CorrSen

User Manual

AndroidOS Application

(version 2.11)

UNIVERSITY OF CHEMISTRY AND TECHNOLOGY PRAGUE
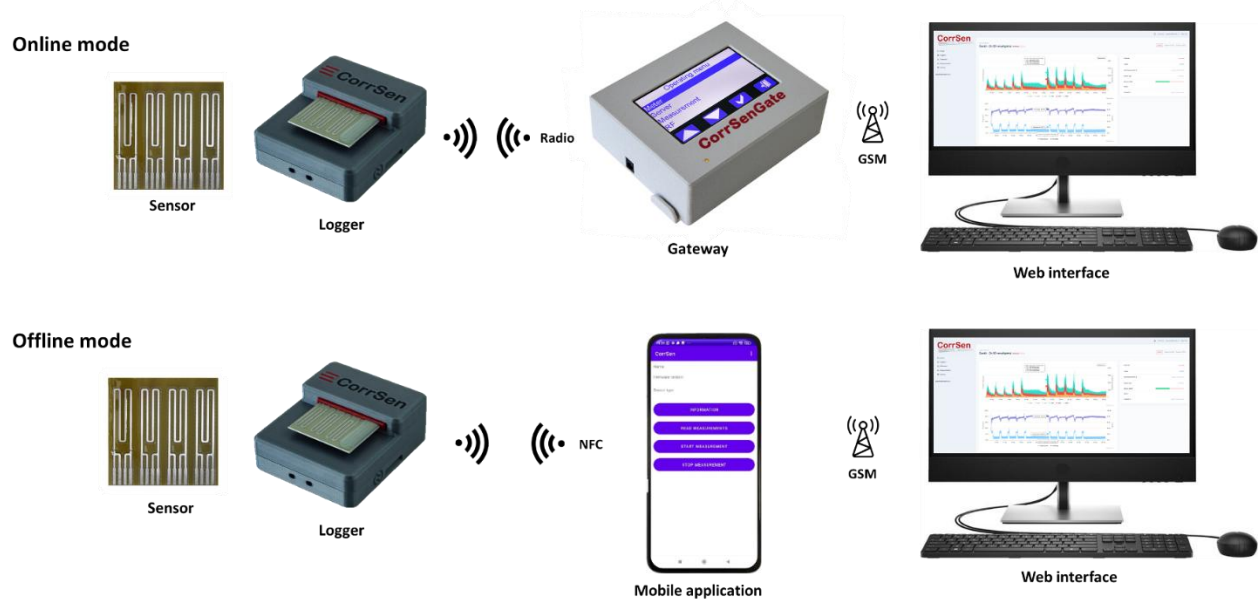
GEMA

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1. CorrSen Mobile Application for AndroidOS

The CorrSen mobile application is designed for reading data from the CorrSen logger and setting its operating parameters in situations where the logger cannot be used in online mode (e.g., lack of mobile signal, offline operation preferred, etc.). Once the mobile phone reconnects to a mobile network, the data can be sent to the server.
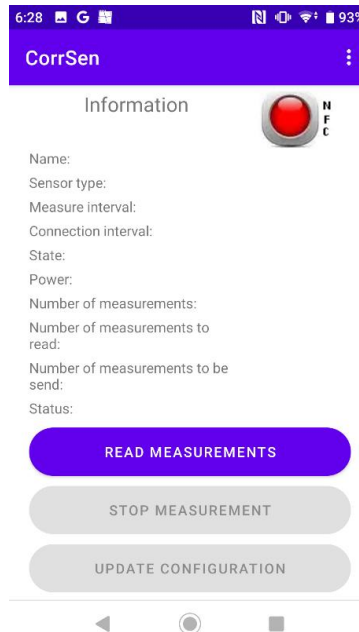

1.1. Installing the Application

The CorrSen app can be downloaded and installed free of charge from Google Play. It is recommended to occasionally check Google Play to ensure you are using the latest version.

1.2. Launching the Application

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

Because the mobile device is not yet connected to the logger, the information fields are initially empty. At this point, it is best to find the optimal position to establish an NFC connection with the logger. NFC works over a short distance (typically just a few centimeters), so ensuring a stable connection is crucial for proper application functionality.

On most smartphones, the NFC antenna is located at the upper back of the device, typically near the camera lens. On the logger, the NFC antenna position is marked with an NFC symbol on the side.

A three-color indicator in the top-right corner of almost every menu shows the current connection status via NFC:

- Idle – the phone is too far from the logger, or reading has finished

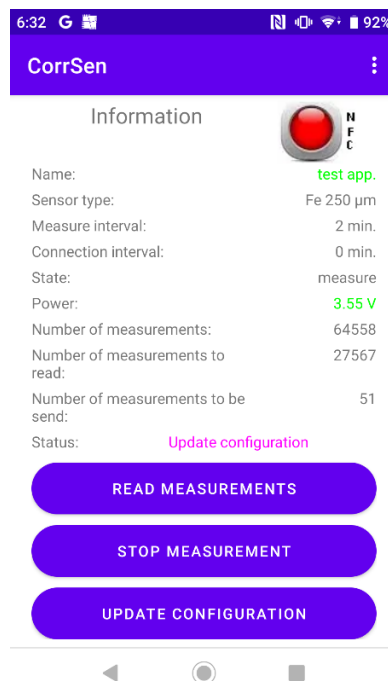- Detecting – the phone is in range, and reading is about to begin

- Reading – the phone is in range, and reading is in progress

1.3. Information Menu

Once the mobile phone is connected to the logger, the information table is populated:

Name: Name of the current measurement

Sensor type: Type of measuring sensor

Measure interval: Current measuring interval

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

State: *measure – logger* is measuring at the set interval*, sleep –* measurement is turned off

Power: Current battery voltage of the logger

Number of measurements: Total number of stored measurements in the logger

Number of measurements to read: Number of measurements that haven't been read and transferred to the server. These start reading when the "read measurements" function is activated.

Number of measurements to send: Number of measurements already read from the logger but not yet sent to the server

Status: Logger status

2. Data Reading and Logger Configuration

At the bottom of the information table is the function menu used to read data from the logger and configure its parameters. The menu has three buttons: Read measurements, Start/Stop measurements, and Update configuration.

When NFC is active, all buttons are blue (enabled). If NFC is not available, only the Read measurements button is functional, which allows starting data reading.
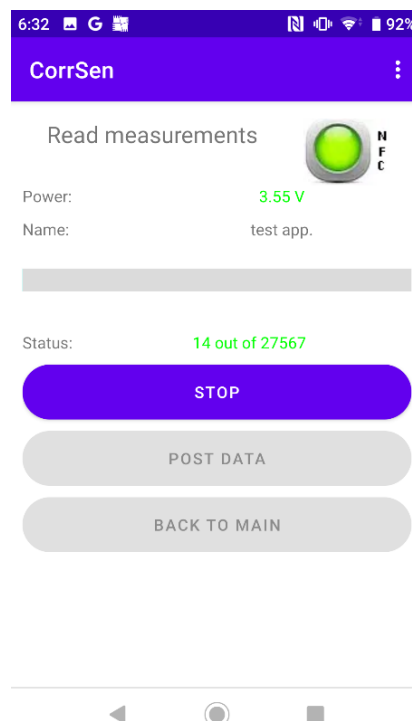
2.1. Read Measurements

This function is used to read data measured by the logger. The number of unread measurements is shown in the Number of measurements to read field in the information table.

Start the reading process by pressing the Start button. If the mobile is not yet in contact with the logger, place it near enough for the NFC communication to initiate.

Once reading starts, the Status field displays either the number of measurements being read or the remaining time required. You can interrupt the process at any time by pressing the Stop button.

After completion (or interruption), you can return to the main menu by pressing Back to main. If a mobile signal is available, use the Post data button to send the data to the server. Otherwise, data can be sent later.

2.2. Start/Stop Measurements

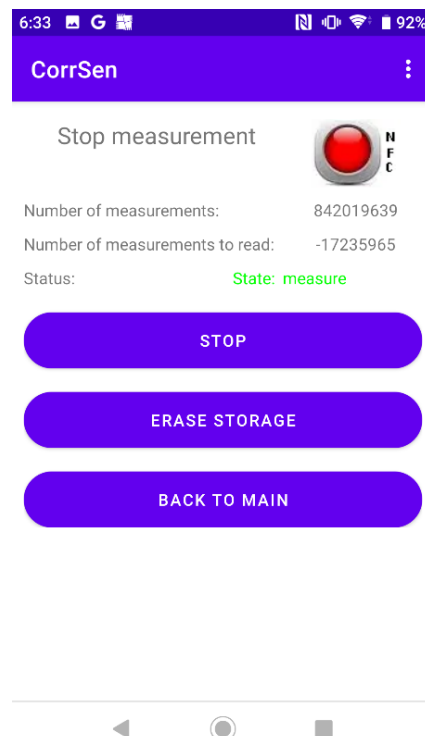This function allows starting or pausing data measurement by the logger.

2.2.1. Stop Measurements

If the logger is actively measuring, the Stop measurements function becomes available. It can be used to temporarily or permanently pause data measurement.

To stop measuring, press the Stop button. The logger must be connected via NFC. Successful operation is confirmed on the app screen, and the logger switches to the idle state.

You can also choose Erase storage to delete all measured data (Warning! Make sure to read and save important data to the server before deleting. Once erased, data is permanently lost).

To confirm the logger is idle, return to the main menu and check the Status field.
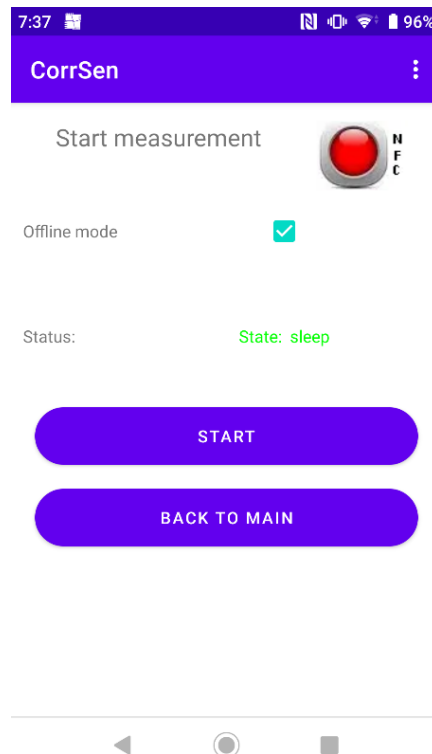
2.2.2. Start Measurements

If the logger is in the idle state (measurement stopped), the Start measurements option appears. It allows you to resume measuring.

The appropriate measurement interval will be set based on the logger's configuration on the server. The logger must be connected via NFC.

Successful activation is confirmed on the application screen. The logger will switch to measure mode and start recording data.

You can verify this by returning to the main menu and checking the Status field – must show the *measure* value.
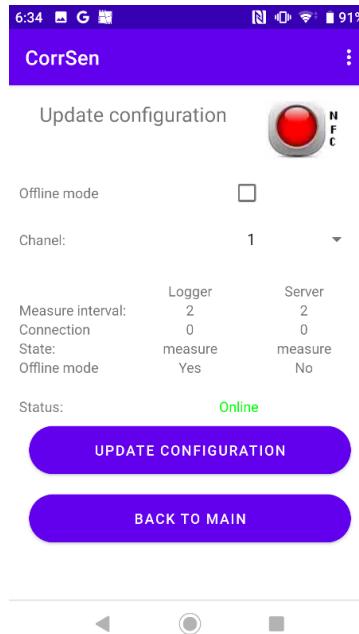
2.3. Update Configuration

The Update configuration function is used to set the measurement parameters of the logger.

Before using this function, the app must be connected to the internet (mobile signal), so it can fetch current parameter values from the server.
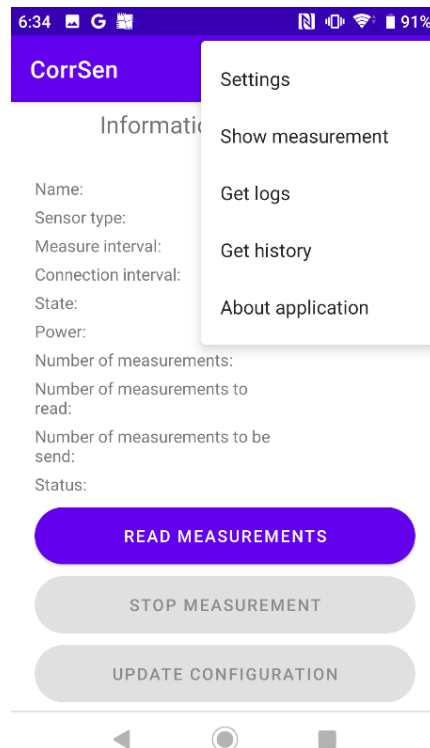
When the function is started, the logger and server parameter values are displayed. If they differ, pressing the Update configuration button will apply the server values to the connected logger.

3. Parameter Display and Settings Menu

This menu is accessible in the top right corner of the application. Logger connection is not required to view or edit these settings.

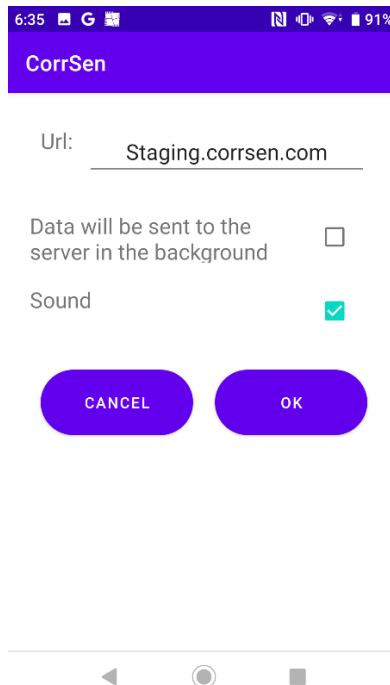The individual functions are described below.

3.1. Settings

This function displays and allows you to set the server address. Without a correct server address, communication with the server fails, and data cannot be uploaded from the logger.
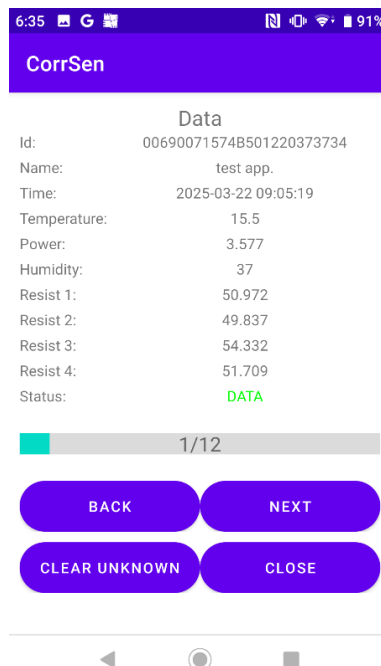
The address can be edited by clicking the field and changing the text.

You can also toggle background data sending and enable/disable acoustic signals for NFC communication status.
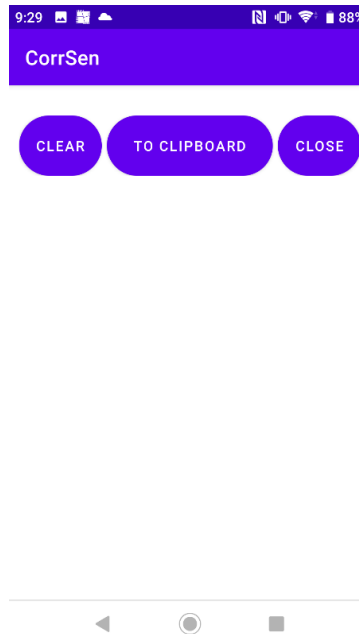
3.2. Show Measurement

This function allows you to view measured data retrieved from the logger before it's sent to the server. After sending, the data is deleted from the application and cannot be viewed again.
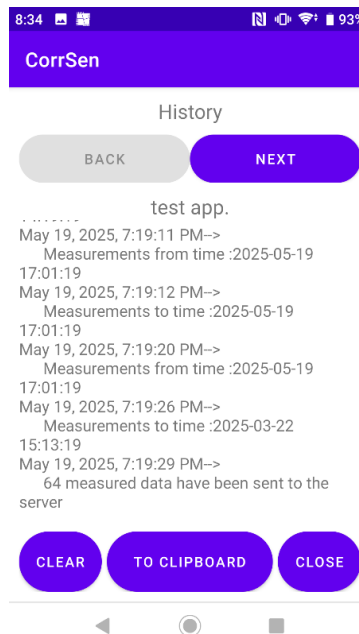
3.3. Get logs

This feature collects error messages. It is not typically used by standard users.

3.4. Get History

This function displays the history of read and sent measurements.

3.5. About Application

Displays the current version of the application.