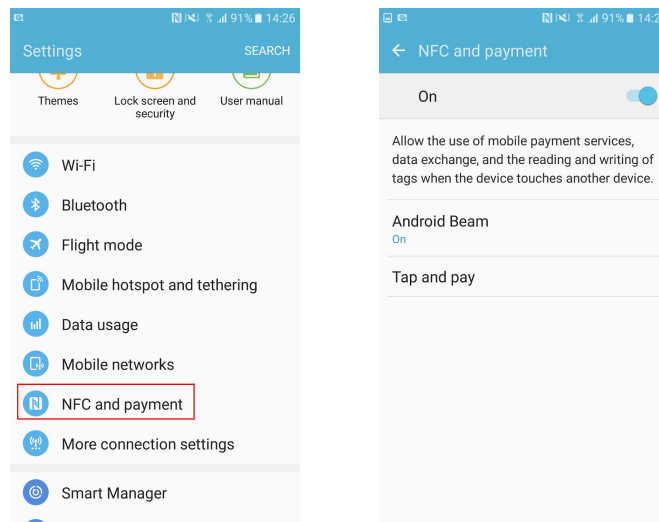


## Instructions manual - NFC Temperature data logger with external probe TLDLS

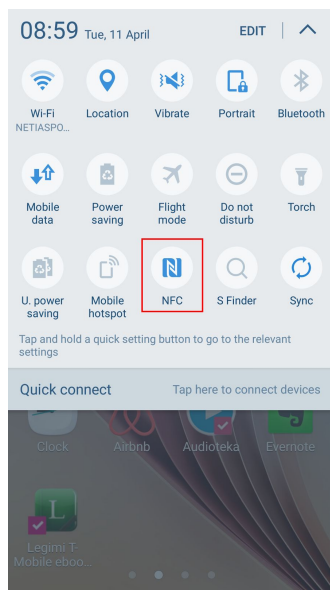


### Enable NFC and download the Android app

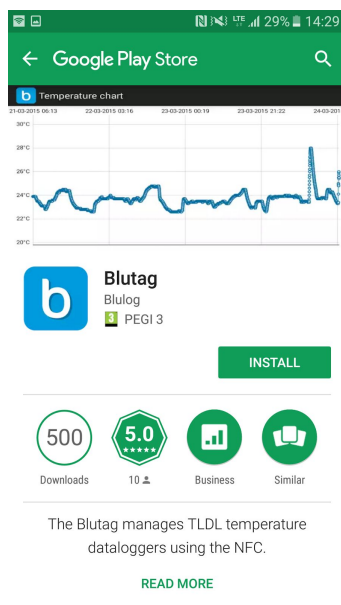
Go into „settings” on your Android smartphone and enable NFC (in the same category as Bluetooth). You can check the following link to see if your smartphone is equipped with NFC : <http://www.nfcworld.com/nfc-phones-list/>. Android PDA readers with NFC antennas are also compatible.



You can also enable NFC by clicking on the NFC icon on the dropdown menu accessible from the desktop.



Once NFC is enabled, simply place the back of your smartphone (around the middle) on the TLDL data logger. you will automatically be redirected to download our Android app Blutag on Google Play.



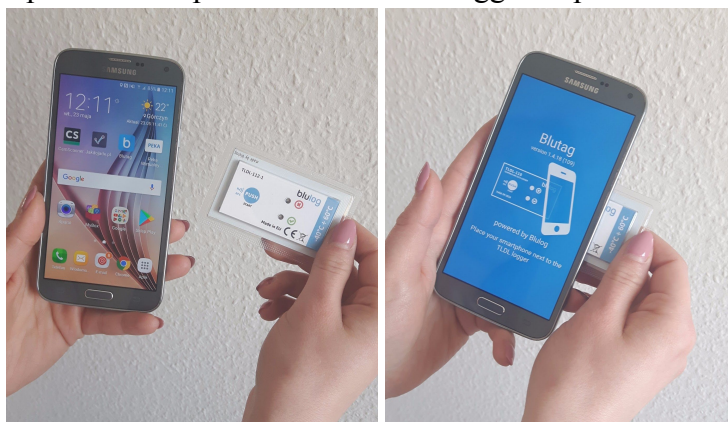
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## Open the app

Open the Blutag app and place your smartphone in contact with the TLDL logger. You will be directed to the main page where you can access information about the logger. Remember, the NFC technology works only if the logger is in direct proximity with your smartphone. Make sure that you place it on top and as near to the logger as possible.

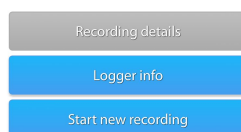


## The Blutag app - essentials

Once the logger has been put to the phone, you will see the first screen of Blutag, where you can start/stop recordings and have summary information about last recording you will also see 3 buttons: Recording details, Logger info and Start new recording.

To learn how to start/stop recordings, see Part 1.

To know more about other functionalities of loggers, see Part 2.



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## Part 1 HOW TO START THE RECORDING AND DOWNLOAD PDF REPORTS

### Start/stop measurement

Place the logger near your smartphone/reader. On the main page press on the button „Start new recording”. Choose the right profile from the dropdown menu on the top. You can choose either Default profile or a Basic one. In the Default profile you can add the info regarding product description, producer, sender, recipient or even a tracking number so all the elements that can facilitate the logistics process. If you don't want to add such detailed information, choose Basic profile, where you will be asked to fill in only the most important fields (for more information regarding profiles, see Part 2).

For both profiles you can also choose time thresholds for activating the alert diodes, temperature limits or delay of start. You can choose either immediate start or manual start. Just press then on „Start new recording” to confirm and place the smartphone in contact with the data logger.

To stop the recording (for multiple-use versions only!), click on ‘Stop recording’ button and place the logger near your smartphone to complete the operation. You can now start another recording, choosing new parameters. If you want to start a new recording using the same parameters, click on ‘Restart recording’ instead of ‘Stop recording’.

The image displays three sequential screenshots of the blulog mobile application interface, illustrating the steps to start a new recording.

**Screenshot 1: Start new recording**  
This screen shows the initial setup options. At the top, there is a dropdown menu labeled "Choose profile". Below it, several input fields are provided for configuring the recording parameters:

- Length of measurement cycle [s]: 600s
- Minimum acceptable temperature: 2.0°C
- Maximum acceptable temperature: 8.0°C
- Time threshold for activation of the alert diode under minimum temperature: 60min
- Time threshold for activation of the alert diode above maximum temperature: 60min
- Cumulate duration of breach: ☒
- Manual start with button: ☐
- Delay of start of recording: 0min
- Choose PIN code necessary for reading temperature measurements: not supported

A blue button labeled "Start new recording" is located at the bottom.

**Screenshot 2: Start new recording**  
This screen shows the same setup options as the first screenshot, but with additional text input fields for product and sender information:

- Product description: Apples
- Name of producer: ABC
- Name of sender: XYZ
- Email of sender: xyz@xyz.eu
- Name of recipient: QWERTY
- Tracking number: 123456789

The "Start new recording" button is again at the bottom.

**Screenshot 3: Recording details**  
This screen displays a summary of the recording parameters and a list of actions that can be performed:

- Product description: Apples
- Name of producer: ABC
- Name of sender: XYZ
- Email of sender: xyz@xyz.eu
- Name of recipient: QWERTY
- Tracking number: 123456789
- Start date of recording: 25 May 2017 09:30:09
- End date of recording: (empty)
- Length of measurement cycle [s]: 600
- Minimum acceptable temperature: 2°C
- Maximum acceptable temperature: 28°C
- Time threshold for: 60

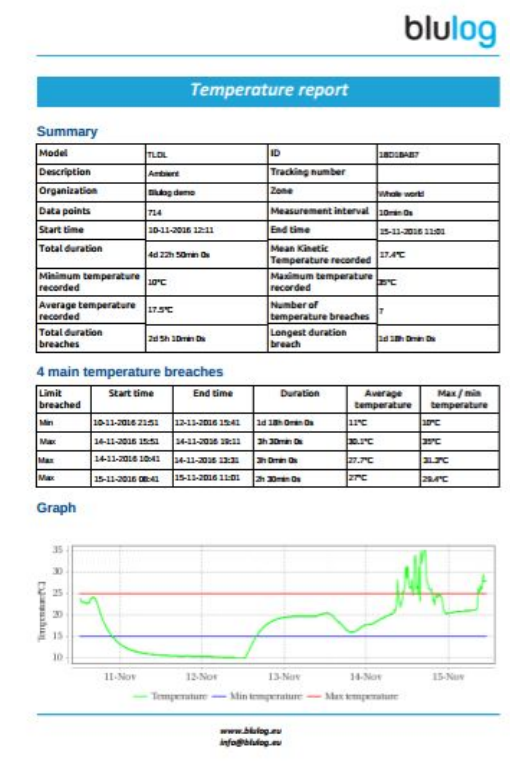
At the bottom, there are four blue buttons: "Temperature graph", "Share temperature report", "Upload data to cloud", and "Download PDF report".

## READING DATA AND DOWNLOADING THE PDF REPORTS

When you scan the loggers, the question 'Do you want to download the PDF report' will pop up automatically.

If you clicked on 'No' or if the question didn't appear, you need to click on 'Recording details' and choose 'Download the PDF report' button to save the report on your phone. You will find it in the 'Download history' and in 'Documents' in 'My files' folder. You can then send it to others or upload it to your computer. You can choose to remember the decision to have for instance PDF reports downloaded automatically at each reading.

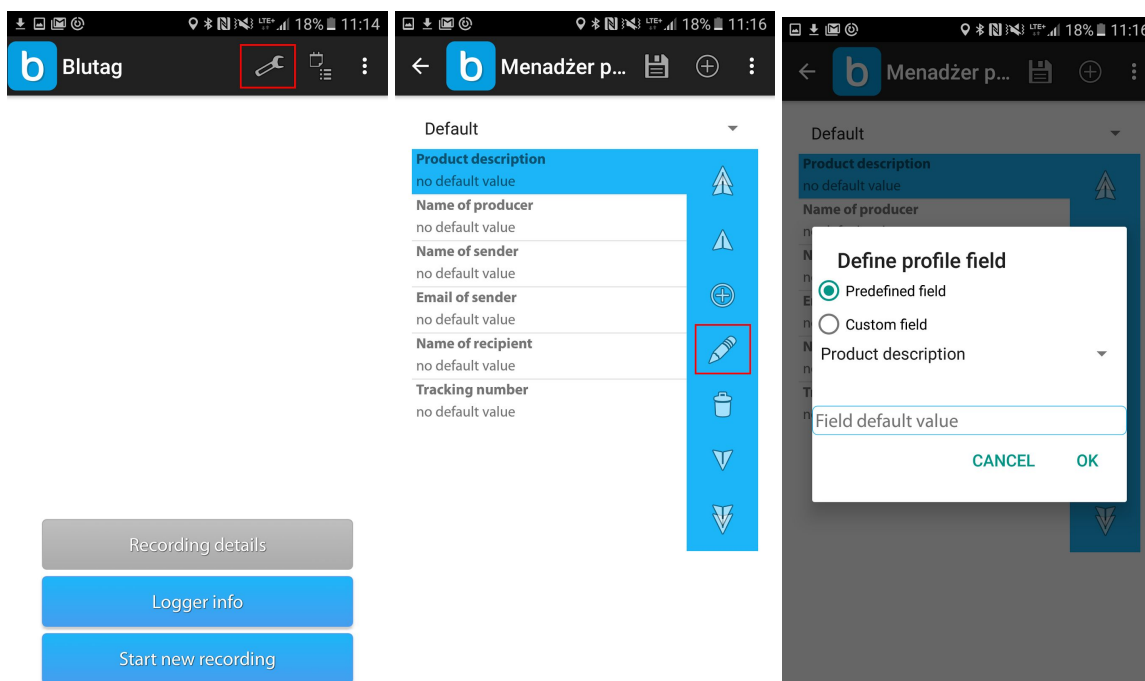
To check how to get the CSV reports and to know more about other functionalities of the application, please consult the Part 2.



## Part 2 OTHER FUNCTIONALITIES OF BLUTAG

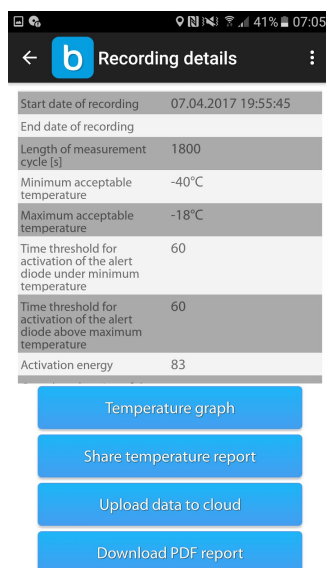
### Creating profiles

From the main page, go in the top menu and press on „Manage profiles” or the spanner icon. This section will enable you to create and modify profiles based on chosen fields (product description, tracking number, name of recipient for instance) with default values and even to create your own fields. There are two default profiles available. Once your profile is saved, you will be able to use it for all your recordings.



### Recording details

By pressing the "Recording details" button, you will be taken to the page where you can press the corresponding button, you can check the temperature graph, share the temperature report, upload the data to the cloud and download the report to your phone.



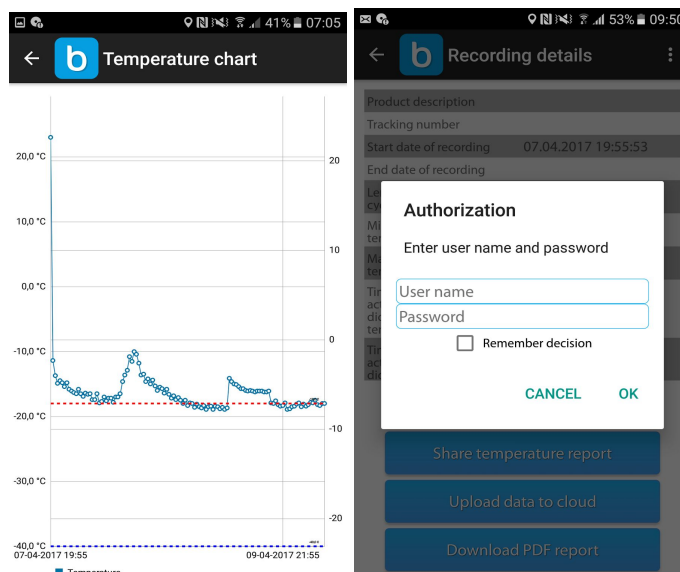
You will also see there 4 different buttons - Temperature graph, Share temperature report, Upload data to the cloud and Download PDF report

Temperature graph enables you to see the history of measurement in form of graph. Try to drag it with you fingers to widen/shrink.

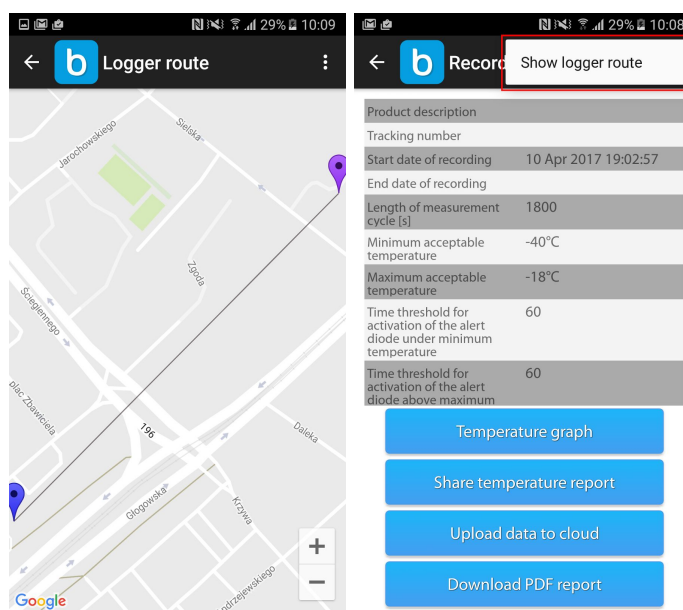
The second button allows to share the reports with others - you can send it either by email, message, Bluetooth or using other means. The report will be sent in the form of a CSV document.

If you have your BluConsole account, you can also upload data to the cloud. When you click on the button, you will be asked to provide your account info. A window will also automatically pop up the first time you read a logger and you can choose automatic upload to the cloud at each reading by saving your choice.

Clicking on 'Download PDF report' will enable you to download the PDF report on your phone.



If you click on the 3 point in the top-right corner, the option 'Show logger route' will appear. If you choose it, you will be redirected to the Google maps. Thanks to this tool, you will be able to check where exactly the logger was scanned in the past.





## LOGGER INFO

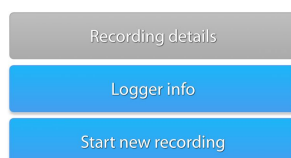
Once you click on the 'Logger info' button, you will see several useful information regarding the device - the ID number of the logger itself, versions of firmware and hardware, calibration and expiration date how many recording have been already used and recording time left.

Blutag		Logger info	
Last measurement recorded date	23-05-2017 10:33	TLDL ID number	18d52be4
Last measurement recorded	27,6°C	Firmware version	3
Minimum measurement recorded	27,6°C	Hardware version	8
Maximum measurement recorded	27,6°C	Calibration date	2 Feb 2017 16:40:00
Average measurement recorded	27,6°C	Expiration date	5 May 2018 17:40:00
Mean Kinetic Temperature	27,6°C	Count of recordings used	2
Total duration breaches	0s	Recording time left	364d 23h 56min 24s
Number of measurement breaches	0		

- Recording details
- Logger info
- Start new recording
- Restart recording

## CALIBRATION CERTIFICATE

From the 'Logger info' page you can download calibration certificate, provided individually for each logger. You just have to click on the second icon in the top-right corner.



## STANDARDS

The blulog TLDL loggers comply with the HACCP, EN 12830, GDP and ETSI 300 220 standards.

## WARRANTY

12 months warranty under the following conditions.

Damage caused by the following is excluded from the manufacturer's warranty:

- Use contrary to the intended purpose
- Lack of care, accidents or normal wear
- External influences (e.g. damage during transport, damage caused by vibration, excess heat or acids)

This warranty expires if:

- The ID number of the product is changed, removed or made illegible
- Repairs or modifications are undertaken by third parties or unauthorised persons

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## SAFETY INSTRUCTIONS

- Only use the product properly, for its intended purpose and within the parameters specified in the technical data
- Do not try to open the devices and/or use force

## TECHNICAL DATA - TLDLS

Temperature scale:	°C
Temperature range:	-40°C to +60°C
Measurement interval:	10 sec to 2 hours
Memory capacity:	5,000 or 48,000 depending on device
Days of recording:	365
Resolution:	0.1 °C
Accuracy between 0 and 30°C:	+/-0.2 °C
Accuracy on the rest of the range:	+/-0.4 °C
Dimensions:	80 x 50 x 5 mm
Weight:	10g
Protection class:	IP6
Time:	UTC
Equipment needed:	NFC / Android
Period of validity:	On device
Data reading period post end of rec:	2 years