# Photovoltaic array SIMULATOR (1800Wp)

This power supply takes slope and regulation criteria of several photovoltaic modules, with the following characteristics: Programmation of the short circuit current and of the open voltage, from:

- manual control by front multiturn potentiometers
- external control from voltage 0/10V
- automatic cycle according to real registration of an external photovoltaic cell, in accordance with real time cycles\*.

Programmable slopes thanks to menu Control :

- by alphanumeric LCD display with several menus
- RS232 link
- analogical signal from 0 to 5V
- maximal PV power dry contact relay with programmable tolerance.

\* Connected to AINELEC PV Simulator, a standard photovoltaic cell collects a day sunshine. From this sample, an extrapolation is done about the entire PV array by a multiplying coefficient. It is possible to speed up or slow down the day sunshine curve covering. Plots describing sunshine curve can be also programmed manually.

## **Electrical characteristics:**

Output power: 1800W

Input: 230V+/-10% or 110V 50-60Hz Programmable voltage from 10% to 100% of Vomax, by multiturn potentiometer Vo (step of 1%) Current of cell solar: from 0,5A to 4A adjustable by multiturn Ipv, to get Icc max on the power supply Slopes programmable Rs/Rp of 0 to 50% (step of 0,5%) Adjustable internal clock (hour, minute) Selection switch manual, PV and automatic

## **Interface:**

LCD display with 2 lines of 16 characters 2 leds indicate the regulation zone RS232 output, on DIN 9 pins, protocol 4800 bauds ASCII VT100 Analogical signals on DIN card 5 pins 180°: Is/Vs/Pmax/Ps of 0 to 5V full scale.

## **Protective functions:**

Security: primary differential, output cutout Isolation between input and output: 3kV Forced ventilation to the rear of the cabinet Dry contact for defect, breaker circuits and PowerMax

## **Mechanical characteristics:**

Cabinet of table of type 3U/84E - color RAL7032 Outlines: 500x180x400mm (LxHxP) Weight: about 13kg Feet to the rear for main wires Reclining transport handful by selector

## **Product range:**

Simulators	Icc max (A)	Vo max (V)
ALS75V25A	25A	75V
ALS90V20A	20A	90V
ALS150V12A	12A	150V



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Connection in serial or in parallel



Backside panel





