Efento Logger user manual

Downloading and installing Efento Logger application

Download and install *Efento Logger* application from Google Play. Application is available free of charge for any device with Bluetooth 4.0 and running Android 4.4 or newer.

Configuration

After receiving your logger make sure to remove plastic foil which protects the battery.

Start the application and after few seconds it will automatically discover all the loggers within your mobile device's range. Find logger which you want to configure and tap it. Devices will create a connection and after few seconds you will be able to configure your logger. Tap *Settings* button (first icon on the left). Before you configure anything, you will be asked to enter the reset key. Reset key is an unique number, assigned to each sensor. It can be found on the sticker on logger's enclosure. If the reset key you typed in is right, you will be able to configure the logger. Once you have typed in the reset key, it will not be required anymore on mobile device on which you typed it in. Each new mobile device which will connect to the logger will have to enter the reset key. In settings menu, you will be able to:

- Change logger's name. New name will be visible on each mobile device which connects with the logger.
- Change measurement period and reset device's memory. By default measurement period is set to 10 minutes. While changing the measurement period, device will automatically calculate for how many days will logger's memory last - this information will be visible on your mobile device's screen. If you change measurement period, all the previous measurements will be deleted from logger's memory.
- Reset logger's memory. All the measurements will be deleted from logger's memory.

Reading the data from logger's memory

Tap on the logger, which memory you want to read. Devices will connect and logger's data will be transferred automatically to your mobile device. On the screen you will see the following information: date and time of the first measurement, date and time of the last measurement, minimal and maximal temperature from the whole series along with the date and time when they occurred, measurement period and information about logger's memory - the percent of free memory and estimated time when the memory will be full.

Measurements can be displayed on a chart (tap on *Chart* icon) or exported as a report (click on *Export* icon). Report can be sent directly to your e-mail, uploaded to a cloud platform (e.g. Dropbox, Google Drive) or send to a printer. While exporting data, you can choose time period from which you want to export the data and what kind of data you want to export: measurements only, daily statistics (min, max and average temperature for each day), monthly statistics (min, max and average temperature for each month), SAT & GDDC values for the whole series and for each month.

After selecting what you want to export, tap on *Export* button and select whether you want to send the report as e-mail, upload it to a cloud platform or print (only available if you have printer connected). Report is generated as a .csv file, which can be opened by many data processing programmes, e.g. MS Excel, Google Docs, Open Office Calc.

After downloading the data, you are also able to access daily and monthly statistics directly on your mobile device. In order to do that, tap on *Statistic* button and select type of statistics you want to access (daily, monthly, SAT&GDDC).

Notifications

The application will notify you about:

- Low battery level - there will be a red battery icon next to logger's name, whose battery is on low level. After the icon appears, you have 30 days to change the battery. In case of battery going down, the data that has been already saved in logger's memory will not be lost and after changing the battery you will be able to read it.
- Problem with measurements - there will be a exclamation mark next to logger's name, which is unable to take measurements. This notification appears only on loggers with probe. If you see this notification on the list, check if the probe is connected properly.