Services

Testing services

- Interconnection requirements of DER
- Grid-connected storage
- Photovoltaic modules
- Power-hardware-in-the-loop
- Electromagnetic compatability requirements for DER
- Static converters in grids
- Ancillary services
- Network protection

Database of DER and Smart Grid Research Infrastructure

The Database contains systematic information on research infrastructure and related assets, testing capabilities and services of the leading research institutes, universities and companies focusing on DER and smart grids.

Database of Grid Connection Requirements for Generators

The Database is the access point to European grid connection requirements for DER. You can find national and international grid codes and interconnection specifications by country, energy source, segment and technical keywords.

STARGRID Smart Grid Standardisation Information Tool

The tool provides information on smart grid standards and related documents, such as standards and specifications, both published and in draft status,

Pre-standardisation

DERlab and its members support the work of several standardisation committees at the national and international levels, such as:

- International Electrotechnical Commission (IEC)
- European Committee for Standardisation (CEN) and European Committee for Electrotechnical Standardisation (CENELEC)
- IEEE Standards Association and others.

DERlab participates in several international research projects and publishes guides and technical white books on its main research areas.

Networking

- Operating Agent of the ISGAN Annex 5 SIRFN
- Member of the Open Gateway Energy Management Alliance (OGEMA)
- Member of the European Energy Research Alliance (EERA)
- Participant in the EERA Joint Programme on Smart Grids
- Member of ETIP SNET Work Group 3 Flexible Generation



Our Vision is to be the reference lab in Europe for the sustainable integration of distributed energy resources into power systems.

Our Mission is to perform tests, pre-competitive and pre-normative research, as well as training activities, supporting the transition towards more decentralised power generation.

Database of DER and Smart Grid Research Infrastructure











CONTACT

European Distributed Energy Resources Laboratories (DERlab) e.V.

Wilhelmsstraße 5 34117 Kassel (Germany) Phone: +49 561 7294 277

office@der-lab.net www.der-lab.net





European Distributed Energy Resources Laboratories













Map scaled down to 20%

The transition towards high shares of renewable energy and the tendency to a more decentralised energy supply requires a smarter grid with sufficient hosting capacity and the ability to manage the power fluctuations of the renewable sources.

High-level research and laboratory tests are vital for tackling these challenges. With the necessary expertise and capabilities, DERlab laboratories can carry out testing of individual components, such as DER converters or storage, as well as complete systems.

Futhermore, various effects that units have on the power systems can be verified in compliance with international and national standards or certification procedures.

Research Infrastructure of the DERlab Members





