

# Environmental chambers for Photovoltaic (PV) Modules

CLIMATS

SPECIAL



Manufacturing of 3 environmental chambers of 4, 6 and 8 m<sup>3</sup> meant for Export to carry out **Photovoltaic (PV) Modules** tests standards.

Among these three chambers, two will be used for saturated humidity / freeze combined tests and the third one for stabilized tests at +85°C with or without humidity.

Important particularities have been taken into account during the study and realization of these chambers :

- the development of a charts smart system that can be adapted on most photovoltaic (PV) modules in order to ease their handling when loading and storing.
- a humidity production and a ventilation especially adapted to standards requirements.

Thanks to a new evolution of our piloting software **Spirale 3**, the cycle progress is continuously watched and analyzed.

As soon as the temperature or the humidity rate runs beyond the set tolerances (according to a standard or other constraints), an indicator is actuated for the overrun duration, without stopping the test.

This visual indicator enables the user to quickly appreciate the test integrity, while the cycle is running or during its reading, and eases the results analysis.



## Technical features

### Temperature range

from +100°C to -70°C

## Applicable standards

**IEC 61215 and IEC 61646 standards** combining long tests of saturation at +85°C with 85% of relative humidity, followed by sub-zero temperature controlled pull-downs.

**IEC 61215 and IEC 61646 standards** combining dry heat tests at +85°C, followed by sub-zero temperature controlled pull-downs.

**IEC 61215 and IEC 61646 standards** combining long tests of saturation at +85°C with 85% of relative humidity during a 1000 hours duration.

**IEC 60068-2-2 standard** meant for high temperature aging tests at +85°C without humidity control during a 1000 hours duration.

