

## USER MANUAL

# Si-HVACR Measurement

## MOBILE APPLICATION

# 1 - Mobile App description

The **Si-HVACR Measurement MobileApp** is the Sauermann mobile application dedicated to the following HVACR portables: Si-HH3, Si-TT3, Si-PM3, Si-Ti3, Si-VH3 & Si-VV3 measuring instruments. It allows to view and record measurements in real-time.

## Main features

- Easily view different parameters
- Browse saved measurements history and data graphs (average, min & max values, etc.)
- Create reports (PDF, CSV or XML format) and add up to four (4) photos to customize them with either customer or operator information.

## Minimal required configuration

For an optimal operation, the following minimum required versions must be installed on the tablet or smartphone:

- Android 5.0
- iOS 12.4

## Mobile Application installation



- Flash the following QR code to download **Si-HVACR Measurement MobileApp** application on your smartphone or tablet.  
or
- Write "**Si-HVACR Measurement Mobile App**" in the search bar then validate.
- Download the application.
- Follow your mobile device indications.



Download the **Si-HVACR Measurement MobileApp**



# 2 - Safety instructions

## Si-HVACR Measurement MobileApp application

### 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.

### 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 DVD or 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.

### 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 - Start with the application



## Launch the Si-HVACR Mobile App

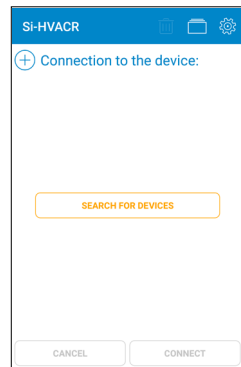
Launch the application pressing this icon.

## Activate the wireless communication on the instrument

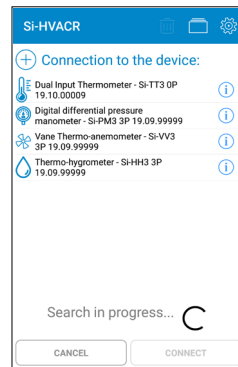
- The device is turned on.
- Press simultaneously ON/OFF & HOLD keys to activate or deactivate wireless communication. The wireless communication icon flashes on the instrument screen. The icon becomes fix when the instrument is paired to the tablet or the smartphone.
- Si-TI3 only: turning the device on automatically activates the wireless communication.

## Pair the device to the smartphone/tablet

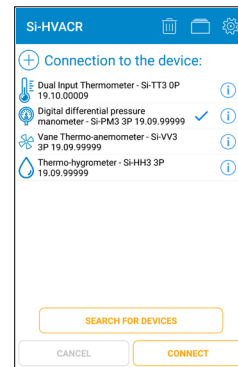
- Click "Search for devices". The detected devices are displayed.
- Select the device to pair then click "Connect".
- The real-time measurement values are displayed on the smartphone/tablet.



Home



Devices detection



Devices selection

## Device information

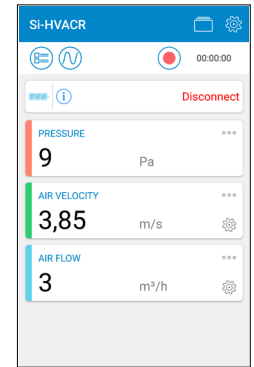
From the real-time values display:

- Check the battery level of the device
- Display the device information: name, serial number and firmware version.

- Click "Disconnect" to unpair the device.
- Click "Yes" to confirm disconnection.

## Real-time displayed values on App

- Si-HH3 thermo-hygrometer: humidity, temperature, dew-point, wet temperature, absolute humidity, enthalpy, mixing ratio
- Si-TI3 infra-red thermometer: infrared temperature, ambient temperature
- Si-TT3 dual input thermometer: T1 thermocouple temperature & T2 thermocouple temperature, delta temperature
- Si-PM3 digital differential pressure manometer: pressure, air velocity, airflow
- Si-VH3 hotwire thermo-anemometer: air velocity, airflow, ambient temperature
- Si-VV3 vane thermo-anemometer: air velocity, airflow, temperature



Example with a Si-PM3

- Customize the parameters display: display, hide, set the parameter location.
- Directly access the options of the air velocity & airflow parameters. See more details in Chapter 4 - Options settings, Measures.
- Display the list of parameters that can be added to the main display. Select the required parameter then confirm with "Select".

# 4 - Options settings

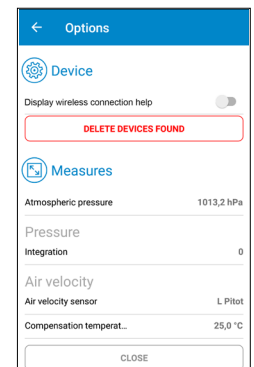
- Access the options settings from the main screen displaying real-time data. When options are set, click "Close".

## Device

- If required, tick the wireless connection help box to activate it.
- Click on "Delete devices found" to empty the list of detected devices.

## Measures

- Set the atmospheric pressure. Default value: 1013.2 hPa
- Pressure settings for Si-PM3: In "Pressure", set the integration value. Click "Validate" to confirm.
- Air velocity settings for Si-PM3, Si-VV3 & Si-VH3: In "Air velocity", select the required air velocity sensor & set the compensation temperature.
  - Add a customized air velocity sensor: Add a name and click validate. Set the coefficient of the air velocity sensor then confirm with validate.



- Airflow settings for Si-PM3, Si-VV3 & Si-VH3:  
In "Airflow", select the air vent type (rectangular or circular) and the air vent dimensions.  
+ Add customized air vent dimensions:  
Fill in the air vent width & length then validate.
- Tick the "K Factor" box to activate it.  
Select the K factor value to apply.  
+ Add a customized K factor value then validate.
- 🗑️ Delete an existing customized item (air velocity sensor, air vent type or K factor):  
Select the items to delete.  
Click "Delete" to confirm.



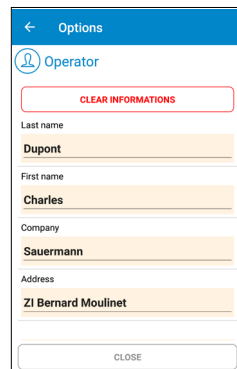
Options - Units

### Select the measuring units

For each parameter, select the unit to be displayed on the real-time data screen:

- Click on the parameter then select the required unit.
- Confirm with "Select".

PARAMETER	AVAILABLE UNIT
Temperature	°C / °F
Pressure	Pa / hPa / mmH <sub>2</sub> O / inH <sub>2</sub> O / PSI / inHg
Atmospheric pressure	hPa / mbar
Air velocity	m/s / fpm / km/h / mph
Airflow	m³/h / m³/s / m³/min / cfm
Distance	mm / in



Options - Operator

### Operator

- Fill in the information on the operator: name, address, e-mail, phone.  
Click "Clear information" to empty all operator fields.
- Add a logo to customize your measurement reports:  
Click "Logo" then select an existing photo or take a photo.  
Click "Delete" to remove the selected picture.

### About

- "Read the manual": allows to download the user manual
- "Languages": select the required language.
- "Version": consult the application version number.
- "Licences": display the licences.

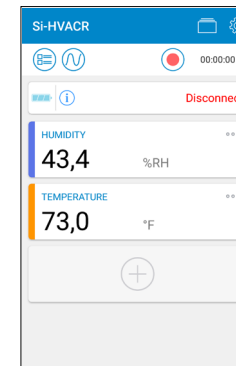


Options - Logo

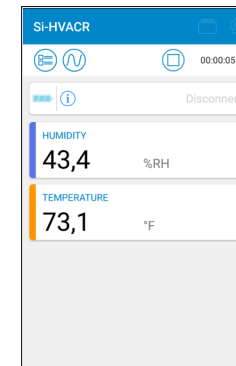
## 5 - Datasets

### Record & save measured values

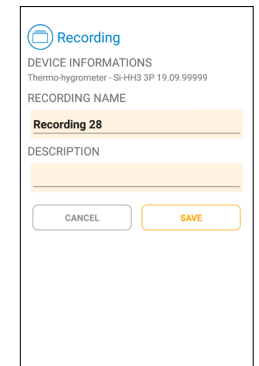
- Start the record of measured values.  
The elapsed time is displayed on top of the screen.
- Stop the record of measured values.
- Save the record:  
Add a recording name and a description if needed, then click "Save".  
Click "Cancel" if you do not need to save this record.
- Open the data record:  
Click "Yes" to open the data record or "No" to go back to the measurements display.



Ready to start recording  
Example with a Si-HH3



Record in progress  
Example with a Si-HH3

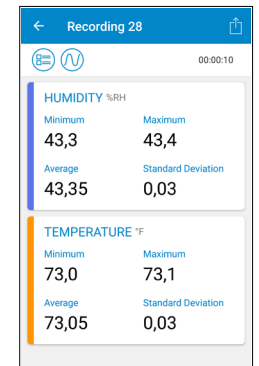


Save recording  
Example with a Si-HH3

Open the data record to display a summary with:

- the recording name
- the recording duration
- the minimum, maximum, average & standard deviation values for each parameter displayed.

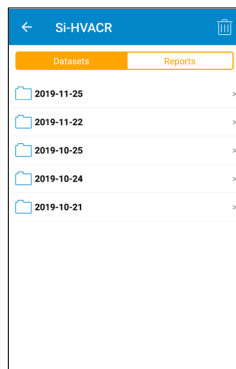
📄 Directly export the dataset.  
See next page: "Export the measured values".



Summary display

### Display the saved datasets and reports

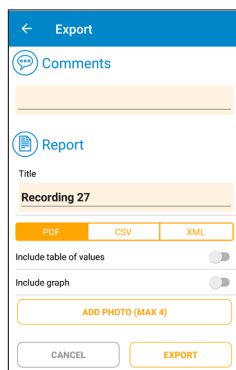
- Open the list of saved datasets and reports from the real-time values display screen.
- Click "Datasets" to display all the saved datasets: In each folder, find the measurements records carried out for this dataset. Click on a record to display its summary.
- Click "Reports" to display the list of saved reports: Select how to display the list of reports: ascending/descending alphabetical, chronological or inversely chronological. Click on a report to display it.
- Delete existing files: select the items to delete then click "Delete" to confirm.



Datasets & reports

### Export the measured values

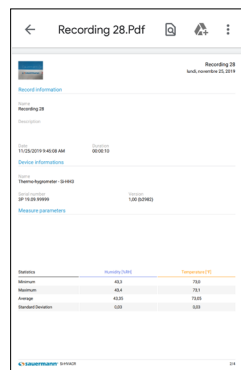
- Export data as a measurement report, directly from the data summary screen, or from the "Datasets" list selecting the required recording.
- Fill in the customer information.
- Check that the operator information is correct.
- Add comments if needed.
- Select the required format: PDF, CSV or XML.
- PDF report: select the items to include in the report. Tick "Include table of values" and/or "Include graph" if needed. It is also possible to add up to 4 photos to the report to customize it with either customer or operator information.



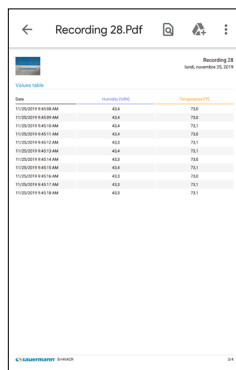
Data export



PDF Report - Information

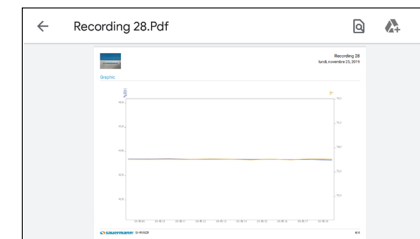


PDF Report - Summary



PDF Report - Values table

- CSV or XML reports: tick "Copy to clipboard" to copy the data and/or tick "Include table of values" to add the values table to the report.
- Once the export done, click "Yes" to send or share the report, or "No" to cancel.



PDF Report - Graph

### View mode

From the real-time values display, during a measurement record, or from the record summary screen, use the following icons to switch to the required view:

- Table of values
- Graph
- Real-time display

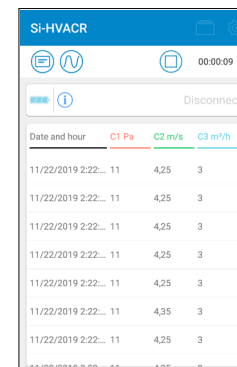
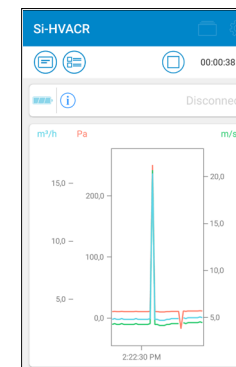
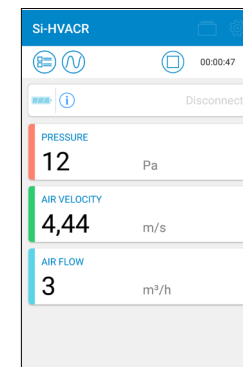


Table of values  
Example with a Si-PM3



Graph  
Example with a Si-PM3



Real-time values  
Example with a Si-PM3