

USER MANUAL

Sauermann Combustion
SOFTWARE AND APP FOR Si-CA GAS ANALYZER

Table of contents

1. Introduction	5
2. Warning and safety instructions	6
2.1 Exclusions and restrictions of liability	6
2.2 Exclusions and warranty limitations.....	6
2.3 Symbols used	6
3. Download the app and create an account.....	7
3.1 Download the Combustion app	7
3.2 Create a Sauer mann account and launch the app.....	7
4. Connect the analyzer and search for analyzers	8
4.1 Wireless connection.....	8
4.2 USB Connection	8
5. Set the general parameters of the analyzer.....	9
5.1 Set the autozero.....	9
5.2 Set the purge time.....	9
6. Set the parameters of the analysis	10
6.1 Set the fuel	10
6.1.1 Select the fuel	10
6.1.2 Create a fuel	11
6.2 Set the CO dilution mode (Si-CA 230 only).....	11
6.3 Set the CO dilution threshold (Si-CA 230 only).....	11
6.4 Set the CO pump cut-off level.....	12
6.5 Set the Reference O ₂	12
6.6 Set the NOx factor.....	13
6.7 Set the Smoke/soot index	13
6.8 Set the alarms	13
6.9 Set the atmospheric pressure.....	14
6.10 Set the air temperature.....	15
7. Perform other measurements	16
7.1 Gas pump flow rate.....	16
7.2 Perform a Stack Gas Velocity measurement with a Pitot tube.....	16
8. Set the measuring unit.....	17
9. Set the data saving	18
10. Manage your data.....	19
10.1 Create a folder	19
10.2 Modify a folder.....	19
10.3 Delete a folder	19
10.4 Import data from the analyzer	19
11. Manage the customer database.....	20
11.1 Create a customer	20
11.2 Modify a customer.....	20
11.3 Delete a customer	20
11.4 Import a customer data file.....	20
12. Manage customers' locations	22
12.1 Add a location to a customer	22
12.2 Modify a location	22
12.3 Delete a location	22
13. Manage the operator database.....	23
13.1 Create an operator	23
13.2 Modify an operator.....	23
13.3 Delete an operator	23
14. Manage the equipment database	24

14.1 Create an equipment.....	24
14.2 Modify an equipment	24
14.3 Delete an equipment	24
14.4 Import an equipment data file	24
15. Update the firmware of the analyzer.....	26
16. Create a report.....	27
16.1 Save measurements.....	27
16.2 Create a report.....	27
16.3 Import data from the analyzer	28
17. Customize the report.....	29
18. Disconnection.....	30

1. Introduction

The Sauermann Combustion app lets you control your Si-CA analyzer remotely, view measurement results in real time, and customize them before exporting in the format of your choice.

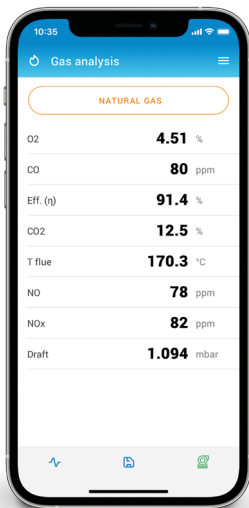
This app is available for smartphone and PC.

Main features:

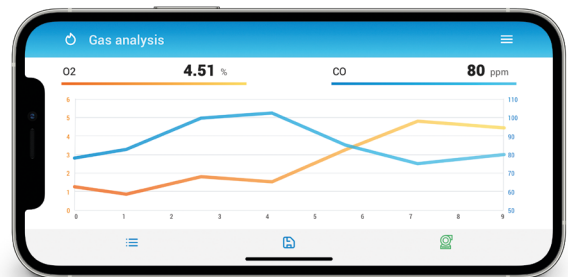
- Free apps for iOS & Android mobile devices
- PC software with USB & wireless connectivity
- Fast, easy wireless connection
- Remote live view of combustion analysis data as list or graph
- Remote control to change settings
- Data saving, including automatic logging
- Report creation in PDF, CSV (for Excel) and XML formats
- Databases for customers, operators, & equipment



Please note that the Si-CA 030 analyzer is only compatible with the app for smartphone.



Smartphone data view



Smartphone graph view



Computer data view

2. Warning and safety instructions

2.1 Exclusions and restrictions of liability

The application operation is under the exclusive customer or user entity responsibility, who acknowledges using this system at his/her own risks. The customer or user entity explicitly excludes Sauermann and every other company through which the it could have been sold of any kind of responsibility or warranty regarding any direct, indirect, accidental, consecutive or non-consecutive damage that could have been subjected, for some or all, by partial or total non-respect, voluntary or involuntary, of recommendations, conditions and prerequisites indicated hereafter.

2.2 Exclusions and warranty limitations

Sauermann guarantees that the application, which is made available for the customer or user entity through digital content such as a downloaded link as indicated in our commercial documents, are in a state enabling its correct installation and operation. Within the limits of the law, this warranty is exclusive. Therefore, we do not guarantee the application operation after its availability to the customer or user entity of this digital support or downloaded link. There is no other explicit or implicit guarantee regarding the application merchantability and fitness for a particular purpose. The customer or user entity acknowledges accepting all the present guarantee limitations or exclusions.

2.3 Symbols used

For your safety and in order to avoid any damage of the device, please follow the procedure described in this user manual and read carefully the notes preceded by the following symbol:



The following symbol will also be used in this user manual:

Please read carefully the information notes indicated after this symbol.



3. Download the app and create an account

3.1 Download the Combustion app

- Download the app for smartphone for free from Apple Store and Google Play Store or download the PC software for free from Sauer mann website.
- Install the app on your device.



Minimum required versions to install and use the app: Android 5.0, iOS 12.4, BLE 4.0

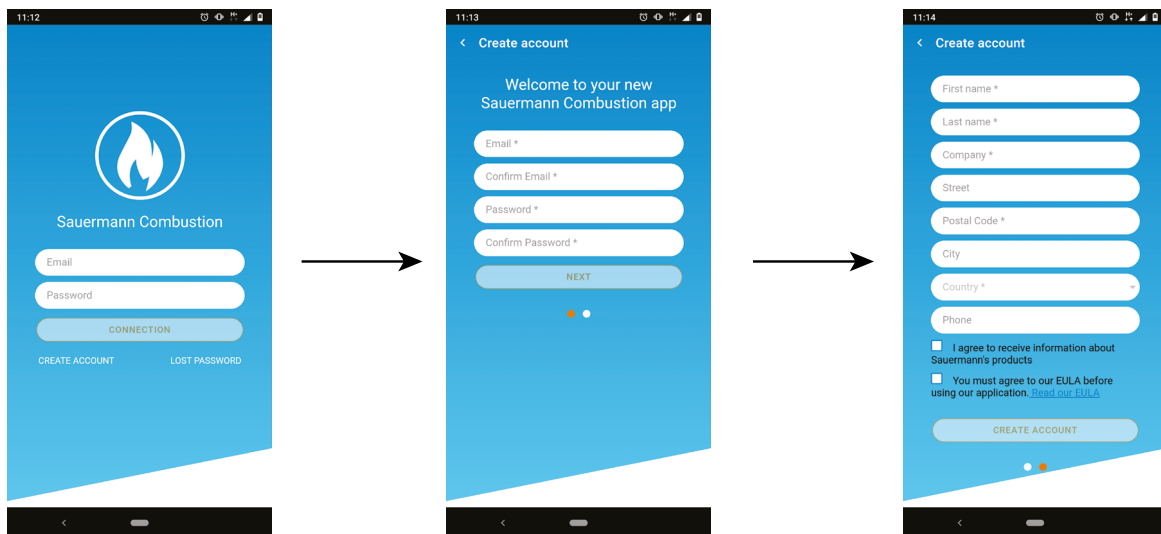


The PC software is not compatible with the Si-CA 030 combustion analyzer. Please use the Sauer mann Combustion mobile phone app instead for the Si-CA 030.

3.2 Create a Sauer mann account and launch the app

When you first connect, you have to create a Sauer mann account.

- Launch the app.
- Tap **"Create account"**.
- Enter an valid email address and confirm it.
- Choose a password and confirm it.
- Tap **"Next"**.
- Enter personal information.
- Tick the box to agree to receive information about Sauer mann's products.
- Tick the box to agree the EULA before using the application.
- Tap **"Create an account"**.



Once the account is created, enter your email address and password for further connections when required.

4. Connect the analyzer and search for analyzers


The analyzer can be connected via the app through wireless connection (app or PC software) or through USB connection (PC software only).

4.1 Wireless connection

First, activate your wireless connection on your device (smartphone or computer).

Then, the wireless connection must be activated on the analyzer:

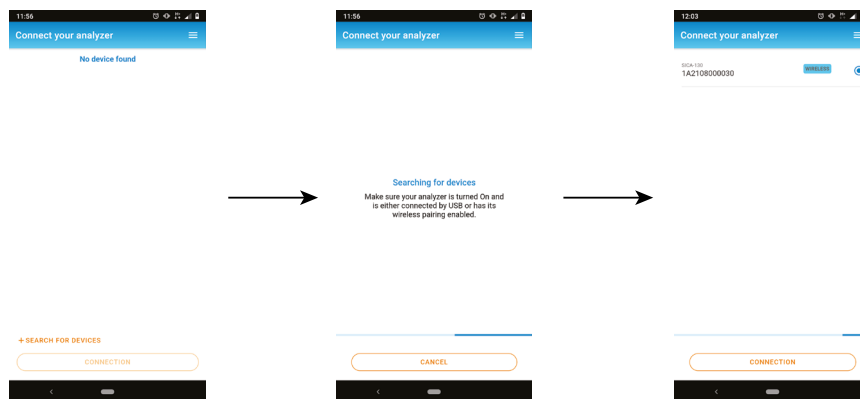
- Turn on your analyzer.
- Press Menu key (Si-CA 030) or tap Menu (Si-CA 130 and 230).
- Go to **"Settings"**.
- Go to **"General"**.
- Activate the **"Wireless connection"**.

The wireless connection icon  is displayed at the top right of the screen.

- Launch the app.
- Tap **"Search for devices"**.

The list of detected devices appears with their names and serial numbers.

- Tap the required analyzer then **"Connection"**.
- After a few moment, the analyzer is connected to the smartphone or computer.



4.2 USB Connection

For the USB connection:

- Connect the analyzer to the computer via the USB cable.
- Launch the software app.

The list of detected devices appears with their names and serial numbers.

- Click the required analyzer then **"Connection"**.
- After a few moment, the analyzer is connected to the computer

5. Set the general parameters of the analyzer

The settings menu allows to set the general parameters of the analyzer:

- Autozero
- Purge time



Any changes made to settings are automatically saved when you exit the screen.

5.1 Set the autozero

This part allows to set the autozero duration.

"Settings > General" screen is displayed.

- Tap **"Autozero"**.
- Select the autozero duration: 30 s, 60 s, 120 s or 180 s.



The manufacturer recommendation is a minimum of 60 seconds for most applications.

5.2 Set the purge time

This part allows to set the purge time duration.

"Settings > General" screen is displayed.

- Tap **"Purge time"**.
- Select the purge time: 15 s, 30 s, 60 s or 120 s.

6. Set the parameters of the analysis

This menu allows to set the following items regarding the analysis:

• Fuel	• Alarms
• CO dilution mode	• Pump after autozero
• CO dilution threshold	• Zero draft sensor
• CO pump cut-off level	• Atmospheric pressure
• Reference O ₂	• Air temperature
• NOx factor	• Display configuration
• Smoke/soot	• Stack cross-sectionnal area

6.1 Set the fuel

This part allows to select the required fuels for the gas analysis but it also allows to add customized fuels.

6.1.1 Select the fuel

The default list of fuels is dependent on the country selected. Possible fuels listed include the following:

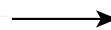
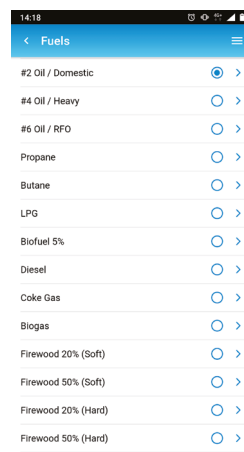
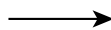
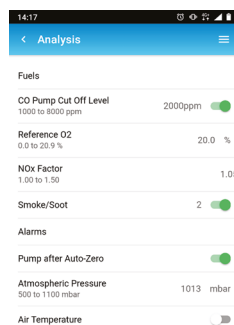
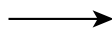
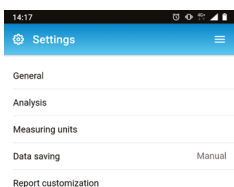
• Natural Gas (H)	• Biogas
• Natural Gas (L) Groningue	• Firewood 20% (Soft)
• Natural Gas North America	• Firewood 50% (Soft)
• #2 Oil / Domestic	• Firewood 20% (Hard)
• #3 Oil / Heavy	• Firewood 50% (Hard)
• #6 Oil / RFO	• Wood Chips / Pellets 8%
• Propane	• Cannel Coal
• Butane	• Low Volatile Coal
• LPG	• Hog Fuel
• Biofuel 5%	• Peat
• Diesel	• Biomass
• Coke Gas	

"Settings > Analysis" screen is displayed.

- Tap "Fuel".
- Select the required fuel.



To see features of the fuel, tap on it. The following information about the fuel is displayed: A1, B, K, CO₂t(%), V dry gas (m³/ucb), M air (kg/ucb), MH₂O (kg/ucb) and PCI (MJ/ucb)




< #2 Oil / Domestic	
A1	0.68
B	0.007
K	-
CO ₂ t (%)	15.1
V dry gas (m ³ /ucb)	10.41
M air (kg/ucb)	11.09
M H ₂ O (kg/ucb)	1.17
PCI (MJ/ucb)	42.7

6.1.2 Create a fuel

It is possible to create a customized fuel.

"Settings > Analysis" screen is displayed.

- Tap "Fuel".
- Tap "Add fuel" on the bottom of the screen.
- Name the fuel and validate it tapping 
- Enter the following features of the fuel: A1, B, K, CO₂t(%), V dry gas (m³/ucb), M air (kg/ucb), MH₂O (kg/ucb) and PCI (MJ/ucb).
- Tap "Save".


The customized fuel is then integrated at the end of the fuel list.

 If a very specific fuel must be created please contact the Sauermann Service Center for further information.

A customized fuel can be deleted:

- Tap the name of the customized fuel on the fuel list.

Features of this fuel are displayed.

- Tap  on the top of the screen.

A message is displayed asking to confirm the deleting.

- Tap Yes to confirm.


6.2 Set the CO dilution mode (Si-CA 230 only)


This part allows to activate the CO dilution mode. The CO dilution allows to bring fresh air to the analyzer and so to dilute the CO. The following choices can be selected for the CO dilution:

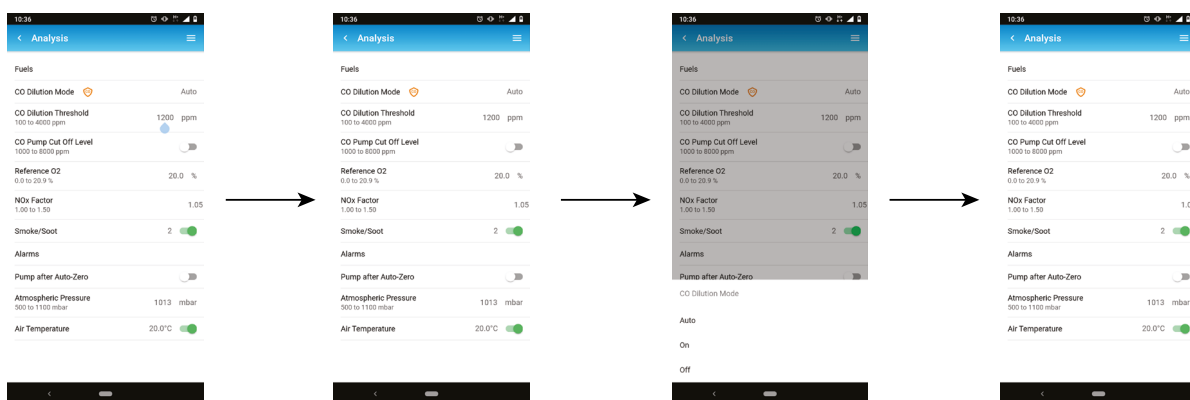
- AUTO: dilution is activated once the CO value exceeds the defined threshold value (see chapter "Set the CO dilution threshold" on page 11)
- ON: dilution is activated continuously.
- OFF: dilution is inactivated

"Settings > Analysis" screen is displayed.

- Tap "CO dilution mode".
- Select "AUTO", "ON" or "OFF".

 The manufacturer recommendation is to set to AUTO for most applications.

When dilution is activated,  will be displayed on top of the screen and in front of the CO line on the measurement screen.



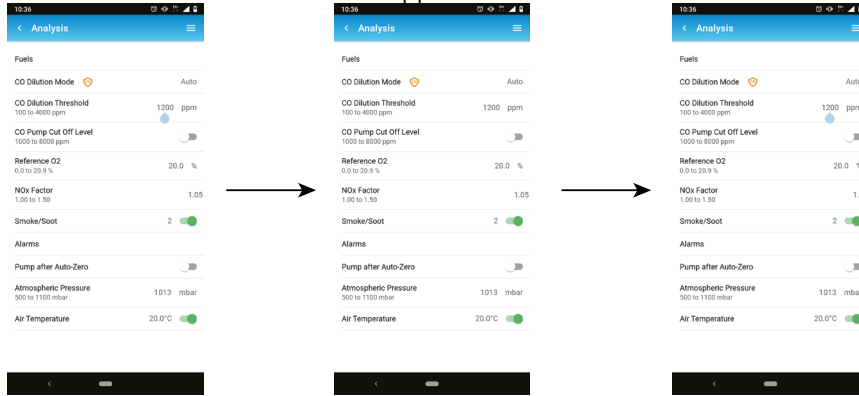
6.3 Set the CO dilution threshold (Si-CA 230 only)

This part allows to define the CO dilution threshold.

"Settings > Analysis" screen is displayed.

- Tap "CO dilution threshold".

- Enter the required threshold between 100 and 4000 ppm.



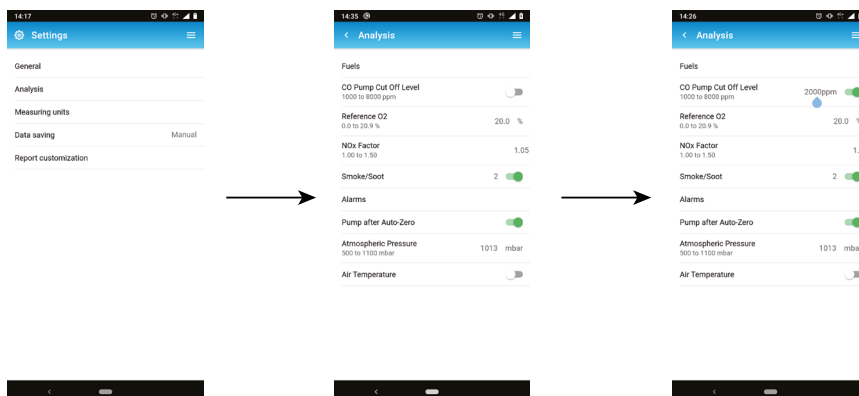
6.4 Set the CO pump cut-off level

This part allows to define the CO pump cut-off level.

“Settings > Analysis” screen is displayed.

- Activate the CO pump cut-off level.
- Tap “CO pump cut-off level”.
- Enter the required level between 1000 and 8000 ppm.

i In normal operation it is recommended to set the CO pump cut-off level threshold higher than the CO dilution threshold.

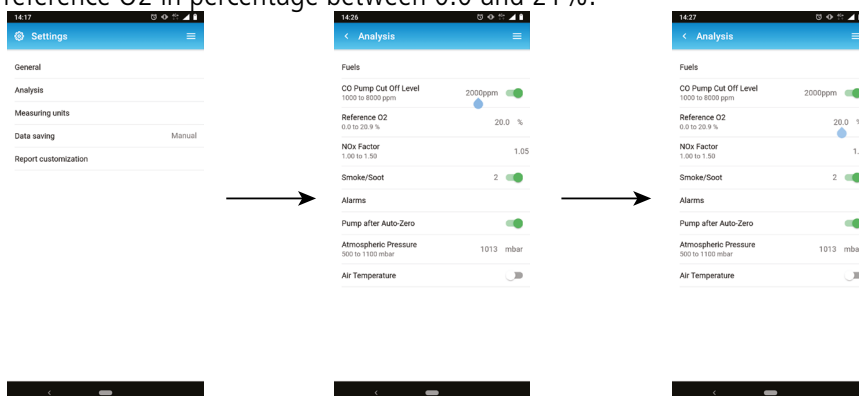


6.5 Set the Reference O₂

This part allows to set the oxygen reference level to use when corrected emissions calculations are needed.

“Settings > Analysis” screen is displayed.

- Tap “Reference O₂”.
- Enter the required reference O₂ in percentage between 0.0 and 21%.

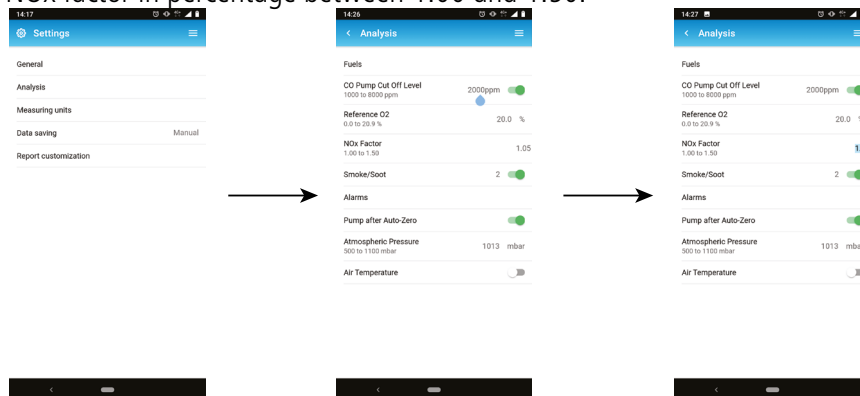


6.6 Set the NOx factor

This part allows to set the NOx factor, which is the assumed NO to NO₂ ratio used to calculate NOx when the NO sensor is included but the NO₂ is not included. Same apply for low ranges NO and NO₂ sensors.

“Settings > Analysis” screen is displayed.

- Tap “NOx factor”.
- Enter the required NOx factor in percentage between 1.00 and 1.50.



6.7 Set the Smoke/soot index

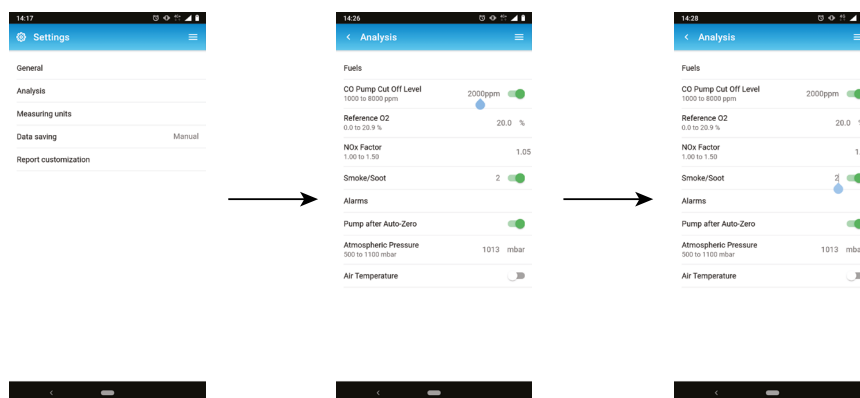
This part allows to enter the smoke or soot index obtained with an external pump (available as option). An inputted smoke value will be included with saved data points.

“Settings > Analysis” screen is displayed.

- Tap “Smoke/soot”.
- Enter the smoke/soot index between 0 and 9.



To enable the smoke index input, activate this function on the screen.



6.8 Set the alarms

This part allows to set an alarm for every parameters measured and calculated by the analyzer.

This alarm can be rising (the alarm of the instrument is activated when the measured value exceeds the defined threshold) or falling (the alarm of the instrument is activated when the measured value is below the defined threshold).

A maximum of 5 different alarms can be set.

“Settings > Analysis” screen is displayed.

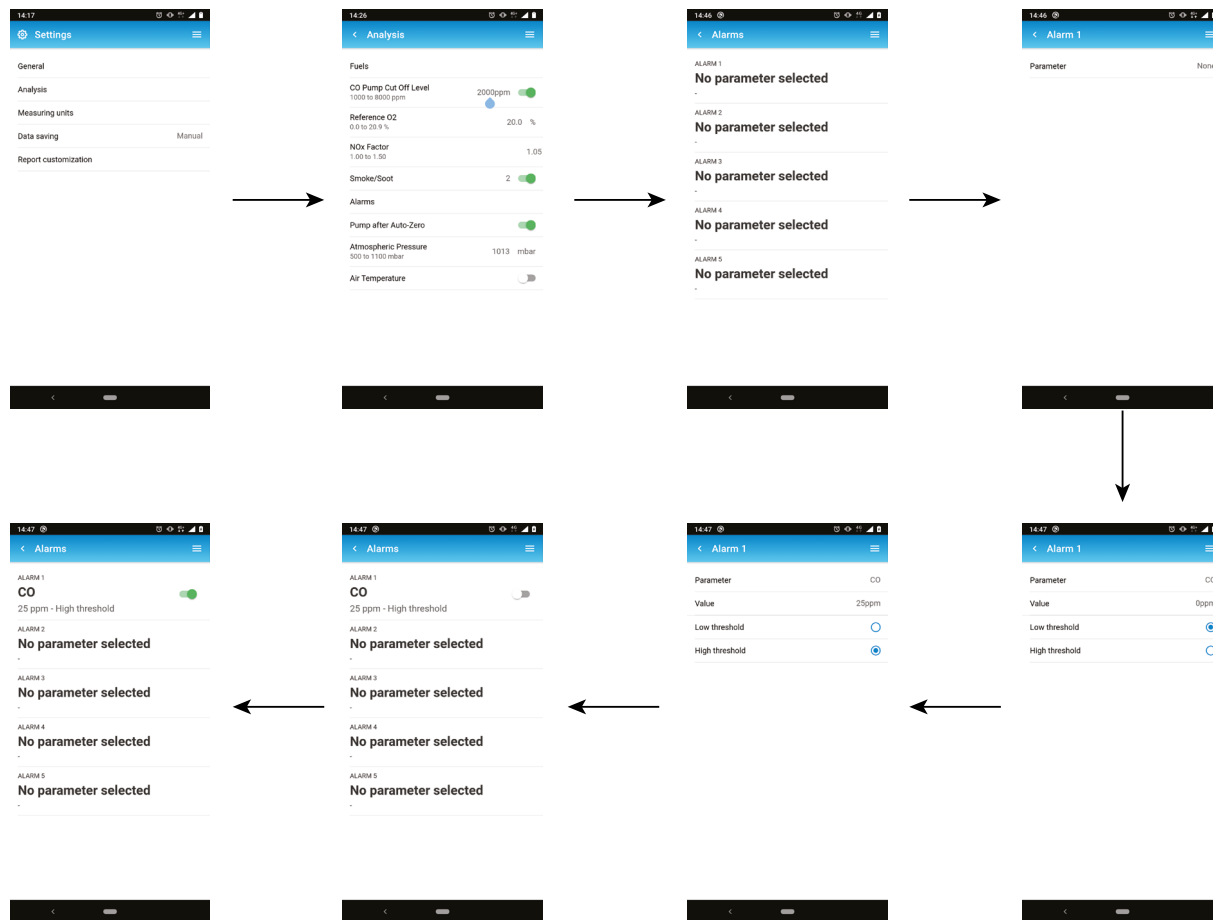
- Tap “Alarms”.
- Tap on one of the five listed alarms to first set it up.
- Select the parameter in which the alarm will be activated on the “Parameter” line.
- Enter the threshold value on the “Value” line.
- Select either high threshold or low threshold alarm.
- Return to main Alarm screen and tap on the activate button in order for the alarm to be enabled.
- Repeat the procedure for other alarms as needed.



Alarms can be revised later (for example, different threshold value) if needed.

During the measurements, an alarm remains ON even if the measurement goes below or above the threshold value until it is acknowledged.

If the alarm is acknowledged and the value is always in alarm, the alarm remains ON.

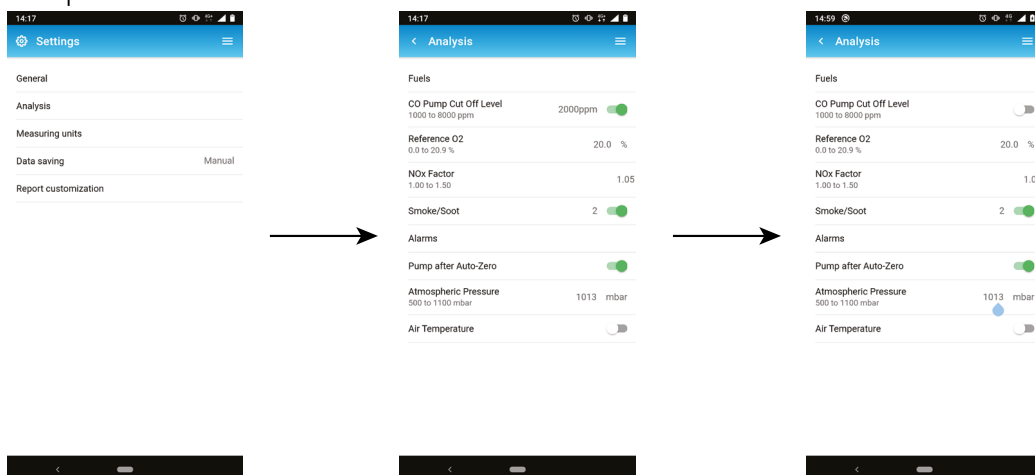


6.9 Set the atmospheric pressure

This part allows to set the atmospheric pressure in which measurements are performed. This value is taken into account in calculations such as the stack velocity. It is set to 1013 mbar by default.

“Settings > Analysis” screen is displayed.

- Tap “Atmospheric pressure”.
- Set the atmospheric pressure between 500 and 1100 mbar.



6.10 Set the air temperature

This part allows to set the air temperature for the incoming air into the combustion equipment if known. This value is obtained by three different ways:

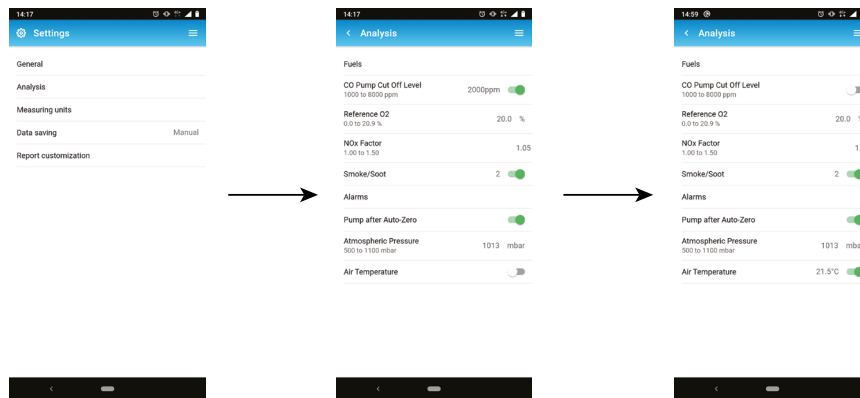
- by an external probe if this optional probe is connected
- entered by the user if no probe is connected
- by the internal NTC sensor of the analyzer if no probe is connected and if no value entered

To enter an air temperature:

“Settings > Analysis” screen is displayed.

- Activate the air temperature.
- Enter the required air temperature.

If the external probe or the internal sensor sensor is used, just activate the air temperature.



7. Perform other measurements

The analyzer can perform other measurements than a gas analysis:

- Gas/pump flow rate
- Stack gas velocity

7.1 Gas pump flow rate

This screen shows the real-time measured flow rate of the gas passing through the analyzer as performed by the main flue gas sampling pump.



The pump of the analyzer must be turn on.

“Other measurements” screen is displayed.

- Tap “Gas/pump Flow Rate”.

The analyzer displays the flow rate of the pump in L/m.

7.2 Perform a Stack Gas Velocity measurement with a Pitot tube



To perform this test, it is necessary to have a Pitot tube Type L or Type S.

Place and connect the L Pitot tube:

The Pitot tube must be introduced perpendicularly, in the middle into the duct and parallel to the flow.

The head (ending with an ellipsoidal nose) must be maintained parallel and facing the flow.

The total pressure (+) caught by the nose, is connected to the P+ at the bottom of the analyzer.

The static pressure (-) caught by the holes of the head, is connected to the P- at the bottom of the analyzer.

Place and connect the S Pitot tube:

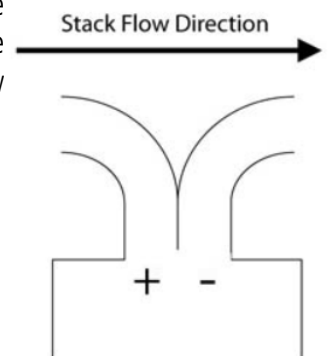
The S-type Pitot tube is inserted into the stack and rotated until the differential pressure measurement is greatest for a given location in the stack. The proper orientation is for the high pressure side of the S-type Pitot tube tip to face into the direction of the stack gas flow as shown in the diagram.

The holes must be perfectly aligned with the air or gas flow direction.

The Pitot tube S is more sensitive to alignment errors than the Pitot tube L.

The connecting to the measurement device must be carried out like following:

- The leg in front of the air flow is connected to the P+ sign of the analyzer.
- The leg at the opposite of the air flow is connected to the P- sign of the analyzer



When the connections are made and “Other measurements” screen is displayed :

- Tap “Stack Gas Velocity”.

The analyzer displays the following measurements: Velocity, Volume flow and Mass Flow.

- Tap the K value to modify it if necessary (K value must be between 0.0000 and 99.0000).



Recommended values are: 0.84 for S-Type Pilot tube and 1.0015 for L-Type Pilot tube.

8. Set the measuring unit

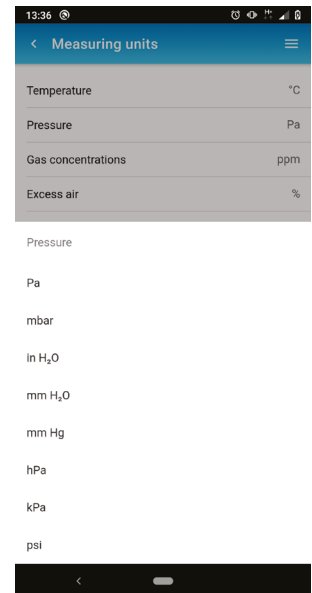
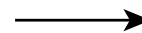
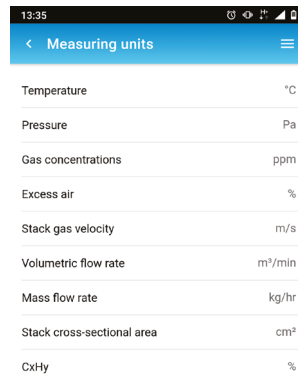
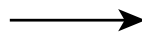
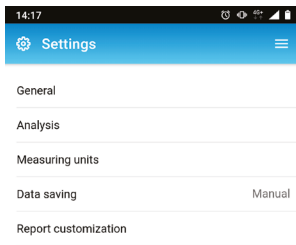
This part allows to define the measuring unit for each parameters measured or calculated by the analyzer.

The following unit is available according to the parameter and the model of Si-CA analyzer:

- Temperature: °C, °F
- Pressure: mbar, iwg (inches water gauge), mmwg, mmHg, Pa, hPa, kPa, psi
- Gas concentrations: ppm, mg/m³, %, mg/kWh, g/GJ, g/m³, g/kWh, g/hp
- Excess air: %, --- (no unit)
- Stack gas velocity: m/s, f/m, km/h, mph
- Volumetric flow rate: m³/m, cf/m
- Mass flow rate: kg/h, lb/h, t/d
- Stack cross-sectional area: cm², in²
- CxHy: %, ppm

“Settings” screen is displayed.

- Tap “Measuring units”.
- Tap the required parameter to set.
- Select the required unit in the list.



9. Set the data saving

This part allows to define the data saving mode: manual or data logger

"Settings" screen is displayed.

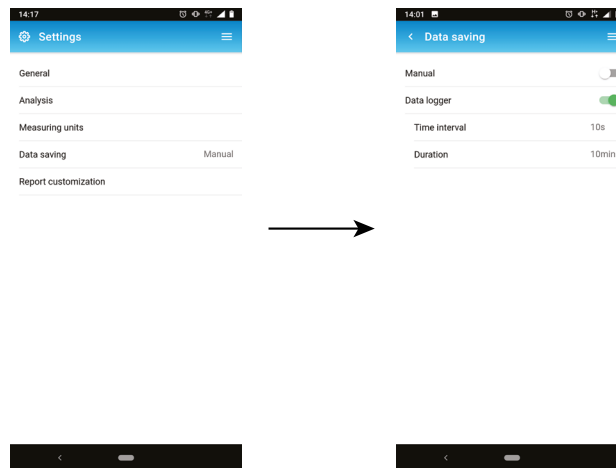
- Tap "**Data saving**".
- Select "**Manual**": data will be manually saved during measurement. All data saved using the app will be saved on the mobile, not on the internal memory of the combustion analyzer
or
- Select "**Data logger**": data will be saved according to a specified time interval and duration.
- Define the time interval between 10 and 600 seconds (by default time interval 10 seconds and duration 10 min). This time interval is for how often data points will be saved and to respect a maximum of 60 points per campaign.
- Define the duration between 1 and 120 minutes. The duration is the total time for the entire test period.



Data will not be saved until initiated on the gas analysis screen.
Only displayed values are saved.

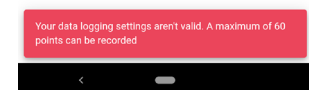
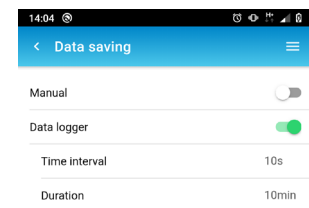


All data saved using the app will be saved on the smartphone or computer, not on the internal memory of the combustion analyzer



The following screen will be displayed if the memory is insufficient:


- Tap "**Change setting**".
- Modify the time interval or the duration.



10. Manage your data

The data menu allows to create and manage folders where measurements will be saved.

10.1 Create a folder

- Tap  then "Data".
- Enter a folder name.



You can use your customer's name.


- Tap "Create folder".

The folder appears in the list.

10.2 Modify a folder

- Tap  then "Data".


The folders list appears.

- Tap  to edit the folder name.

10.3 Delete a folder



- Tap  then "Data".

The folders list appears.

- Tap  to delete the folder.

10.4 Import data from the analyzer

It is possible to import data saved in Si-CA 130 and Si-CA 230 analyzers.


- Tap  then "Data".
- Tap  at the top right of the screen.

Folder(s) containing data are imported from the analyzer to the app and appears on the folder list.

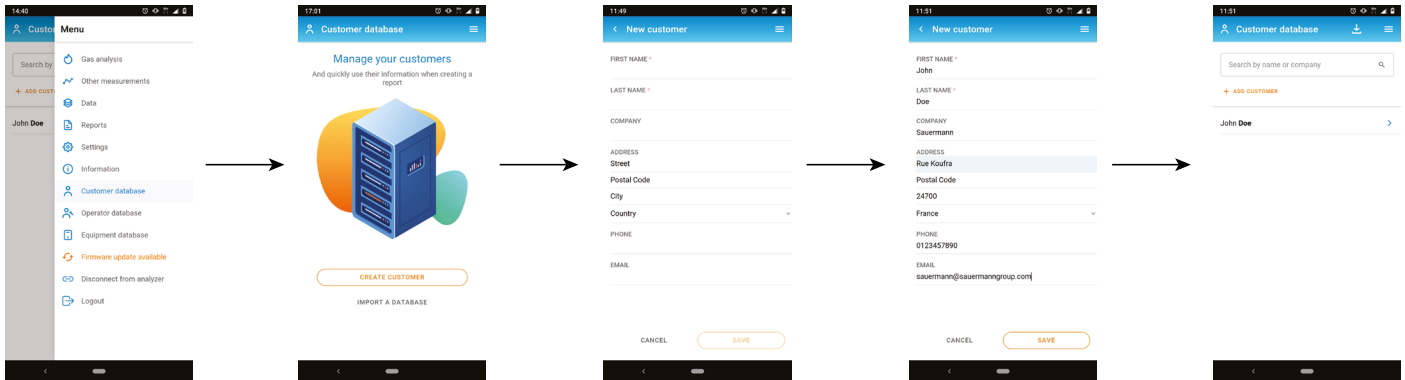
11. Manage the customer database

The customer database allows to create customers and use their information when creating a report.

11.1 Create a customer

- Tap  then "Customer Database".
- Tap "Create customer".
- Enter all information regarding the customer to create.
- Tap "Save".

The customer is created and appears on the list.




11.2 Modify a customer

From the list of customers:

- Tap the name of the customer to modify.
- Perform the required modifications.
- Tap "Save".

11.3 Delete a customer

From the list of customers:



- Tap the name of the customer to delete.
- Tap  at the top right of the screen.
- Tap "Delete" to confirm.



All information and locations about this customer will be deleted.

11.4 Import a customer data file

It is possible to import customer information from an xml file.

- Tap  then "Customer Database".
- Tap "Import a database" or tap  if customers have already been created.
- Tap "Select your file".
- Select the required file on your device (smartphone or computer).

A preview of the first customer is displayed.

- Tap "Import".

A message confirming the import is displayed.

- Tap "Go to customer database".

Customers from the xml file have been imported into the customer database.

In order to be correctly imported, the xml file must follow our xml format:

```
<?xml version='1.0'?>
<customers>
  <customer>
    <customerDetails>
      <city>Montpon-Ménéstérol</city>
      <company>Sauermann France</company>
      <country>France</country>
      <email>example_1@sauermanngroup.com</email>
      <firstname>John</firstname>
      <lastname>Doe</lastname>
      <phone>+33 5 53 80 85 00</phone>
      <street>Zone d'Activités Bernard Moulinet, Rue Koufra</street>
      <zipCode>24700</zipCode>
    </customerDetails>
    <location>
      <name>Sauermann Montpon</name>
      <contact>Mme Marie Doe</contact>
      <city>Montpon-Ménéstérol</city>
      <country>France</country>
      <email>example_1@sauermanngroup.com</email>
      <phone>+33 5 53 80 85 00</phone>
      <street>Zone d'Activités Bernard Moulinet, Rue Koufra</street>
      <zipCode>24700</zipCode>
    </location>
    <location>
      <name>Sauermann New York</name>
      <contact>Ms Helena Smith</contact>
      <city>New York</city>
      <country>United states</country>
      <email>example_2@sauermanngroup.com</email>
      <phone>(631) 234-7600</phone>
      <street>140 Fell Court, Ste. 302 Hauppauge</street>
      <zipCode>11788</zipCode>
    </location>
  </customer>
</customers>
```

To create your own xml file:

- Copy the text from "<?xml version='1.0'?>" to the last "</customer>".
- Past this text into a notepad file.
- Change the information written in black between "city", "company", "country", "email", "firstname", lastname", "phone", "street" and "zipCode".
- Save the notepad file as xml.

12. Manage customers' locations

A customer can have multiple sites with different addresses. So, it is possible to create several locations to assign to the same customer.

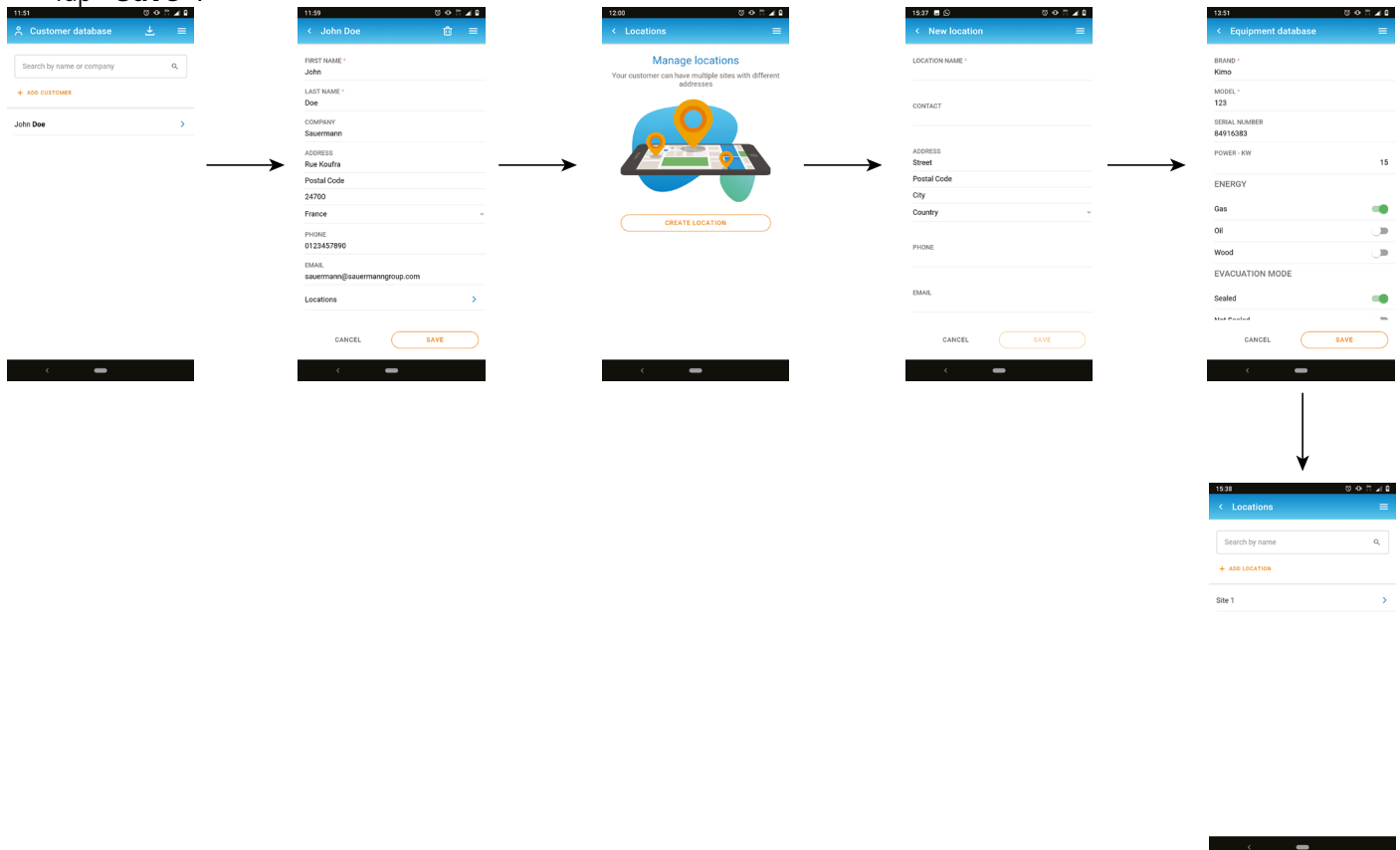


To add a location, one or more customers must be created. See "Create a customer" on page 20.

12.1 Add a location to a customer

From the list of customer:

- Tap the name of the customer to add a location.
- Tap **"Locations"** at the bottom of the screen.
- Tap **"Create location"**.
- Enter all information regarding the location.
- Tap **"Save"**.




12.2 Modify a location

From the list of locations:

- Tap the name of the location to modify.
- Perform the required modifications.
- Tap **"Save"**.

12.3 Delete a location

From the list of locations:

- Tap the name of the location to delete.
- Tap  at the top right of the screen.
- Tap **"Delete"** to confirm.




All information about the location will be deleted.

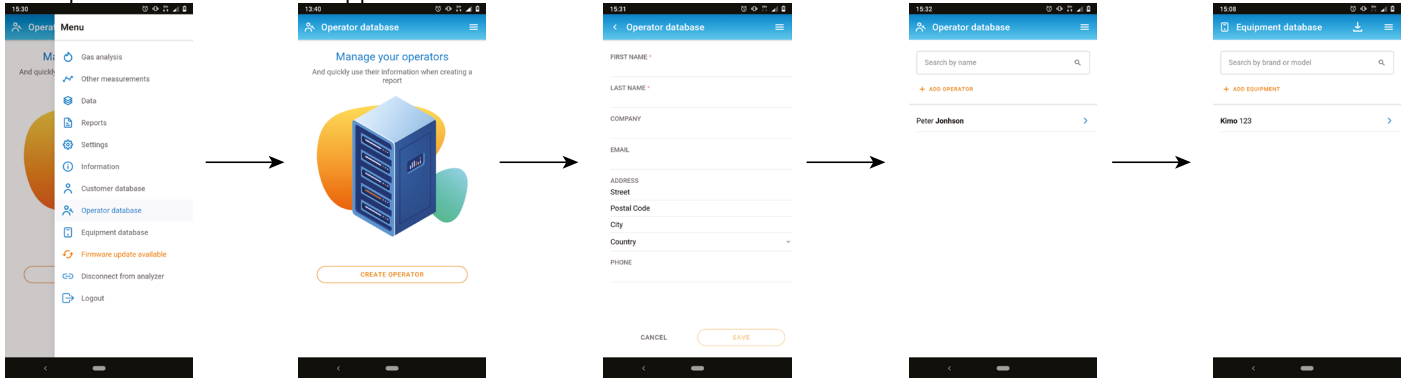
13. Manage the operator database

The operator database allows to create operators and use their information when creating a report.

13.1 Create an operator

- Tap  then "Operator Database".
- Tap "Create operator".
- Enter all information regarding the operator to create.
- Tap "Save".

The operator is created and appears on the list.




13.2 Modify an operator

From the list of operators:

- Tap the name of the operator to modify.
- Perform the required modifications.
- Tap "Save".

13.3 Delete an operator

From the list of operators:

- Tap the name of the operator to delete.
- Tap  at the top right of the screen.
- Tap "Delete" to confirm.




All information about this operator will be deleted.

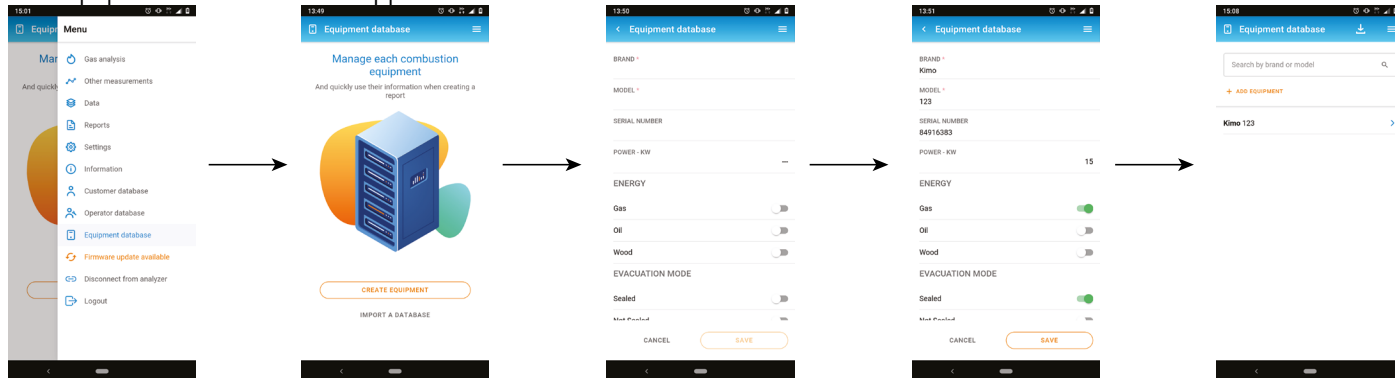
14. Manage the equipment database

The equipment database allows the user to enter information about the combustion equipment and use this information when creating a report.

14.1 Create an equipment

- Tap  then "Equipment Database".
- Tap "Create equipment".
- Enter all information regarding the equipment to create.
- Tap "Save".

The equipment is created and appears on the list.




14.2 Modify an equipment

From the list of equipment:

- Tap the name of the equipment to modify.
- Perform the required modifications.
- Tap "Save".

14.3 Delete an equipment

From the list of equipment:



- Tap the name of the equipment to delete.
- Tap  at the top right of the screen.
- Tap "Delete" to confirm.



All information about this equipment will be deleted.

14.4 Import an equipment data file

It is possible to import equipment information from an xml file.

- Tap  then "Equipment Database".
- Tap "Import a database" or tap  if equipments have already been created.
- Tap "Select your file".
- Select the required file on your device (smartphone or computer).

A preview of the first equipment is displayed.

- Tap "Import".

A message confirming the import is displayed.

- Tap "Go to equipment database".

Equipments from the xml file have been imported into the equipment database.

In order to be correctly imported, the xml file must follow our xml format:

In order to be correctly imported, the xml file must follow our xml format:

```
<?xml version='1.0'?>
<equipments>
  <equipment>
    <equipmentDetails>
      <brand>Chaffoteaux</brand>
      <energy>Gas</energy>
      <evacuation>NotSealed</evacuation>
      <model>32N</model>
      <power>25</power>
      <serialNumber>123-aaa</serialNumber>
      <installationDate>2020-12-22</installationDate>
      <burnerBrand></burnerBrand>
      <burnerModel></burnerModel>
      <burnerInstallationDate></burnerInstallationDate>
      <burnerPower></burnerPower>
      <burnerSerialNumber></burnerSerialNumber>
    </equipmentDetails>
  </equipment>
  <equipment>
    <equipmentDetails>
      <brand>Chaleur Bois</brand>
      <energy>Wood</energy>
      <evacuation>Sealed</evacuation>
      <model>SOLID25KW</model>
      <power>25</power>
      <serialNumber>153-fez</serialNumber>
      <installationDate>2020-12-22</installationDate>
      <burnerBrand>RIELLO</burnerBrand>
      <burnerModel>fioul Millenium 40G3</burnerModel>
      <burnerInstallationDate>2020-12-22</burnerInstallationDate>
      <burnerPower>35</burnerPower>
      <burnerSerialNumber>15615151-1-gerrger</burnerSerialNumber>
    </equipmentDetails>
  </equipment>
</equipments>
```


To create your own xml file:

- Copy the text from "<?xml version='1.0'?>" to the last "</equipments>".
- Past this text into a notepad file.
- Change the information written in black between "brand", "energy", "evacuation", "model", "power", "serialNumber", "installationDate", "burnerBrand", "burnerModel", "burnerInstallationDate", "burnerPower" and "burnerSerialNumber".
- Save the notepad file as xml.


15. Update the firmware of the analyzer


When the analyzer is connected to the app and if a new firmware version is available for the analyzer, the app will display **"Firmware update available"** on the Menu.

To update the firmware:

- Tap .
- Tap **"Firmware update available"**.
- Tap **"Download"** to download the firmware.

A progress bar is displayed.

 Transferring the firmware to the analyzer can take a long time depending on the wireless connection.

 The battery level on both the analyzer and mobile phone should be greater than 50% to ensure proper installation of new firmware

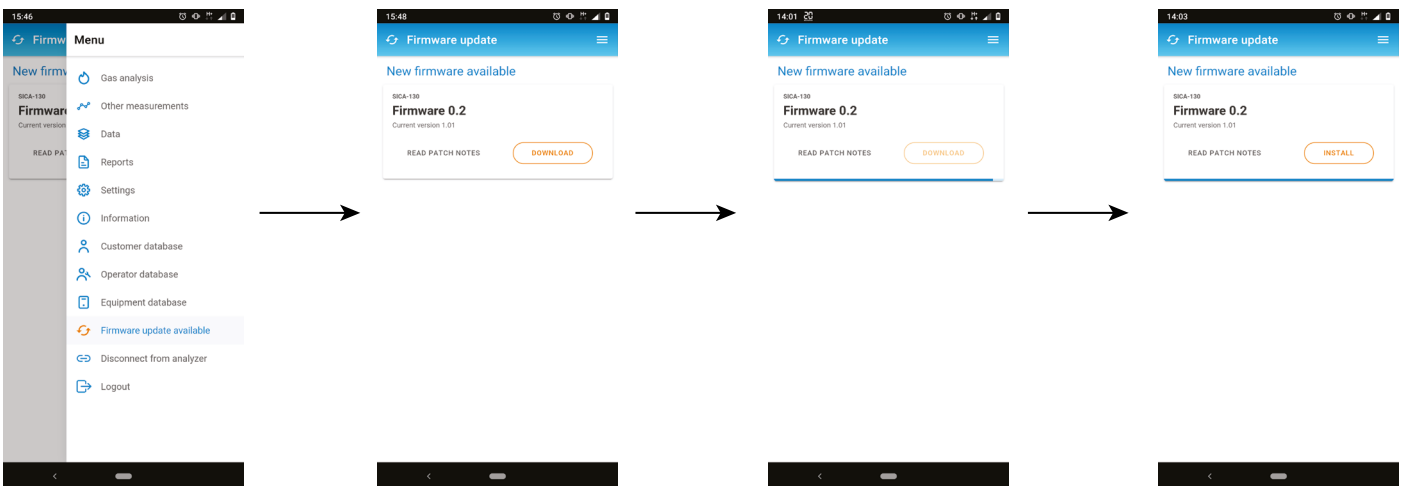
When downloading is finished:


- Tap **"Install"**.

A message is displayed asking to confirm the installation.

- Tap **"Install now"**.

The progress of the update is displayed on the analyzer screen.




 Tap **"Read Patch Notes"** to find out what's new in the firmware.


16. Create a report

The gas analysis measurements can be exported as part of a detailed report. To create reports, combustion gas analysis data must first be saved.

16.1 Save measurements

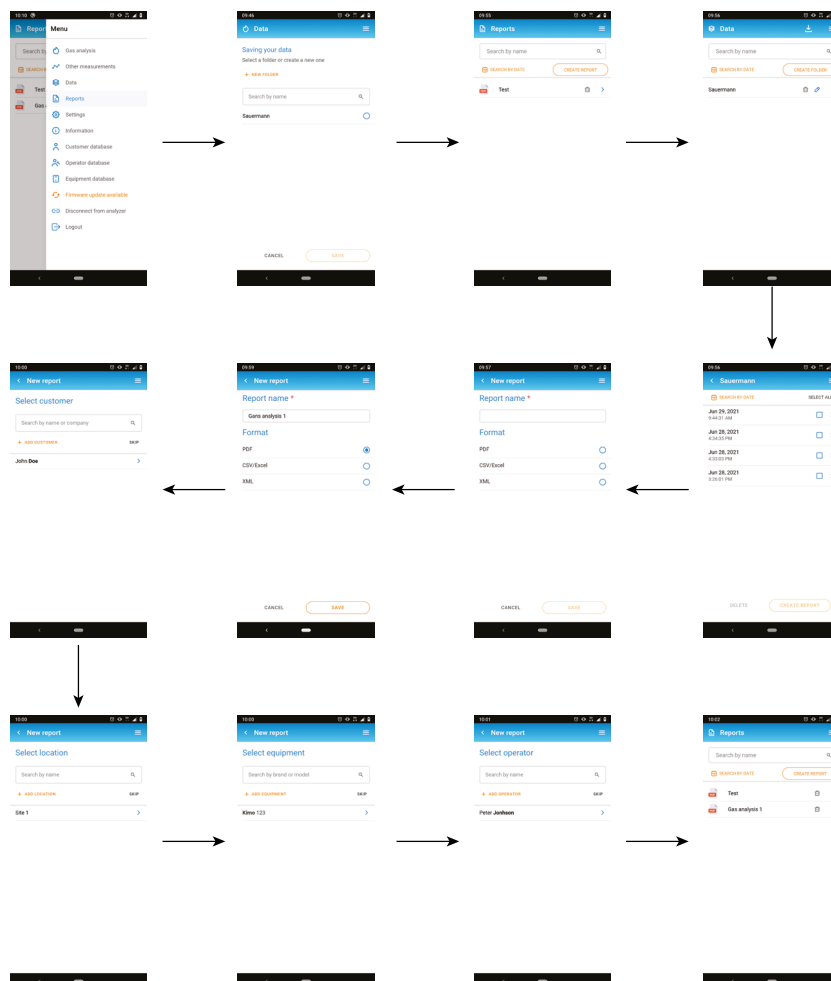
- Tap  during a gas analysis.
- Select a folder previously created or create a folder.
- Tap **"Save"**.

16.2 Create a report

- Tap .
- Tap **"Reports"** then **"Create report"**.
- Select the folder or create a new one in which the report will be saved.
- Tick the box corresponding to the saved data.
- Tap **"Create report"**.
- Name the report.
- Select the report format: pdf, CSV/Excel® or XML.
- Tap **"Save"**.
- Select the customer or create a new one corresponding to the report.
- Proceed the same way for the location, the equipment and the operator.
- Add some comments that will appear on the report if needed.
- Add pictures if needed by clicking **"Add picture"** below the comments part.
- Tap **"Save"**.



The report is created and appears on the list.

- Tap on it to open it.




16.3 Create a report from data of the analyzer

It is possible to create a report from data saved in Si-CA 130 and Si-CA 230 analyzers.

- Tap .
- Tap **"Reports"** then **"Create report"**.
- Tap  at the top right of the screen.
- Folder(s) containing data are imported from the analyzer to the app and appears on the folder list.
- Use this folder to create the report.

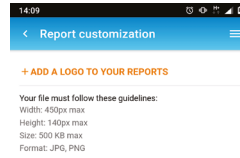
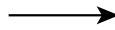
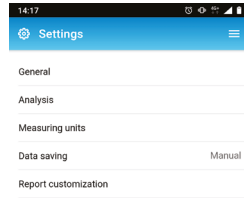
17. Customize the report

It is possible to customize the report by adding a logo:

- Tap  then "Settings".
- Tap "Report Customization".
- Tap "Add a logo to your reports".
- Select a logo file.




The logo must follow these guidelines: Width: 450 px max; Height: 140 px max; Size: 500 KB max and Format: JPG or PNG



18. Disconnection

To disconnect the analyzer from the app:

- Tap .
- Tap "Disconnect from analyzer".

The analyzer is disconnected from the app. Follow the connection procedure to connect the analyzer again.

To log out from the app:

- Tap .
- Tap "Logout".



You will no longer be connected to the app. The email and password will have to be re-entered to log in to the app.

It is not necessary to log out each time you close the app.

Sauermann Industrie

ZA Bernard Moulinet
24700 Montpon
France
T. +33 (0)5 53 80 85 00
services@sauermanngroup.com

Sauermann NA

140 Fell Court, Ste. 302
Hauppauge, New York 11788
T. (+1) 631-234-7600
F. (+1) 631-234-7605
info.usa@sauermanngroup.com

Sauermann GmbH

Leibnizstraße 6
D – 74211 Leingarten
T. +49 (0)7131/399990
F. +49 (0)7131/399992
info.germany@sauermanngroup.com

Sauermann UK

Units 7-9, Trident Business Park
Amy Johnson Way
Blackpool - FY4 2RP
T. +44 (0) 870 950 6378
F. +44 (0) 870 950 6379
info.uk@sauermanngroup.com

Sauermann Italia SA

Via Golini 61/10
40024 Castel S.Pietro Terme (BO)
T. (+39)-051-6951033
F. (+39)-051-942254
info.italy@sauermanngroup.com

Sauermann Ibérica

C/Albert Einstein 33.
Planta 3. P. I. Santa Margarida II-
08223 Terrassa (Spain)
T. +34 931 016 975
info.spain@sauermanngroup.com

Sauermann Australia

1/36 Campbell Avenue, Cromer , 2099,
NSW, Sydney
T. (+612) 8880 4631



BE CAREFUL! Material damages can happen, so please apply the precautionary measures indicated.



Once returned, required waste collection will be assured in the respect of the environment in accordance to guidelines relating to WEEE.