



Foto: Eurac Research/Ivo Corrà

LABORATORY

Accelerated Life Testing Lab

Climatic chamber for accelerated life tests

Accelerated Life Testing Lab

Our climatic chamber (1.3 x 1.5 x 2.2 m) simulates accelerated life cycles to evaluate the degradation of the performance of industrial products such as photovoltaic modules, plastics and electronic components. Cycles include controlled conditions of temperature and humidity.

Climatic Chamber

The Angelantoni PV4500 climatic chamber incorporates humidification, refrigeration, heating and dehumidification to fully control the temperature and humidity to which the test sample is subjected in its real environment. Temperatures can range from -40°C to +90°C and the relative humidity from 20% to 95%.

Testing on photovoltaic modules and other components

The chamber can accommodate up to 10 standard-sized PV modules. Tests comply with the IEC 61215:2016 standards and simulate the environmental conditions to which a photovoltaic system is exposed during its life cycle, accelerating the natural degradation process. It is also possible to test plastic materials and electronic components.

Company Service Expertise

The laboratory is part of a broader collaboration between research and business that can take a prototype to a market-ready product, passing through simulation phases, specific tests and optimisation.

Eurac Research offers companies consolidated knowledge-base that has been developed through international networks and applied in numerous projects with local companies, including focus on quality and reliability of modules, the study of the solar resource and the integration of photovoltaics within buildings and networks.

