

Press Release

Freiburg
June 3, 2015
No. 13/15
Page 1

TestLab Power Electronics at Fraunhofer ISE Accredited by DAkkS

Certified Testing Services Offered in Accordance with International Guidelines

As the capacity of renewable energy continues to expand, controls for public grids need to adapt and become more dynamic. This also increases the requirements on the electrical properties of the power electronics connected to the grid. To ensure the reliability of power electronics in this context, Fraunhofer ISE has been carrying out tests in accordance with different standards and guidelines for many years. Since the end of April, the TestLab Power Electronics is accredited by Germany's national accreditation body (DAkkS) and now offers an even wider range of testing services to its customers than before. With the accreditation, Fraunhofer ISE expands its strong international reputation as one of the leading power electronics laboratories worldwide.

The [TestLab Power Electronics](#) at Fraunhofer Institute for Solar Energy Systems ISE characterizes power electronic units such as inverters, DC/DC converters, chargers, etc. through to the megawatt range. In order to guarantee the reliability of power generating units, Fraunhofer ISE has been carrying out tests in accordance with the appropriate standards and guidelines for many years. The accreditation by the DAkkS contains the major international guidelines for testing the overall efficiency and electrical characteristics of grid-connected inverters as well as for the validation of models simulating these characteristics. "Power electronic components are increasingly responsible for the stable and reliable operation of our electricity grid. For this reason,

**Fraunhofer Institute for
Solar Energy Systems ISE**
Heidenhofstrasse 2
79110 Freiburg
Germany
Press and Public Relations
Karin Schneider
Phone +49 761 4588-5150
Fax +49 761 4588-9342
info@ise.fraunhofer.de

www.ise.fraunhofer.de

Press Release

Freiburg
June 3, 2015
No. 13/15
Page 2

efficiency, quality and compliance to all relevant standards are decisive factors for the manufacturers in the market today," says Sönke Rogalla, Group Head of "Sustainable Grids and Power Plants" in the Department of Power Electronics. "The accreditation of the TestLab Power Electronics by the DAkkS has confirmed our commitment to excellence and the high quality of our work."

With their extensive laboratory equipment and the highly precise measurement systems, the engineers at TestLab Power Electronics are able to offer testing services based on different international grid codes and testing standards. These include Chinese, Spanish, Italian, British and other international feed-in directives. "The cooperation with our clients begins long before the actual certification tests. We offer comprehensive support and consultation on the extensive normative requirements which are imposed on the devices today," explains Roland Singer, Head of TestLab Power Electronics. "Based on our client's needs, we draw up a customized test plan which covers as many international requirements as possible with the smallest measurement expenditure. This greatly reduces costs and testing times". Beyond their testing services, the Freiburg experts actively participate in different standardization committees to further develop the future grid codes. This enables them to present their customers with firsthand information on the current and future requirements in this area.

**Fraunhofer Institute for
Solar Energy Systems ISE**

Heidenhofstrasse 2
79110 Freiburg
Germany
Press and Public Relations
Karin Schneider
Phone +49 761 4588-5150
Fax +49 761 4588-9342
info@ise.fraunhofer.de

www.ise.fraunhofer.de

In the meanwhile, TestLab Power Electronics also offers its services on location by the customer or even in the field at large solar or wind parks. For this purpose, the engineers use their precise mobile measurement system to detect system perturbations and a test container to carry out so-called LVRT-tests. Low Voltage Ride Through (LVRT) indicates the capability of a device to support the grid voltage during short-term faults in the grid. The test container has already

Press Release

Freiburg
June 3, 2015
No. 13/15
Page 3

been employed several times to test combined heat and power plants (CHP) in the field. The LVRT behavior of several CHP units was measured up to a power of 550 kW and the grid-supporting performance was successfully verified.

Come and meet our experts at the Intersolar in Munich from June 10-12, 2015 in Hall A3.251.

Informational Material

Fraunhofer ISE, Press and Public Relations
Phone +49 761 4588-5150
info@ise.fraunhofer.de

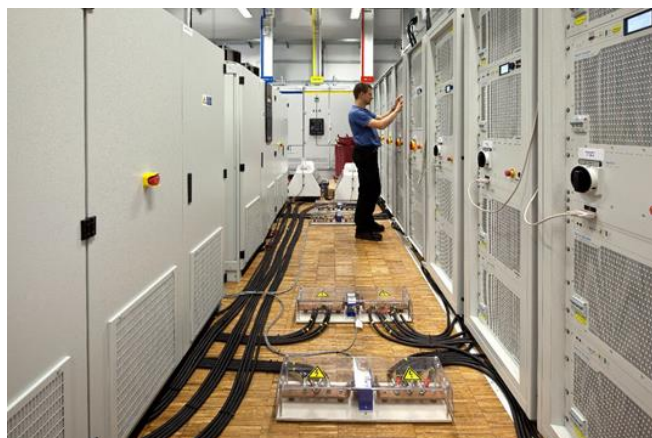
Text of the PI and photos can be downloaded from our website: www.ise.fraunhofer.de

Contact Person for further information:

Roland Singer, Fraunhofer ISE
Head, TestLab Power Electronics
Phone +49 761 4588-5948
roland.singer@ise.fraunhofer.de

**Fraunhofer Institute for
Solar Energy Systems ISE**
Heidenhofstrasse 2
79110 Freiburg
Germany
Press and Public Relations
Karin Schneider
Phone +49 761 4588-5150
Fax +49 761 4588-9342
info@ise.fraunhofer.de

www.ise.fraunhofer.de



View of engineer working at the test setup in the TestLab Power Electronics of Fraunhofer ISE: PV array simulator (right) and device under test (left).

©Fraunhofer ISE