

Efento Inspector user manual (v 3.3.0 or newer)

System startup

Connect the smartphone to its charger plugged into AC outlet (of the same AC line that provides power to the refrigerator) and do not disconnect it (the continuous connection is necessary for detection of power outages).

Create a free Google account for your device. This account will be used to upload reports and email alerts. A Google account you can create using <u>this site</u>. Write down the user name (login) and password, which will be needed later (Data export, item 6).

Important: after creating the account, enter account settings and the "**Logging and safety**" item and select the "**Allow less secure apps**" option.

- 1. Add sensors to the list
 - 1.1. Click anywhere on the screen, the system automatically searches for available sensors. To add new ones, the searching mode can be set by clicking the settings icon (the logo of Efento system) in the left upper corner of the screen and selecting "Searching" from the list.
 - 1.2. Wait until all the devices appear in a list. This may take about 20 seconds.
 - 1.3. The list shows serial numbers of sensors. The same numbers can be found on the devices. Add the sensors to the list by clicking on them.
 - 1.4. After adding all sensors, close the mode.
- 2. Change the names of the sensors
 - 2.1. Click and hold for a moment the sensor to be renamed (sensors can be physically identified by the serial numbers on stickers).
 - 2.2. Select edition icon from the upper bar.
 - 2.3. In the window that has appeared, enter a new name of the device and confirm it by clicking "OK" button.
- 3. Configure alarm thresholds (notice: in the case of exceeding the set alarm level the sensor name is highlighted in red)
 - 3.1. Click on the sensor to be configured.
 - 3.2. In the "Limits" field set the lower and upper temperature thresholds.
- 4. Enter the phone numbers and/or email addresses for sending alarm SMSes and/or emails. Notice! If you want to use email alarms, make sure that the smartphone has access to the Internet and email account has been configured first.
 - 4.1. Enter the "Alarms" section, (the logo of Efento system in the left upper corner -> Alarms).
 - 4.2. Click on "+" in the upper left corner of the screen.
 - 4.3. In the window that has appeared select the kind(s) of alarm (SMS/email), and then enter the target phone number and /or the target email address and confirm it by clicking "OK" button.
 - 4.4. To change the kind of alarms sent to a destination (phone number or email address), click on the destination and mark the required alarms on the list. By default, the destinations get information about all alarms.



4.5. To remove or edit a destination (phone number or email address), click and hold it for a moment. Then select the delete or edition icon from the upper bar.

Graphs

- 1. Select the required sensor from the list.
- 2. Select the "Graphs" item from the upper bar.
- 3. By default, the app creates graphs from the last 24 hours. If you want to change that period, enter the main menu (click on the logo of Efento system in the left upper corner), select "Settings" and then "Time range".

Data export

- 1. Select the sensor for data export from the list of sensors.
- 2. Select the data export format (pdf/csv) and type of the report:
 - a. Full: the report contains temperature readings, the lower and upper temperature thresholds and information about system events (crossings of temperature limits, power outages, power supply returns, returns to the normal range of temperature).
 - b. Shortened: the report contains only temperature readings and the lower and upper temperature thresholds.
- 3. Select the "Export" item from the upper bar.
- 4. Write down the email address previously created on Gmail.
- 5. Choose the required period of time by setting "From" and "To" parameters.
- 6. Confirm it with "Send" button. The app will require logging details. Select the "Existing" option and input the login (user name) and password to the Google account created before (see the beginning of the description). The data will be sent to the address (it may take several minutes).
- 7. By default, the data for the report are saved every 15 minutes. If you want to change that period, enter the main menu (click on the logo of Efento system in the left upper corner), select "Settings" and then "Measurement frequency".

Automatic email reports

Efento system can automatically send reports from all connected sensors. The reports can be sent to any number of recipients. To set up automatic email reports:

- 1. Enter "Settings" menu, select the "Email account" item from the list. Input the login and password to the Gmail account for the dispatch, then click "Check if correct". If the login and password are correct, a confirmation will appear. Save the changes with "Ok" button. If you do not have a Google account, you can create one for free here.
- 2. Select "Settings" and then "Export" item from the upper bar". "Switch on automatic export" should be in active state (blue).
- 3. Select the data export format (pdf/csv) and type of the report:
 - a. Full: the report contains temperature readings, the lower and upper temperature thresholds and information about system events (crossings of temperature limits, power outages, power supply returns, returns to the normal range of temperature).
 - b. Shortened: the report contains only temperature readings and the lower and upper temperature thresholds.
- 4. Enter the receiver email address. If the automatic reports are too be received by a number of recipents, use commas as separators of their addresses (e.g. abc@abc.com,xyz@xyz.com etc).
- 5. Choose the frequency of reporting:



- a. every hour,
- b. once a day the report for the last 24 hours is sent at 8 am,
- c. once a week the report for the last week is sent on each Monday at 8 am,
- d. once a month the report for the last month is sent on each first day of the next month at 8 am.

Removing a sensor from the list

To remove a sensor from the list, click on it and hold it for a moment, then select the delete icon from the upper bar. **Notice**: by removing a sensor from the list you also delete all the related data from the memory of the base station (main unit) and they cannot be restored.

Audible and visual alarm on excessive temperature

The application allows you to activate audible and visual alarm on exceeding defined alarm thresholds. If a measured value exceeds the alarm threshold, the screen of the smartphone will be automatically highlighted. By default, the audible alarm is turned off. To activate it, go to the "Settings" menu (click on the logo of Efento system in the left upper corner and select "Settings") and then choose "Sound alarm". In the window that appears, you can choose the alarm repetition period (5, 15, or 30 minutes). For example, in the case of an alarm and the choice of 15 minutes, when you switch off the sound, it will be repeated after that 15- minute period (if the temperature is still out of the required range, otherwise it will not start again).

Remote reading of current measurements

To get information on the current temperatures measured by sensors, send "efento" text message (SMS) to the phone number of the SIM card placed in the base station (main unit). In a moment you will receive a return SMS with the current measurements. The option can be deactivated in the "Settings" menu.

Checking prepaid balance / topping-up SIM card

If you are using a prepaid card (which requires periodic topping-up), you can check your account balance and/or top-up the SIM card from the" Settings" menu, after selecting SIM card item and entering the code for checking balance and/or topping-up the account. The codes are available on operators' websites and dedicated top-up cards, receipts etc.

App update

To check for updates, go to the application settings (click on the logo of Efento system in the left upper corner and select "Settings"), and then choose "Update" item. Google Play Store will open and automatically check for updates of Efento Inspector app. If the "Update" button in the store is active, press it to download and install the update.