



User Manual

iOS Application

(version 2.11)



**UNIVERSITY OF
CHEMISTRY AND TECHNOLOGY
PRAGUE**

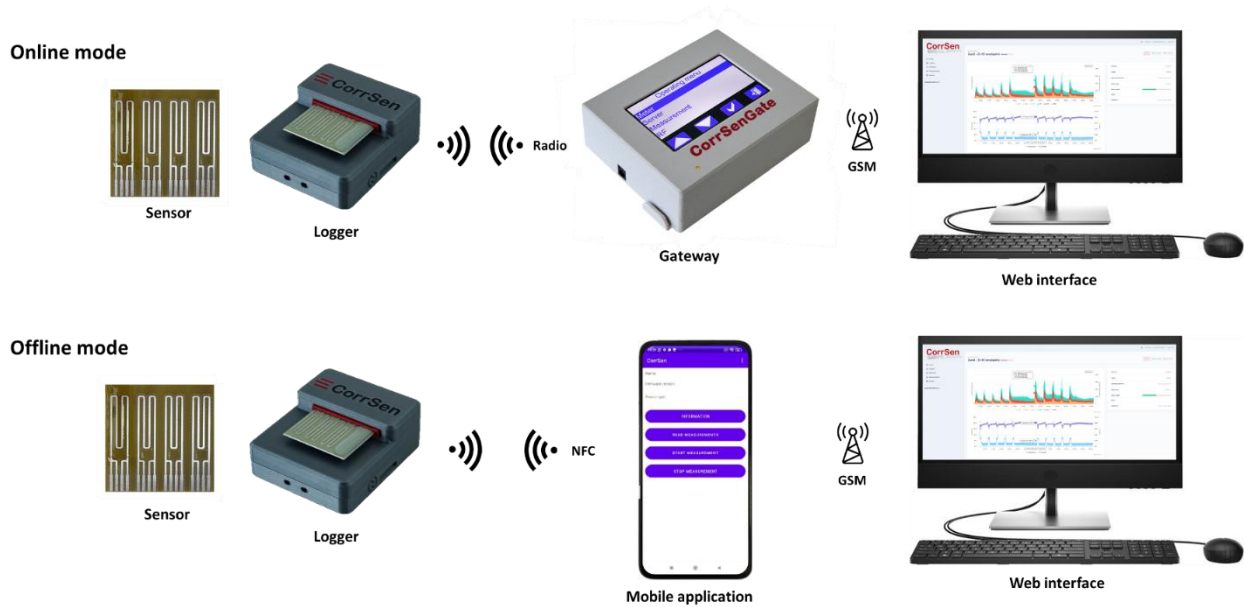


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1. CorrSen Mobile Application for iOS

The CorrSen mobile application is used for reading data from CorrSen loggers and configuring its operating parameters in situations where the logger cannot operate online (e.g., no mobile signal, or we prefer offline operation). Once the mobile phone is connected to the mobile network, the retrieved data can be sent to the server.

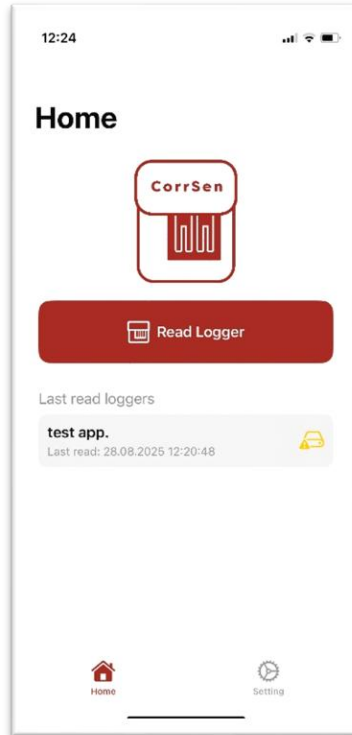


1.1. Installing the Application

The CorrSen app can be downloaded and installed free of charge from the App Store. It is advisable to check the App Store from time to time for the latest version.

1.2. Starting the Application

Tap the CorrSen icon to launch the application and display the Home screen.



On the Home screen, you can view information about the latest reading sessions from assigned loggers (Last read loggers) or initiate communication with a logger (Read Logger). Tapping any item in Last read loggers overview opens an information window displaying details of the most recent reading sessions for the selected logger. The content is identical to the *Detail menu* described below.

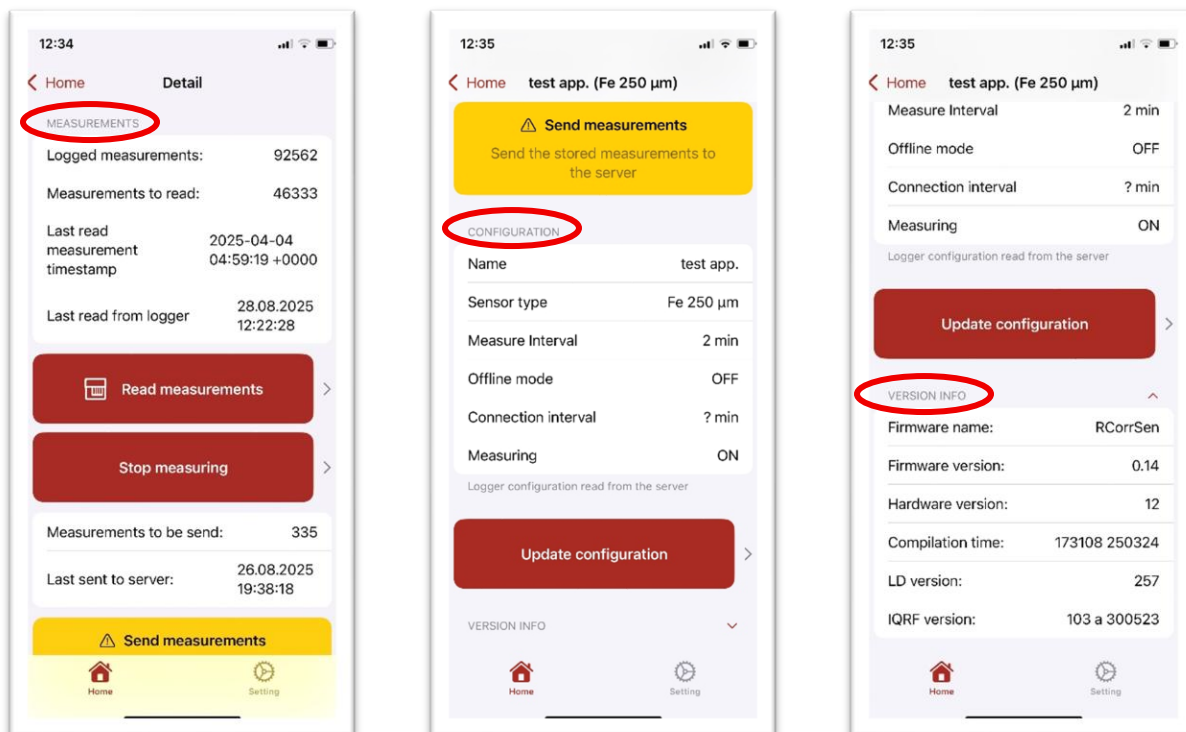
At the bottom of the screen, two icons are displayed (and also appear in other application windows) – **Home** for returning to the main screen and **Setting** for displaying and editing parameters.

To initiate the communication, the mobile phone must be positioned correctly to establish an NFC connection. Because NFC operates only over very short distances (typically a few centimeters), ensuring a stable connection is essential for proper application's operation. In most phones, the NFC antenna is located at the top back (typically near the camera lens). On the logger, the NFC antenna is located on the side of the enclosure and marked with an NFC symbol. All information about the NFC connection is displayed in the NFC window at the bottom third of the display.



1.3. Detail Menu

Once the connection is established, the application displays the Detail window with current information from the connected logger, organized into three sections – **Measurements** (information about measurements in the logger), **Configuration** (logger settings), and **Version** (software version information, expandable by tapping).



Understanding Parameters:

Measurements Section:

Logged measurements: total number of measurements stored in the logger

Measurements to read: number of measurements not yet read and transferred to the server; these are read when the "Read measurements" function is started

Last read measurement timestamp: date and time of the last recorded sample; this helps verify if all data has been uploaded to the server

Last read from logger: date and time of the last data reading from the logger

Measurements to be send: number of measurements read from the logger but not yet sent to the server; if nonzero, a yellow **Send measurements** button appears to allow transfer

Last send to server: date and time of the last data transfer to the server

Configuration Section:

Name: current measurement name

Sensor type: type of measuring sensor

Measure interval: current measurement interval

Offline mode: on/off state of offline mode

Connection interval: interval for sending data to the gateway (not functional in offline mode)

Measuring: on/off state of data logging

Version Info Section:

Expandable block containing SW/FW version information of the logger SW and FW.

2. Data Reading and Logger Configuration Menu

The Detail menu provides an access to features for reading data from the logger and for configuring its parameters:

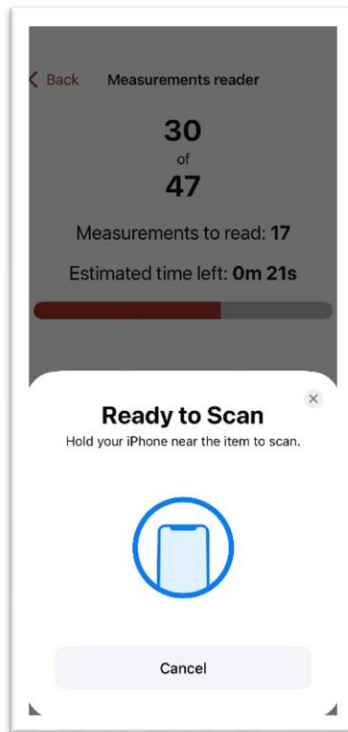
- Read measurements,
- Start/Stop measuring,
- Update configuration.

If unsent measurements exist, a yellow Send measurements button is also provided.

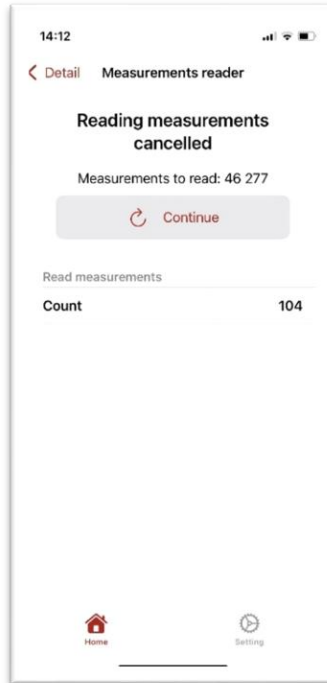
2.1. Read measurements

This function is used to read data measured by the logger. The number of unread measurements is shown “Measurements to read” the Detail menu. Pressing Read measurements button starts data transfer via NFC. If the phone is not close to the logger, bring it closer until NFC communication is established.

During reading, the screen shows the number of measurements read, unread, and estimated time remaining. Periodically (about once per minute), NFC reinitializes, temporarily pausing data transfer and showing “Reinitiating NFC session” before resuming. Reading can be interrupted anytime with the Cancel button in the NFC communication window.



After completion (or interruption), the counts of read/unread measurements are displayed. You can return to the Detail menu with the Detail button or continue with Continue button. If connected to mobile signal, the Send measurements button will be presented to upload data to the server. Otherwise, data can be sent later when signal is available.

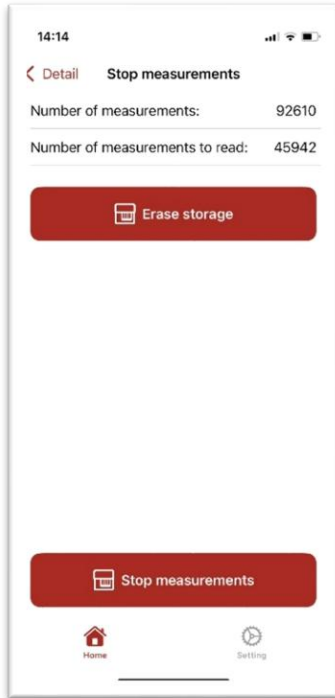


2.2. Start/Stop measurements

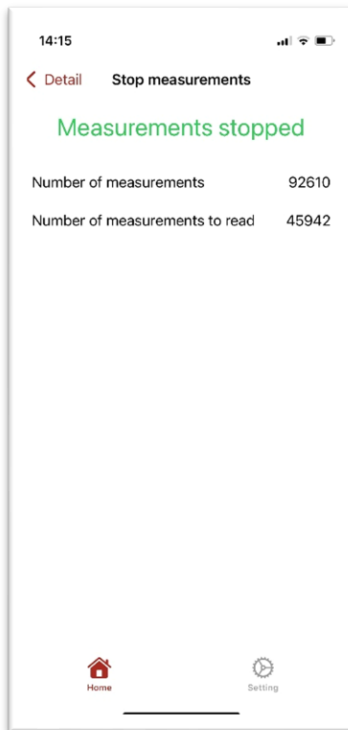
If the logger is actively measuring, this option allows temporary or permanent suspension. When the measurement is suspended, this option starts the measurement.

2.2.1. Stop measurements

When the logger is in active measurement mode, the **Stop measurements** function is available, allowing you to temporarily or permanently pause data measurement by the logger. Press the Stop measurements button to stop measurement. The logger must be connected via NFC signal.



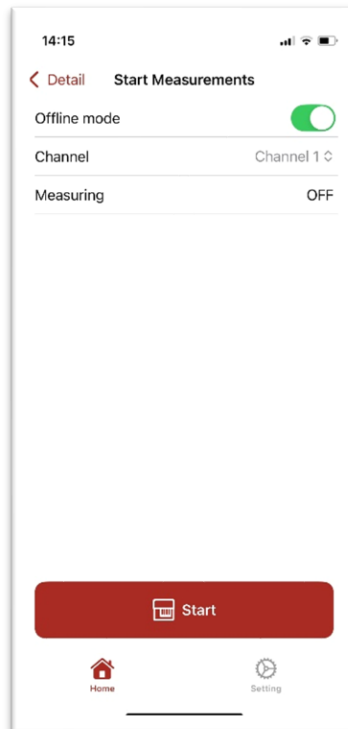
The measurement stop is confirmed on the application screen and the logger switches to idle mode, where data measurement is suspended. At the same time, the active **Erase storage** function button is presented to delete all measured data (Caution! Before deleting, it is necessary to read the data, if it is meaningful, to the server; the Erase storage function permanently deletes the data from the logger).



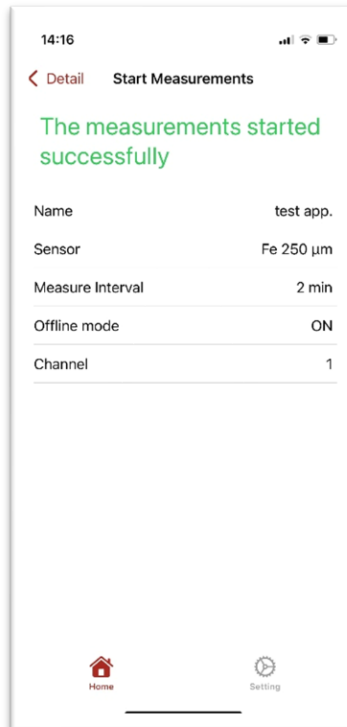
To verify that the operation was performed correctly return to the home screen and read the logger status – the *Measuring* item must be in the *off* state.

2.2.2. Start measurements

If the logger is in the measurement off state (*Measuring: off*), the **Start measurements** item is presented, it allows to turn the measurement back on. The appropriate measurement interval can be also set according to the logger settings set up at the server. The logger must be connected via NFC signal.



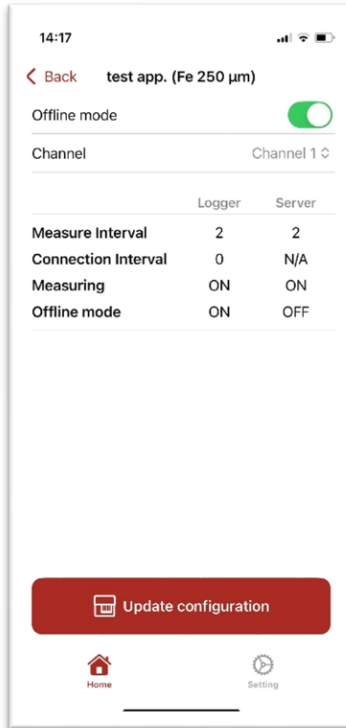
The measurement start function is confirmed on the application screen, the measurement parameters (interval, sensor type, etc.) are displayed, the logger enters the measure state and begins measuring and storing data.



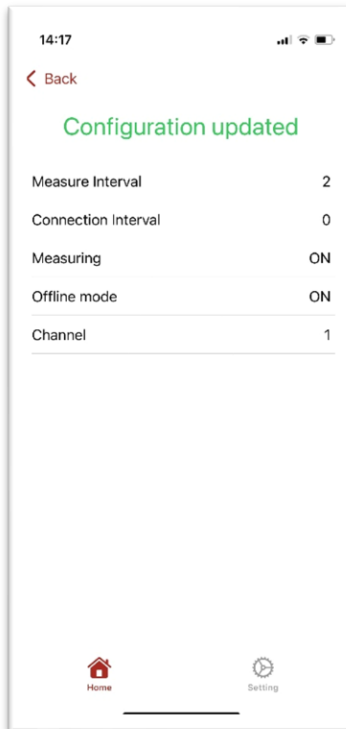
You can verify that the operation was performed correctly by returning to the home screen and reading the logger status – the *Measuring* item must be in the *on* state.

2.3. Update configuration

The **update configuration** function is used to set the logger's measurement parameters. Before using this function, the application must be launched with access to the server via a mobile signal in order to load the current values of the parameters being set. After launching the function, the parameter values from both the he logger and server are displayed. If they differ, pressing the Update configuration button will apply the server values to the connected logger. If they differ, pressing the **Update configuration** button applies the values from the server to the connected logger.



The execution of the Update configuration function is confirmed on the application screen and the newly set parameters are displayed.



3. Settings Menu

Accessible at the bottom right of the application via the **Setting** button. Logger connection is not required. In the current version, only the server address can be edited. If this is missing or incorrect, server communication (including data upload) will not work. The standard server address is monitoring.corrсен.com. The address can be changed by tapping and editing the field. Editing is completed by clicking outside the text box.

