DUAL ENERGY ELECTRIC GATES, SOLAR OR MAINS 230VAC

POA-1 - Street side view

POA-1 - House side view

The gates POA-1 and POA-2 are supplied with an autonomous wheeled frame comprising a solar panel 25W-24VDC and two spotlights simulating the sun.

Non-solar versions
Ref. POA-11 and POA-22

- Frame made of matt anodized aluminium on casters, two with brakes
- Power of the panel: 25 Wc
- 2 projectors for simulating the sun's rays
- 2 photovoltaic cables 3 metres for linking the panel to the wiring frame
- Dimensions of the panel frame: H 1300 x 900 x 620mm

ref. POA-1 swing gates

ref. POA-2 sliding gate

VIDEO PLAY THE DEMO VIDEO

EDUCATIONAL OBJECTIVES

- **To observe and understand the operation of electric gate automation.**
- **Reminder about the different solar panel technologies.**
- **To study the operation of an assembly of solar panel, battery, charge regulator.**
- **To take measurements of electrical values.**
- **To study the operation of photo-electric cells.**
- **To learn how to program gate automation according to several operating criteria.**
- **To perform industrial maintenance operations.**

TEACHING RESSOURCES STUDENT & TEACHER

Practical works

- Study and identification of the different components of the gate.
- Measurement of the current, voltage and power absorbed by the motors.
- Measurement of the current, voltage, and solar power.
- Study of the operating principle of photo-electric cells.
- Configuring the different gate operations.

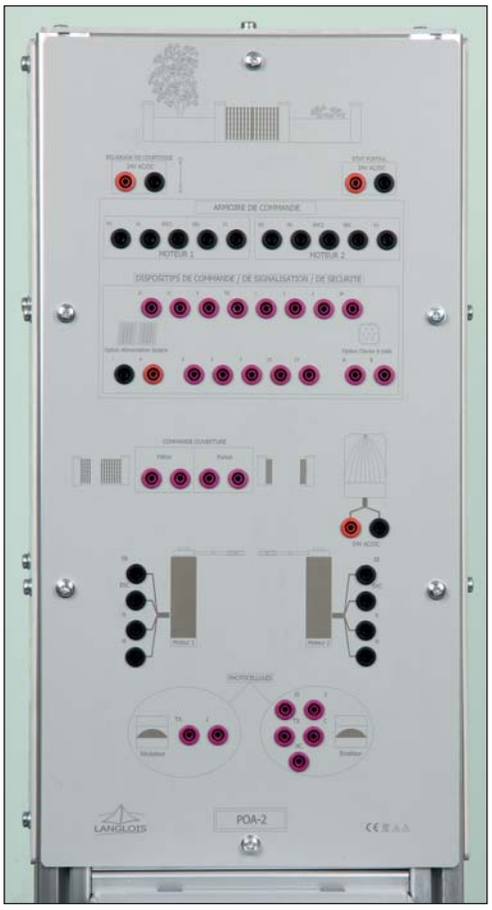
Automated solar swing gates (POA-1).
Automated solar sliding gate (POA-2).
All the electrical connectors of the components (motors, cells, light, control board) are brought to one front using 4mm safety terminals. Thus the student can wire, using the safety leads, all the operations of the gate with no risk of deterioration of the screws or connectors of the components. They can also quite safely read the different voltages and currents of the system. The many operating parameters can be modified in the electrical cabinet using the programming console with digital display. There are two types of power supply wiring for the gates:

- Wiring by solar energy power supply.
  The solar panel is linked to the gate's electrical cabinet.
  Operation is autonomous thanks to the 24VDC batteries.
- Wiring directly to the electricity mains 230VAC using its mains lead with plug 2P+E.

The assembly is supplied fully functional with examples of operation. A CD contains the user instructions and tutorials.
Dimensions:
Overall: H 1700 x W 1400 x 630mm (POA-1)
Overall: H 1700 x L 1800 x 630mm (POA-2)

Composition of the gates

- One electronic unit with control board equipped with digital display and three pushbuttons for configuring the assembly.
- One console with printed diagram of the different components including all the gate's connectors. Interconnection with safety leads supplied.
- Two gear motors 24VDC with hinged arm (version POA-1) and one motor 24VDC (version POA-2).
- One signalling light.
- One pair of photocells.
- One face equipped with 2 indicator lights to simulate lighting in the gate opening area and garden lighting.
- One two position switch for opening/closing of the gate, or a single leaf (for version POA-1).
- One unit with battery 24V-12Ah and charge regulator 24VDC



Connection console with printed diagram

Rear surface with printed diagram and indicator lights

CAME® gear motor

THESE ELECTRIC GATES ARE ALSO AVAILABLE ON NON-SOLAR VERSIONS (Ref. POA-11 and POA-12)