

# Power Electronics Test Engineer

Location: Erlangen, Germany

## ABOUT FLUENCE

Fluence, a Siemens and AES company, is the global market leader in energy storage technology solutions and services, combining the agility of a technology company with the expertise, vision and financial backing of two well-established and respected industry giants. Building on the pioneering work of AES Energy Storage and Siemens Energy Storage, our goal is to create a more sustainable future by transforming the way we power our world. Providing design, delivery and integration, Fluence offers proven energy storage technology solutions that address the diverse needs and challenges of customers in a rapidly transforming energy landscape.

Fluence currently has more than 2.4 gigawatts of projects in operation or awarded across 24 countries and territories worldwide. We topped the Navigant Research utility-scale energy storage leaderboard in 2018 and were named one of Fast Company's Most Innovative Companies in 2019. In 2020, our sixth-generation Tech Stack won Commercial Technology of the Year at the 22<sup>nd</sup> annual S&P Global Platts Global Energy Awards.

## Leading

Do others come to you for your subject matter expertise? Are you excited by the challenge of working in a start-up atmosphere with a purpose?

The Power Electronics Test Engineer will be critical in helping Fluence deploy the next generation of energy storage technology. Working in the test field, as part of the Inverters CoE, the Test Engineer will be responsible for defining, developing, executing, documenting and analyzing tests related to functionality, performance characteristics, control and operation of power conversion systems and associated components.

## Responsible

Fluence is defined by its unwavering commitment to safety, quality, and integrity. We take personal ownership in what we do, developing trust in our relationships with internal and

external stakeholders. We firmly believe in having honest, forthcoming, and fair communications.

- Plan and document test procedures, define acceptance criteria
- Design and construct test setups at megawatt scale
- Conduct hands-on testing of functionality and interoperation of inverters, DC/DC converters, plant controls, battery systems
- Develop detailed documentation with test results and prepare relevant test reports
- Investigate and analyze test failures to provide valuable feedback to the development team
- Review inverter technical documentation to determine compliance with requirements and evaluate technical characteristics
- Develop deep understanding of inverter operations and provide guidance to the software team on inverter control and integration into the Fluence Operating System
- Collaborate with major power converter system suppliers on modifications or improvements to their products to ensure optimal integration with Fluence system design
- Identifying opportunities to improve existing test station software and hardware, participate in implementing them
- Write technical application notes for use of test results in design, commissioning, and operations of inverters in energy storage systems

## Agile

Here at Fluence, we strive to continuously improve, be intellectually curious and be adaptive to our customers and employee's needs. Collaboration is key, both in our partnerships with our customers, and with each other. Fluence prioritizes the most critical efforts that allow for the greatest impact.

- Bachelors' degree in Electrical Engineering or similar
- 3 years industry experience with hands-on skill in testing of electronic assemblies, ideally grid-connected inverters
- Knowledge of testing procedures and engineering, state of the art test equipment
- Strong organization and communication (written and verbal) skills
- Self-driven and passionate

- You have a good knowledge of the standards and regulations of the VDE, IEC, IEEE
- Proficiency using MS Office Tools (Word, Excel, PowerPoint, Visio)
- Good English and German skills
- Good technical writing skills
- Willing to relocate to Erlangen area
- Must possess a desire to take on tough and challenging projects

**Preferred:**

- Familiarity with utility scale systems design, control, and monitoring
- Familiarity with communication protocols such as ModbusTCP, CANbus
- Proficiency in computer programming, ideally in at least one of the following languages:
  - Python
  - Ruby
  - Matlab
  - C/C++
- Familiarity with the Linux command line interface and operations
- Familiarity with TCP/IP and Ethernet network architecture/engineering
- Hands on experience testing power converter equipment in a lab environment
- Knowledge of or history working with major component suppliers in the solar or battery storage industry
- Familiarity with Testrail or similar tools

**Fun**

Working on transforming a fundamental part of our society is exciting and fulfilling. It requires creativity, diversity of ideas and backgrounds, and building trust to effect change and move with speed. We respect our coworkers and customers. We listen to what others have to say, and we are inclusive.

**Apply**

Fluence uses LinkedIn Talent Hub to manage our recruitment process. To be considered for this and all roles at the company, [applicants must apply directly on LinkedIn here.](#)

Fluence IS AN EQUAL OPPORTUNITY EMPLOYER and fully subscribes to the principles of Equal Employment Opportunity to ensure that all applicants and employees are considered for hire, promotion, and job status without regard to race, color, religion, sex, national origin, age, disability, veteran status, sexual orientation, marital or familial status.