ACE RTF Calibration with Kaelus Unify Quick Start Card
Kaelus Analyzer Calibration Extender for RTF

The following steps outline how to use the Kaelus ACE-1000A to test and extend the calibration date of your RTF (Range-to-Fault) instrument.

In order to calibrate your RTF with ACE, it is required to create an account on the Kaelus Unify Portal, register your instrument and setup a payment method. To create your account, please follow the Kaelus Unify Web Portal Quick Start Guide. You will also require a fully working and calibrated Kaelus iPA and a powered USB hub to perform the RTF calibration.

Calibration of each instrument can be extended to a maximum of 12 months from the date of successful calibration. Time to calibrate an RTF with ACE is < 30 minutes.

Equipment Requirement

- ACE-1000A
- RTF
- iPA (Calibrated less than 3 months ago and supports the RTF band being tested)
- Powered USB hub (Belkin 4-Port Powered Desktop Hub Model #F4U020 recommended)
- PC or laptop with Kaelus Unify
- Unify account with payment method setup
- Software updates required: iPA with latest firmware & latest version of Unify; https://www.kaelus.com/en/resource-center/software-downloads

1. Preparation Before Calibration

Please ensure all connectors are clean, free of debris and any damage prior to calibration.
- The correct connector torque of 25Nm is also vital for calibration. Please use the torque wrench supplied in the ACE kit. The environment for calibration must be between 68°F and 86°F (20°C and 30°C).
- Only the iPA connector saver should be attached to the test port during calibration. It is recommended that the connector saver be replaced if there are signs of wear and tear.
- The RTF is required to be connected directly onto the iPA without an RF cable and the ACE calibration standard must be connected directly to the RTF or iPA without an RF cable. The connector saver can be left on the iPA for the entire calibration.
- The iPA is required to be calibrated (ACE or factory calibration) within the past 3 months in order to perform the RTF calibration with ACE.
- Update iPA firmware.

NOTE: The iPA must be connected to the PC/laptop and be identified by Kaelus Unify before you start the RTF calibration!

2. Calibration Procedure ACE for RTF

There are four steps to the RTF calibration with ACE:
1. RTF open-circuit sweep
2. RTF ACE sweeps
3. iPA ACE residual IM sweeps (not required if performing straight after iPA ACE calibration)
4. Payment, processing and calibration programming

Kaelus Unify will guide you through each step of the process including pictures showing how to connect the various items.