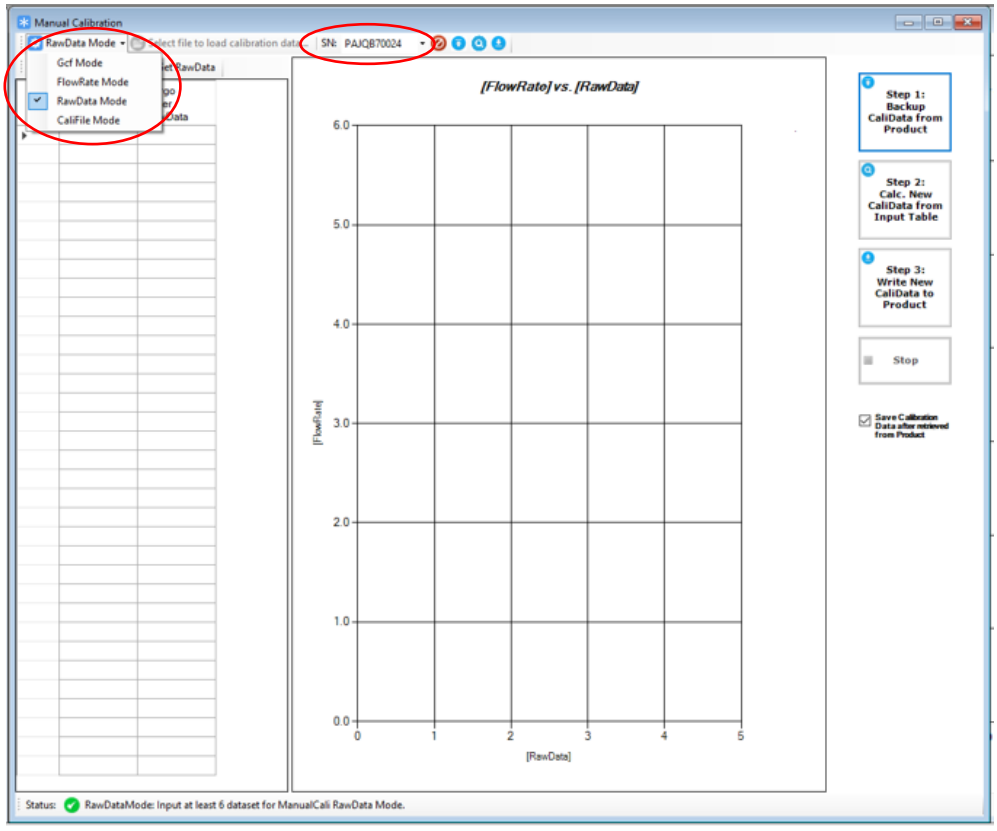
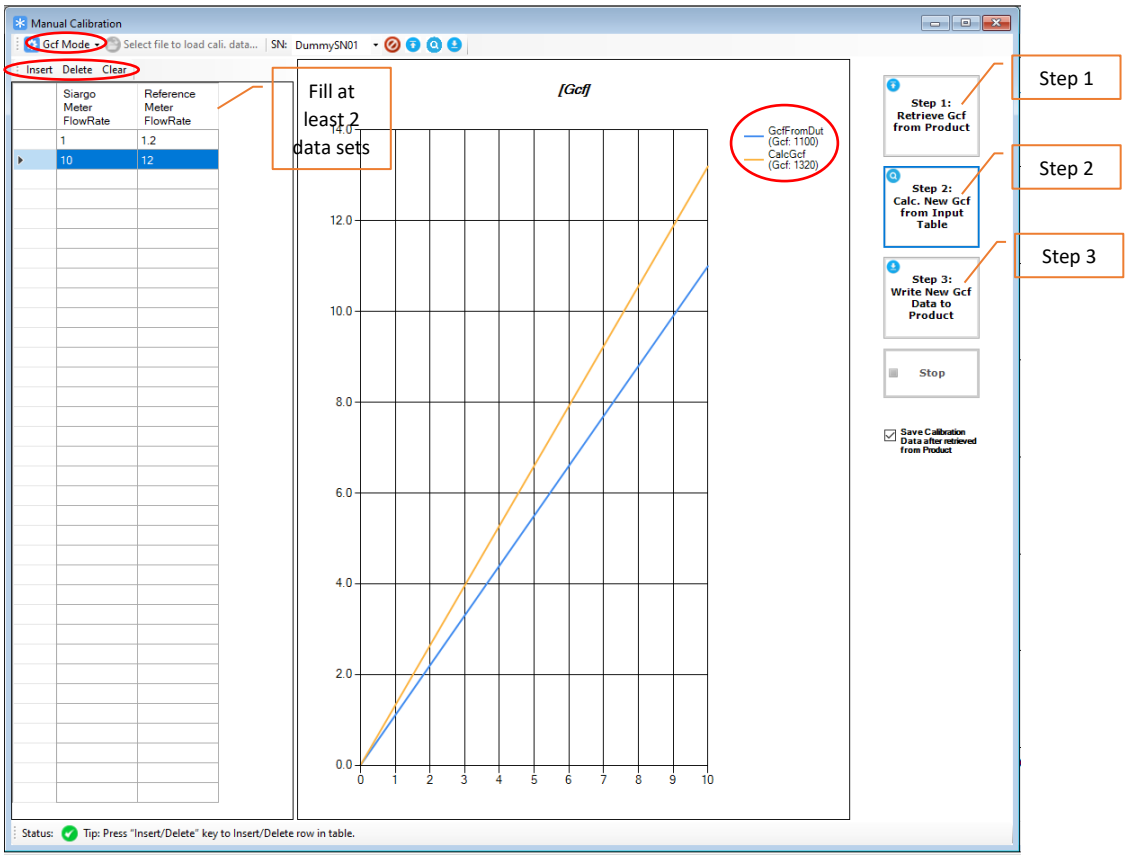
Manual Calibration Quick Start Guide

1. Connect Siargo meter to PC thr. Siargo Usb-RS485 converter.
2. Run SiargoUserApplication.exe. Click “Start Evaluation Test” button to open application mainframe, and then click “Manual Calibration” icon  on top of mainframe to Open Manual Calibration App.
3. From the “Manual Calibration” App menu, choose the “Serial Number” and “Calibration Mode” to do the Manual Calibration.
   Tip: If the “Serial Number” and “Calibration Mode” is shown Disabled status, that means the device is not Found yet! User needs to Check the Hardware Connection and Refind the device. User may check “Siargo User Application Quick Start Guide.pdf” to find the detail steps.
4. The App has 4 Calibration Mode. They are “Gcf Mode”, “FlowRate Mode”, “RawData Mode” and “CaliFile Mode”. The default mode is “RawData Mode”.
   - Gcf Mode: Correct the meter-parameter “Gcf” to calibrate the meter.
     Note: Gcf is the abbreviation of “Gas Correction Factor”
   - FlowRate Mode: Correct the Siargo meter flowrate vs. Reference meter flowrate to calibrate the meter.
   - RawData Mode: Correct the Siargo Meter FlowRate vs. RawData to calibrate the meter.
   - CaliFile Mode: Write the Selected Calibration Data File to meter.



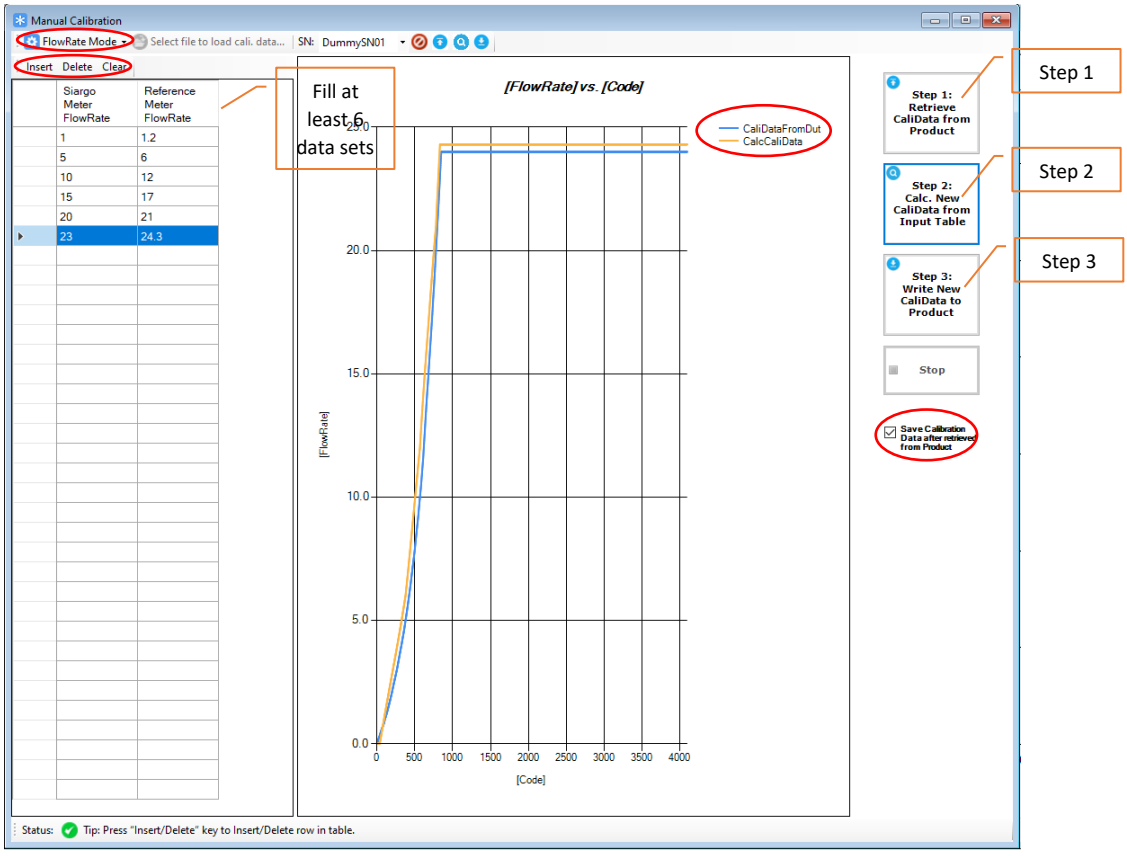
5. Use "Gcf Mode" to Calibrate Meter
   - Click Step 1 button to Retrieve Gcf from Product.
   - Fill the flowrate value read from Siargo meter to "Siargo Meter FlowRate" table column and fill the according corrected flowrate from User reference meter to "Reference Meter FlowRate" table column.
   - Click Step 2 to Calculate New Gcf from Input Table.
   - Click Step 3 to Write New Gcf to Product.

   Note1: The default Gcf value is 1000 for all Gcf-enabled meters.
   Note2: Gcf Mode needs at least 2 valid input data sets to do the calibration.
   Suggestion: More input data sets are Required to Calculate a better Gcf!
   Tip1: User may alter flowrate values in table and retry Step 2 to find a proper Gcf.
   Tip2: Press "Insert/Delete" button or key to Insert/Delete row in table.



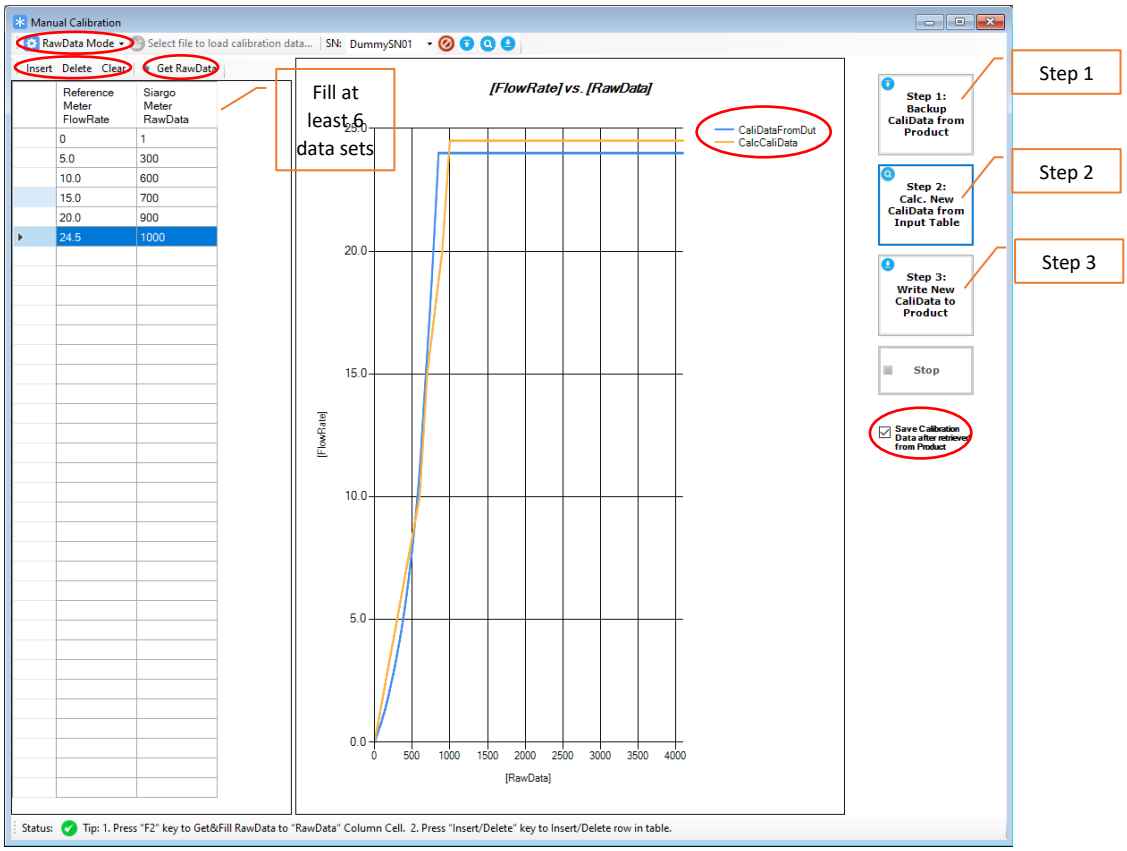
6. Use “FlowRate Mode” to Calibrate Meter
   - Click Step 1 button to Retrieve meter-inner Calibration data from Product.
   - Fill the flowrate value read from Siargo meter to “Siargo Meter FlowRate” table column and fill the according corrected flowrate value from User standard meter to “Reference Meter FlowRate” table column.
   - Click Step 2 to Calculate New Calibration Data from Input Table.
   - Click Step 3 to Write New Calibration Data to Product.

   Note1: FlowRate Mode needs at least 6 valid input data sets to do the calibration.
   Note2: If “Save Calibration Data after retrieved from Product” checkbox is checked, App saves calidata after step1.
   Suggestion: More input data sets are Required to Calculate better calibration fitting especially for small flowrate range!
   Tip1: User may alter flowrate values in table and retry Step 2 to find a proper new calibration fitting curve.
   Tip2: Press “Insert/Delete” button or key to Insert/Delete row in table.
   Tip3: Press “Stop” button to stop Retrieving/Writting CaliData from/to meter while user is doing Step1/Step3.



7. Use “RawData Mode” to Calibrate Meter
   - Click Step 1 button to Backup meter-inner Calibration data from Product.
   - Fill the flowrate value read from Siargo meter to “Siargo Meter FlowRate” table column and get & fill the RawData from Siargo meter to “Siargo Meter RawData” table column.
   - Click Step 2 to Calculate New Calibration Data from Input Table.
   - Click Step 3 to Write New Calibration Data to Product.

   Note1: RawData Mode needs at least 6 valid input data sets to do the calibration.
   Note2: If “Save Calibration Data after retrieved from Product” checkbox is checked, App saves calidata after step1.
   Suggestion: More input data sets are Required to Calculate better calibration fitting especially for small flowrate range!
   Note3: Press “Get Code” button or “F2” key to Get RawData from Siargo meter.
   Tip1: User may alter flowrate & rawdata values in table and retry Step 2 to find a proper new calibration fitting curve.
   Tip2: Press “Insert/Delete” button or key to Insert/Delete row in table.
   Tip3: Press “Stop” button to stop Retrieving/Writting CaliData from/to meter while user is doing Step1/Step3.
   Tip4: User may Skip Step1 if user does not want to backup CaliData from meter.



8. Use “CaliFile Mode” to Write Selected Calibration Data to Meter
   - Click Step 1 button to Backup meter-inner Calibration data from Product.
   - Click Step 2 button to Select and Load saved Calibration data file. The Calibration File List Panel is Shown on left for User to Select Saved Calibration File.
   - Click Step 3 to Write the Selected Calibration data file to Product.

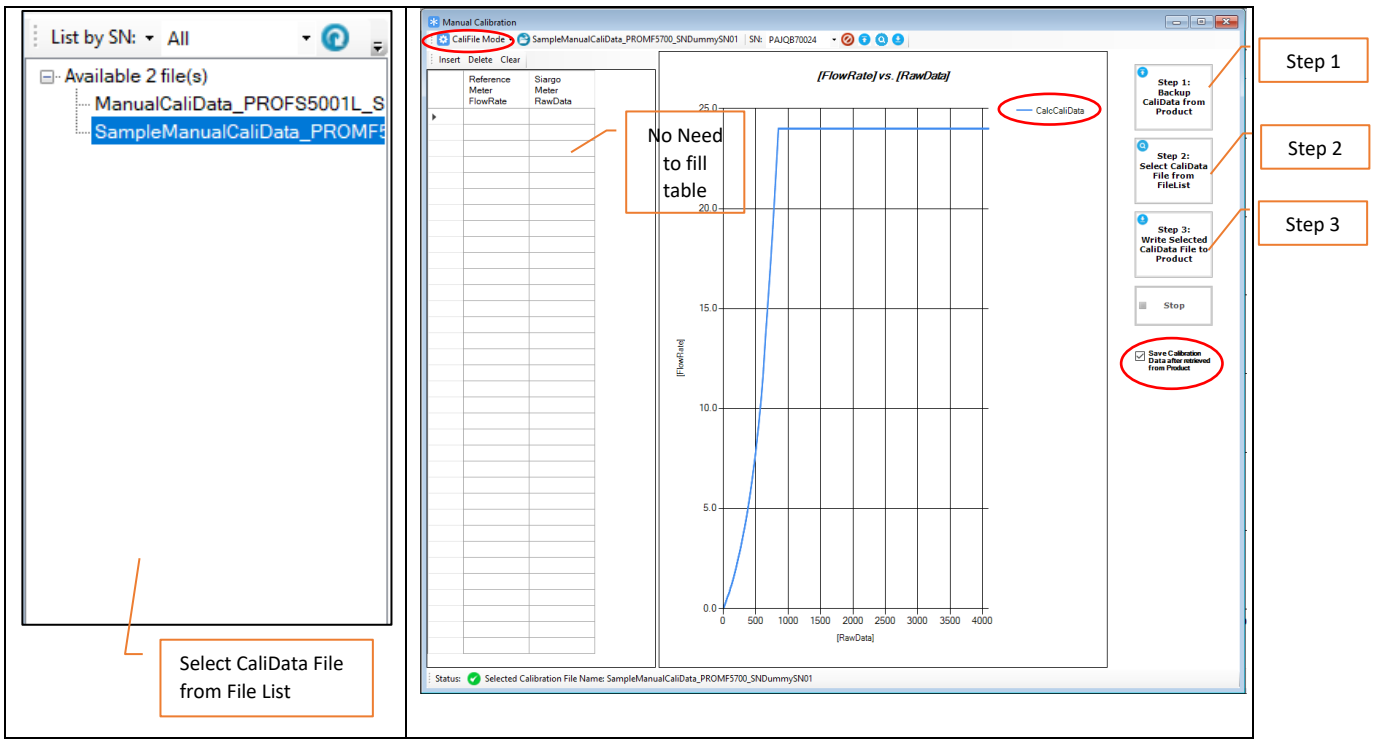
     Note1: CaliFile Mode has no need to input any data sets.

     Note2: If “Save Calibration Data after retrieved from Product” checkbox is checked, App saves calidata after step1.

     Tip1: User may write back the original calibration data for meter. The saved calibration data file is named with meter model, serial number and saved timestamp.

     Tip2: Press “Stop” button to stop Retrieving/Writting CaliData from/to meter while user is doing Step1/Step3.

     Tip3: User may Skip Step1 if user does not want to backup CaliData from meter.



9. Change Siargo meter Maximum Flow Rate
   - Click “Get/Set Param.” button on DataViewer window to show “Read/Set Param.” Panel on right.
   - Select “MaxFlowRate” Option from “Param.” Options.
   - Click “Read Param” button to Acquire the Max. Flow Rate from meter.
   - Fill the desired Flow Rate value to “Value” textbox.
   - Click “Set Param” button to Set the desired Max. Flow Rate to meter.