

Foto: Eurac Research/Ivo Corrà

LABORATORY

Solare PV Lab

Solar simulator for photovoltaic modules

Solare PV Lab

Our pulsed light solar simulator measures the electrical performance of PV modules. By subjecting samples to the same controlled and repeatable conditions, these tests permit, for example, the verification of manufacturer-guaranteed performance specifications or the comparison of the electrical yield of different PV module technologies.

Solar Simulator

We can reproduce the solar spectrum with our class “AAA” pulsed light solar simulator (IEC 60904-9) that has thermal control of the test conditions. The simulator measures the characteristic curve IV of the PV module under standard conditions (defined by IEC 60904). Furthermore, the measurements determine both the performance of the PV module in different combinations of irradiance (0-1000 W/m²) and temperature (5-75°C) and its temperature coefficients.

Company Service Expertise

The laboratory serves 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. Solare PV laboratory offers additional specific services such as diagnostic tests on photovoltaic modules using thermography and electroluminescence and characterization of inverters up to 5 kW.

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 resources and the integration of photovoltaics within buildings and networks.

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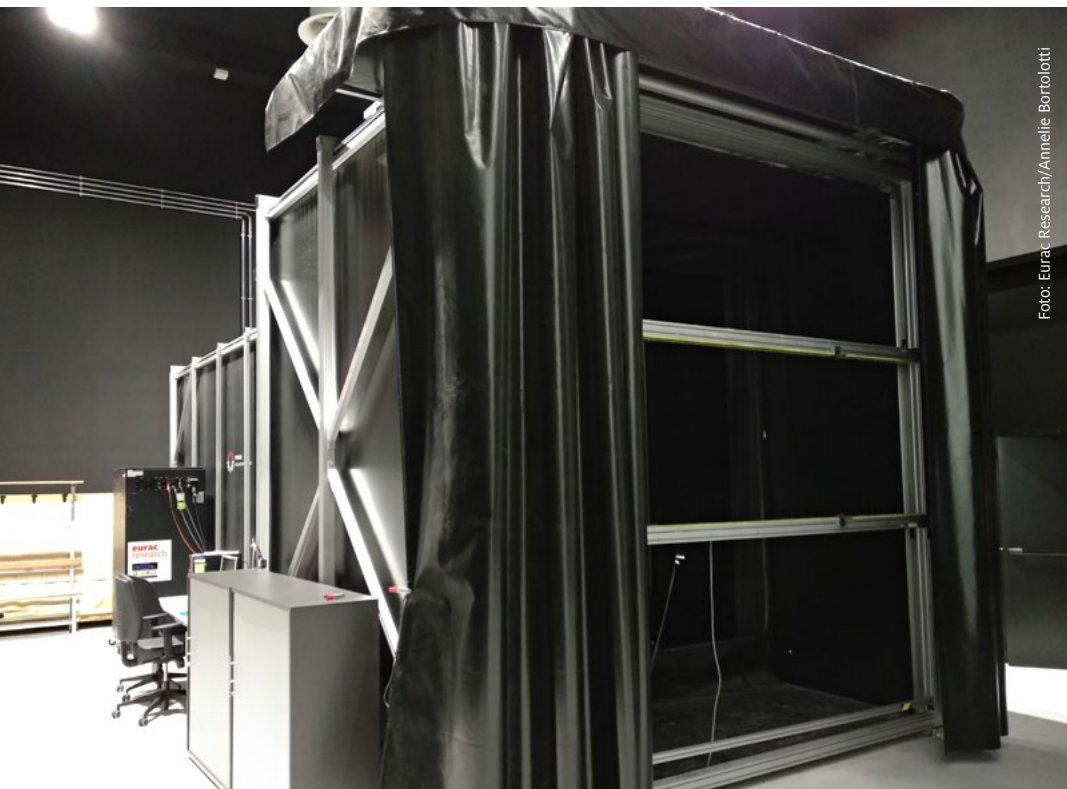


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LAB N° 1785L
Membro degli Accordi di Mutuo Riconoscimento EA, IAF e ILAC
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Solare PV laboratory of Eurac Research is accredited by the Italian accreditation body Accredia and performs testing activities on crystalline silicon photovoltaic modules for terrestrial applications in accordance with the requirements of UNI CEI EN ISO/IEC 17025:2018. Complete list of accredited tests on the Accredia portal

