

SOLAR PUMPING STATION



Experimental capabilities

- Study solar panels
- Study of a pump in charge or in suction.
- Yield study
- Study of the influence of the panel orientation
- Efficiencies calculation
- Yields calculation
- Assembly of the experiences

Operating principle

4 polycrystalline modules 80 Wp 12V.

Circulation pump with rotary fans in brass.

A 12 Volt battery.

The instrumentation allows to measure all electrical parameters of the installation (power, voltage, current).

The robust design of this device makes it suitable for use in schools.

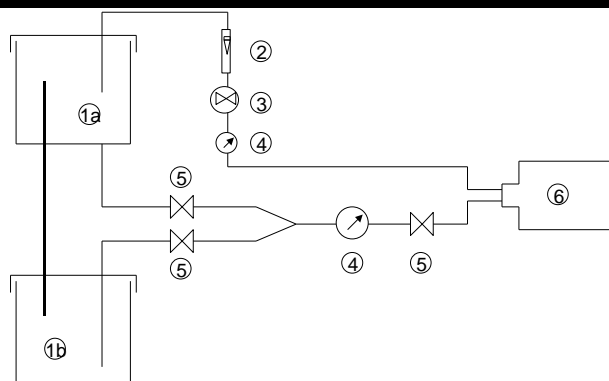
The equipment is set up on an Anodized aluminium frame on casters wheels. This gives it great strength and a flexibility of integration into your premises.

The manufacture of this equipment complies with the European standard for machinery manufacturing.

This equipment can be used alone or with other compatible equipment from our range (see last section of this document).

Illustrations

Technical details



1) Sharp Solar panel 80:

Physical characteristics:

Technology: Multicrystalline
Cell dimensions: 125 mm
Number of cells: 36
Dimension (mm): 1200x530x35
Module weight: 8.5 Kg

Electrical characteristics (1000 Watts / m² - 25 °C):

Peak power: 80 Wp
Max voltage: 600V
Temperature coeff: -0.0781 mV/°C
Cell Yield: 14%
Module yield: 12.6%

2) Circulation pump:

- Mechanism with rotary fans in brass, carbon graphite and stainless steel.
- Accepts the seawater and stainless minerals.
- DC motor (maintenance free).
- Suction capacity: 5 meters

3) Battery

- Brand: ENERSOL 80
- Nominal voltage: 12 V
- Load current: 0.66 A
- Dimensions: 278 x 175 x 190 mm

Services required

Documentation

- Electrical supply : 230 Vac – 50 Hz
- Dimensions: (LxWxH mm): 3200 x 850 x 1800
- weight (Kg): 250

- User's manual
- Technical documentation of the components
- Lab exercises
- Certificate of conformity CE

Note : if the equipment installation is operated by our staff, all supplies and exhaust connections required must stand at less than 2m from the machine