

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!

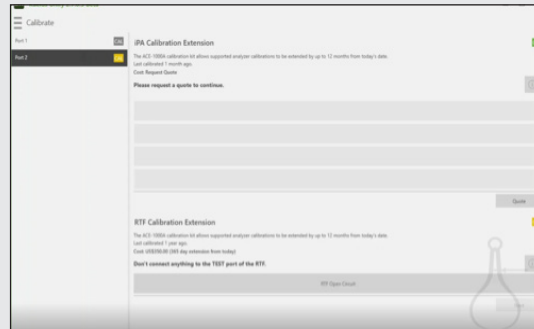
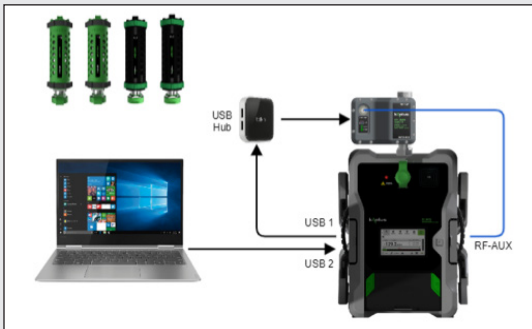
2. Calibration Procedure ACE for RTF

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.

1.

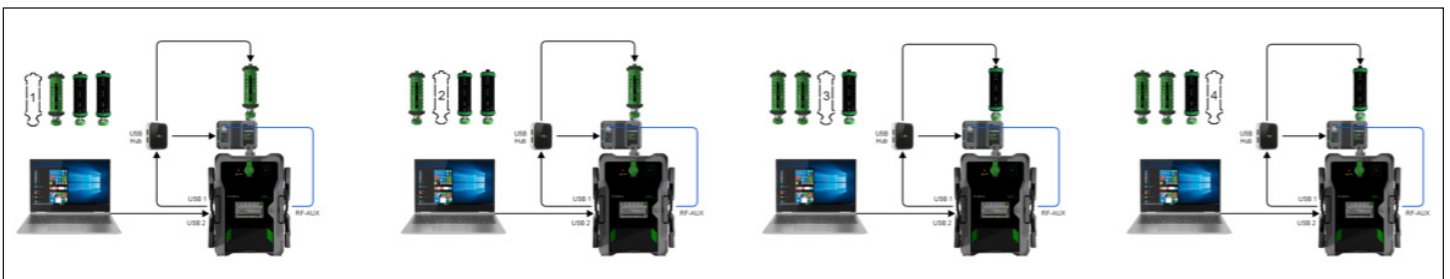


Click or press key to close picture

RTF Open-Circuit Sweep

- Switch on the iPA
- Connect the laptop/PC to the iPA (via USB port 2 mini USB)
- Connect the powered USB hub (common port) to the iPA USB port 1
- Connect the RTF DIN 7/16 connector directly to the iPA, connect the USB hub with the RTF and connect the RF auxiliary cable of the RTF to the iPA (RF-AUX)
- Click the Quote button and review
- Click the progress bar
- Follow the Kaelus Unify instructions

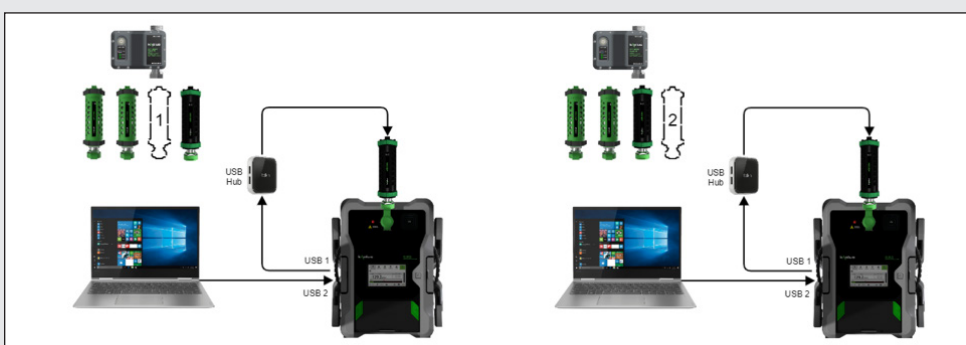
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RTF ACE Sweeps

- Connect the first green ACE calibration standard via USB connection to the USB hub
- Connect the ACE standard directly to the RTF DIN 7/16 port and torque with torque wrench
- All four calibration standards, 2 Green and 2 Black calibration standards, must be connected
- Follow the Kaelus Unify instructions

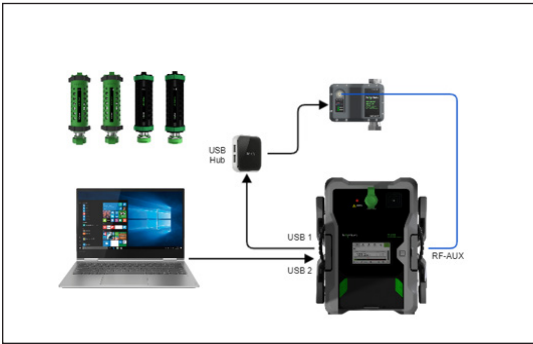
3.



iPA ACE Residual IM Sweeps

- Disconnect the RTF module
- Connect the first black ACE calibration standard via USB connection to the USB hub
- Connect the ACE standard directly to the RTF DIN 7/16 port and torque with torque wrench
- Only two black calibration standards have to be connected to the iPA
- Follow the Kaelus Unify instructions

4.



Payment, Processing and Calibration Programming

- a) Reconnect the RTF with the USB hub and connect the RF auxiliary cable of the RTF with the iPA (RF-AUX)
- b) Follow the Kaelus Unify instructions

5.

Certificate of Calibration

Upon successful calibration, navigate to the Kaelus Unify Portal to obtain the Certificate of Calibration for the RTF, <https://www.kaelusunify.com/login>. Kaelus Unify will keep record the RTF's calibration due date.

If your instrument fails the RTF calibration, you will not be charged and we recommend following the troubleshooting guide or contact us at www.kaelus.com for additional technical support.

NOTE: If the ACE calibration fails multiple times your RTF instrument may need to be sent to a Kaelus Service Center for repair.