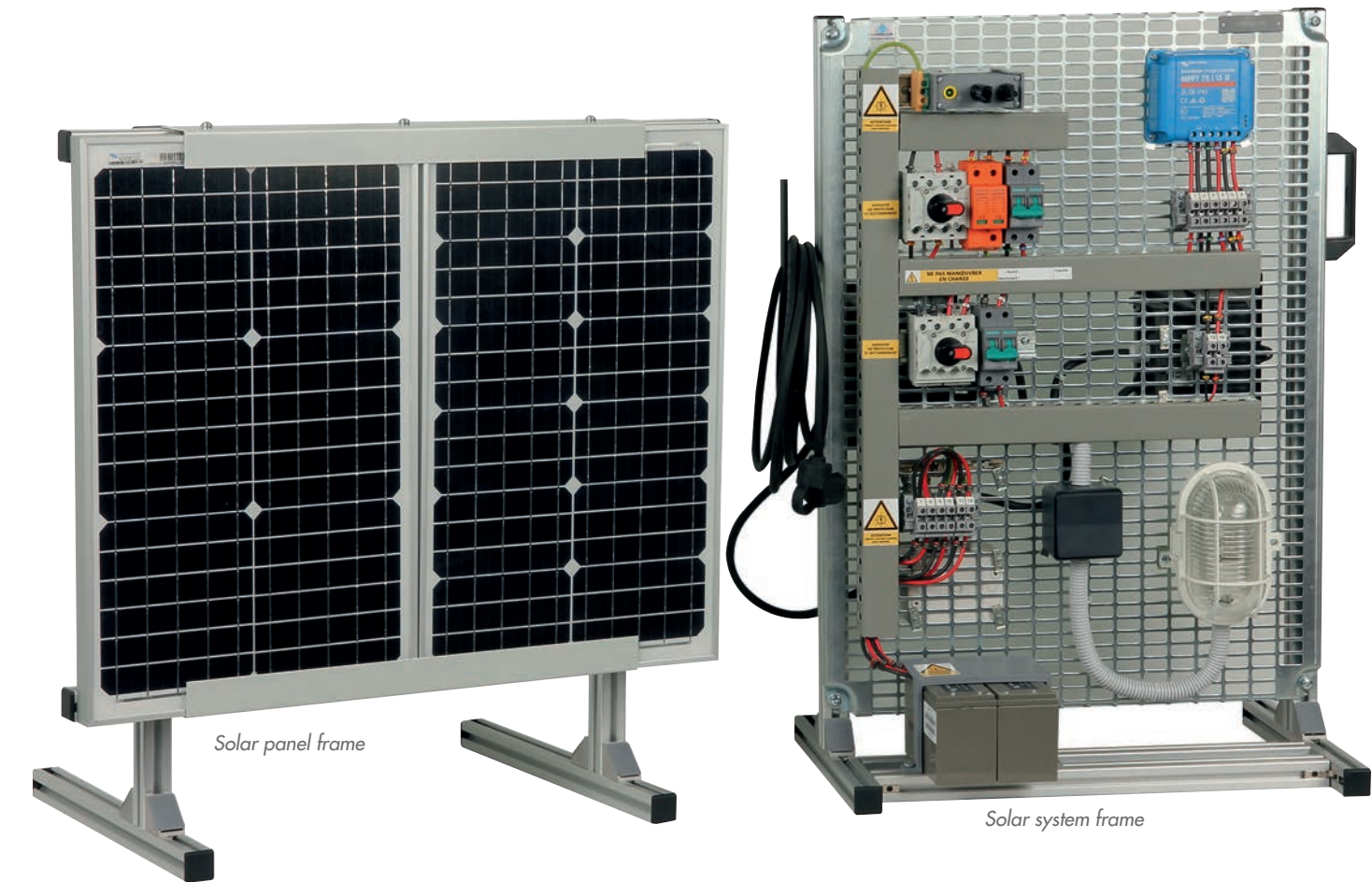


MODEL FOR ELECTRICAL ACCREDITATION IN A SOLAR INSTALLATION



ref. HABILIT-SOL

SUPPLIED
CONFIGURED

Bluetooth

TEACHING RESSOURCES
STUDENT / TEACHER

This model allows the application of knowledge, rules and methods for the electrical accreditation (BC / B1 / B2 / BE / BR / BP) on a solar installation.

The content of this training is based on the rules enacted by the French standard on the prevention of electrical hazards.

Compact, to place on a table, this model represents a photovoltaic system. It is composed of two distinct elements:

- A frame with 2 solar panels. This frame can be tilted to simulate an installation on a roof.
- A structure with, on one side, protection and electrical distribution components. On the other side, 2 projectors to simulate sunlight.

The protection by circuit breakers and the very low service voltage (12Vdc or 24Vdc depending on the battery coupling) make the use of the model entirely safe.

EDUCATIONAL OBJECTIVES

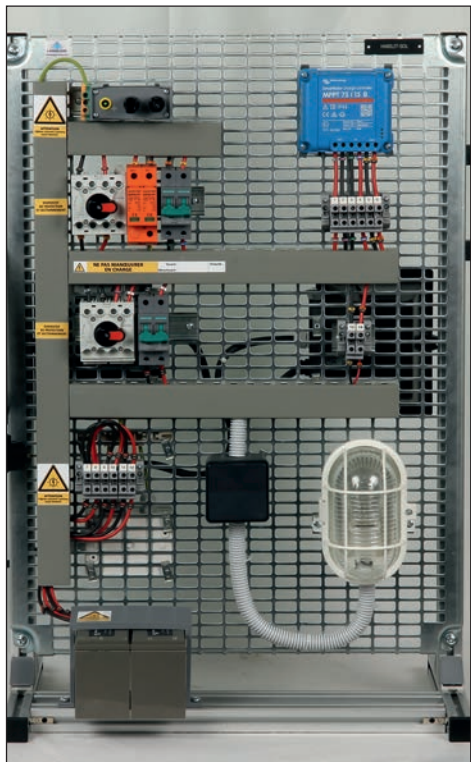
- Study a solar installation for the electrical energy production
- Apply knowledge, rules and methods according to the accreditation of electrical hazards
- Carry out practical work and wiring tasks related to photovoltaic electrical accreditation
- Practice maintenance and servicing operations on a photovoltaic installation
- Practice consignment operations for electrical equipment
- Carry out measurement readings

Practical work provided

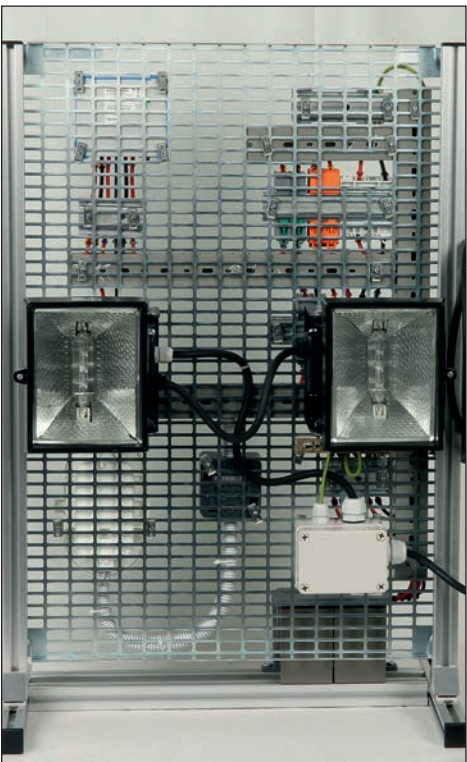
- Reminder of the prevention of electrical hazards
- Components Identification from electrical diagrams
- Securing for maintenance
- Consignment of a disconnector
- Drafting of consignment and authorization documents
- Verification of the proper use of I.P.E
- Realization of voltage / current measurements
- Replacement of an accessory
- Performing solar panel maintenance operations
- Study and realization of solar panel couplings
- Study and realization of battery couplings
- Configure Bluetooth communication.
- Configure a photovoltaic installation from a tablet or a smartphone.



Mesure de tension



Front face solar system frame



Back side solar system frame

Solar system frame composition

Front face

- 1 connection terminal block on solar connectors
- 2 disconnectors with visible cuts, lockable
- 2 DC circuit breakers
- 1 surge protection
- 1 MPPT (Maximum Power Point Tracking) load regulation system with twilight detection. All data such as voltages, currents and solar panel powers, are recorded and can be consulted on a smartphone or a tablet via a Bluetooth application (graphic visualization).
- 3 rows of industrial terminals
- 2 gel batteries 12V/8Ah
- 1 switch
- 1 light 24VDC
- 1 safety instructions panel for electrical accreditation

Back side

- 2 halogen spotlights 230VAC
- 1 earth connection terminal block
- 1 power cord to power the projectors 2P + E

Specifications

- 630 x 400 x h 820mm
- Weight: 25kg

Supplied accessories

- 2 padlock consignations
- 1 battery charger

Solar panel frame composition

- 2 x 30Wc solar panels to connect on solar connectors

Specifications

- 700 x 400 x h 790mm / Weight: 5kg



Panel frame mounting: roof installation simulation