

## DATA SHEET

# IEEE 1547.1 Training

**Our IEEE 1547.1 training workshop provides attendees with a deeper understanding of the standard, especially the new Interoperability requirements. Participants will learn the technical skills needed to conduct both interoperability and type testing as defined in UL 1741 SB. And students will learn how to automate UL 1741 SB testing with QualityLogic's IEEE 1547.1 Test Tools.**

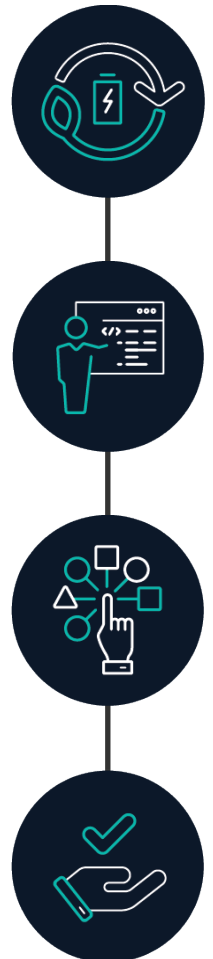
## TRAINING WORKSHOP AT A GLANCE

IEEE 1547-2018 and 1547.1-2020 introduce significant new testing and certification challenges for the inverter industry. These include enhanced Type testing and Interoperability using one of the three required communication protocols (IEEE 2030.5, SunSpec Modbus 700 and DNP3). The testing procedures are further clarified in UL 1741 Edition 3 (*September 2021*).

One of the most significant new testing challenges is the requirement to use one of the standard protocols specified in IEEE 1547-2018 to conduct Interoperability testing. For many in the DER industry, these protocols are new and will require a combination of knowledge and tools to conduct the required UL 1741 SB testing.

To help meet these challenges, QualityLogic offers a IEEE 1547.1 Testing Workshop ideal for those who need to learn enough about IEEE 1547.1 / UL 1741 SB to conduct the certification testing. The class covers the three standards (IEEE 1547-2018, 1547.1-2020, and UL 1741 Edition 3), the Interop and Type tests defined in IEEE 1547.1 and UL 1741 SB, and training on automating the development and certification testing to achieve UL 1741 SB certification.

The workshop includes a live demonstration of the QualityLogic Test Tools to train participants on how to use the tools to conduct 1547.1/UL 1741SB testing for Type and Interop tests, manage the test equipment (grid simulators, DC/PV simulators, power analyzers, and oscilloscope), capture, and automatically analyze the collected measurements for compliance. Participants can use the knowledge from this training to use QualityLogic's 1547.1 test tool to perform automated or manual testing on their target smart inverter device.



## FLEXIBLE TRAINING SCHEDULES

- Workshops are offered as either private or public sessions
- On-site training is available, and the best way to learn about the standards
- Private workshops are dedicated to a single company's staff
- Public workshops are open to teams from multiple companies
- Other protocol training is also available from QualityLogic. Visit our [smart energy training page](#) for details

## WORKSHOP DETAILS

- **Session 1:** Introduction to IEEE 1547-2018
- **Session 2:** Introduction to IEEE 1547.1-2020
- **Session 3:** Introduction to UL 1741 SB

- **Session 4:** IEEE 2030.5 Protocol
- **Session 5:** SunSpec Modbus 700 Protocol
- **Session 6:** IEEE 1815 (DNP3) Protocol

- **Session 7:** QualityLogic IEEE 1547.1 Test Tools
- **Session 8:** Conducting Tests using QualityLogic Test Tools
- **Session 9:** Reviewing Test Results from QualityLogic Test Tools

**Discover why so many inverter manufacturers, companies, and labs rely on QualityLogic's DER protocol expertise. Contact us today.**

### Headquarters

9576 West Emerald St  
Boise, ID 83704

### California

2245 First Street, Suite 103  
Simi Valley, CA 93065

### Oklahoma

4045 NW 64th Street, Suite 120  
Oklahoma City, OK 73116

