

We provide full support in solving your measurement tasks

BUSINESS FIELD MEASURING AND TESTING SERVICES



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WE ARE YOUR RELIABLE PARTNER FOR QUESTIONS REGARDING

- Metrological verification of the properties of decentralised generation plants and their components
- Grid characteristics of inverters and CHP units
- Performance of photovoltaic and hybrid systems
- Calibration of radiation sensors (ISET sensor) and IV curve meters for PV modules (ISET-mpp meter)
- Consulting on setting up laboratory environments

WE SUPPORT YOU IN

- Measurement of the grid characteristics of power converters and internal combustion engines (CHPs) according to various grid connection guidelines
- Laboratory measurements during development on power converters (e.g. efficiency, electromagnetic compatibility, power quality, performance, ageing etc.)
- Customer-specific measurements on rotating machines
- Measurement of system technology devices and characterization of power electronics components
- Specification and setup of test environments



Member of DERlab, the expert network of leading laboratories and research institutes in the field of distributed energy resources equipment and systems



MEASUREMENT AND TESTING SERVICES

TAKE ADVANTAGE FROM OUR LONG-TERM EXPERIENCE in measurements on generating units, grids and their modeling.

We assist you with our expertise in the most diverse system relevant measurements amongst others in photovoltaic systems, storage systems and wind energy systems and support you in product development.

We support you in the specification of your own testing laboratories and test facilities in the field of smart grids and renewable energies.

A particular focus of our experience lies in the measurement and analysis of complete systems beyond the component boundaries.

BENEFIT FROM KNOWLEDGE AND EXPERIENCE



LABORATORY TESTING

- Component tests (converters, internal combustion engines (CHP), smart grid operating equipment, drive engines)
- Grid connection tests, EMC tests
- System tests (hybrid systems, PV (storage) systems)
- Hardware-in-the-loop tests (power HIL, controller HIL)
- Calorimetric measurements,
- Semiconductor switching cell



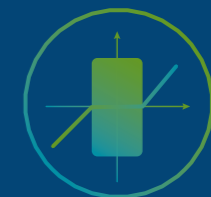
ON-SITE MEASUREMENTS

- We are also available on site with our measuring technology and our experience. e.g. at
- Electromagnetic compatibility analyses (EMC)
 - Power quality measurements, synchronized distributed long-term measurements
 - Performance analyses for generation plants
 - Site-specific evaluation of PV systems and components
 - Performance of generation plants in the event of grid faults (FRT)



LABORATORY CONSULTANCY

- You want to set up, expand or optimize a laboratory? We assist you e.g. with:
- Specification of laboratory infrastructure, in particular for smart grid applications
 - Specification and design of HVRT and LVRT testing equipment
 - Development of recommendations for grid connection guidelines / grid codes
 - Development of test methods and test procedures



SYSTEM ANALYSES AND SIMULATION

- Performance analyses and optimizations
- System evaluation and optimization
- Demonstrators / proof-of-concepts for components and systems
- Grid emulations, simulations and model development
- Models for power generating units in accordance with the FGW Technical Guideline Part 4