The following steps outline how to use the Kaelus ACE-1000A to test and extend the calibration date of your PIM instrument connected to PIM-Server (iQA, iBA and SI E-Series).

In order to use the ACE-1000A, it is required to create an account on the Kaelus Unify Portal and register your instrument, https://www.kaelus.com/unifyportal.

To create your account, please follow the Kaelus Unify Web Portal Quick Start Guide.

Once your account is created and devices are registered, download the latest Kaelus PIM Server (https://www.kaelus.com/en/resource-center/software-downloads) and the Kaelus PIM Server wizard will guide you through the ACE procedure and extend your calibration.

**Note:** Calibration of instrument will be extended to a maximum of 12 months from the date of successful calibration.

Please read the entire Quick Start Guide BEFORE starting the calibration.

### 1. ACE PROCEDURE WITH PIM SERVER

A. Connect your PIM instrument to the PIM Server via USB (iBA and E-Series) or via Ethernet network for iQA.

B. For iQA’s, ensure they have the latest software installed, are connected to the network via Ethernet and are running in Remote Control mode (from the iQA front screen, select mode then select remote control mode). Ensure the IP address on the iQA is on the same network as the computer running PIM Server. An address of 127.0.0.1 indicates no Ethernet IP address obtained.

C. Open the Kaelus PIM Server. Ensure you have internet connection on your PC running PIM Server. Ensure you have internet connection on your PC running PIM-Server.

D. The calibration can only be performed in an environment between 20 and 30 degrees Celsius; between 68 and 86 degrees Fahrenheit.

E. Select device to apply ACE and click Extend Calibration button (ACE wizard will open).

F. Click quote button.

G. Wizard will guide you through how to connect the four calibration standards to your PIM instrument.

   1. Clean connectors of the PIM Instrument and the calibration standard with the provided cleaning kit.

   **Note:** Please ensure that RTF Modules, cables and adaptors are removed from the test port prior to calibration. Only the connector saver should be attached to the test port during calibration. It is recommended that the connector saver is replaced if there are signs of wear and tear or the calibration may fail.

   2. Connect the calibration standard via USB with the PIM instrument.

      A. IBA - connect USB cable of ACE to the iBA USB
      B. iQA and SI - connect USB cable of ACE to PC or laptop

   3. Connect the RF port of the calibration standard to the PIM Instrument; DO NOT ROTATE BODY OF CALIBRATION STANDARD.

   4. Torque the calibration standard with supplied torque wrench (25Nm).

   5. Click on highlighted bar to start analyzing.

   6. Repeat the same steps for all Green and all Black standards (two different Green and two different Black Standards will need to be presented to the PIM instrument) for each port.

      Once analyzing is completed, click “Calibrate” to proceed to calibration. The users credit card or account will be charged with the quoted calibration fee.

H. If your instrument fails the calibration, you will not be charged and we recommend following the troubleshooting guide. You may need to send your instrument to a Kaelus Service Center for repair if the ACE calibration fails multiple times.

I. Replace Calibration Due label on your PIM Instrument with new label provided in the ACE-1000A.

J. To access your certificate of calibration (COC) please sign up to Kaelus Unify and register your instrument. The COC is stored under your instruments serial number.
2. ACE STEP BY STEP WITH PIM SERVER

1. Open PIM Server and navigate to the Portal and ensure your instrument is added to PIM-server

2. Click on the instrument to be calibrated and select Extend Calibration

3. Login to your Kaelus Unify account
   
   Click on Quote in the calibration application, which will display the amount to be charged to your credit card or account.

   **Note:** Please ensure that RTF Modules, cables and adaptors are removed from the test port prior to calibration. Only the connector saver should be attached to the test port during calibration. It is recommended that the connector saver is replaced if there are signs of wear and tear or the calibration may fail.

4. Connect the first standard from the ACE kit and click on the highlighted button in the calibration application to begin analyzing the instrument
   
   Continue through all four standards from the ACE kit, two green standards and two black standards for each port. The progress bar indicates progress of analyzing the instrument.

5. Once all Standards have been tested successfully, the Apply button will highlight to perform the calibration. This is when the credit card or the account will be charged.

   Upon successful calibration, navigate to the Unify Portal to obtain the calibration certificate [https://www.kaelusunify.com/login](https://www.kaelusunify.com/login)

**SUPPORTED INSTRUMENTS**

- iQA B, C Series
- iBA A, B, C & D Series
- SI E Series