

LogSoft software

User Manual for data loggers

TERMIO-31, TERMIOPLUS, TERMIOPLUS-S
TERMIO-1, TERMIO-2, TERMIO-15

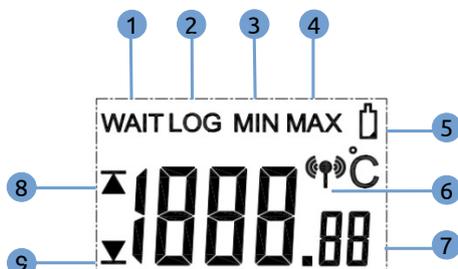
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1. Displays description

Display for:

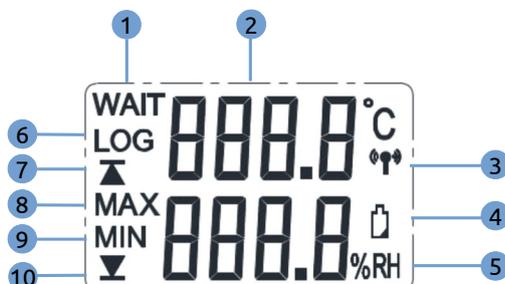
- TERMIO-1,
- TERMIO-2,
- TERMIO-15,
- TERMIO-31



1. Logging stopped
2. Logging started
3. Minimum measured temperature
4. Maximum measured temperature
5. Low battery indicator
6. Device connected to the computer
7. Current temperature
8. Maximum alarm threshold exceeded
9. Minimum alarm threshold exceeded

Display for:

- TERMIOPLUS
- TERMIOPLUS-S



1. Logging stopped
2. Current temperature
3. Device connected to the computer
4. Low battery indicator
5. Current humidity
6. Logging started
7. Minimum alarm threshold exceeded
8. Maximum measured temperature and humidity
9. Minimum measured temperature and humidity
10. Minimum alarm threshold exceeded

WARNING!

Appearance of the low battery indicator icon signifies a low battery/accumulator level.

Low battery level - the appearance of a flashing battery icon.

Critical battery level - the appearance of the battery icon with no data on the display.

Battery replacement or recharging is necessary!

After replacing the battery, navigate to the 'Alarms' -> 'Battery' -> 'Low Battery Detected' tab and select 'Clear' - this button will remove the indicator of low/critical battery levels. Otherwise, the battery icon will continue to be visible on the display.

2. Software installation

To install Logsoft software, follow these steps:

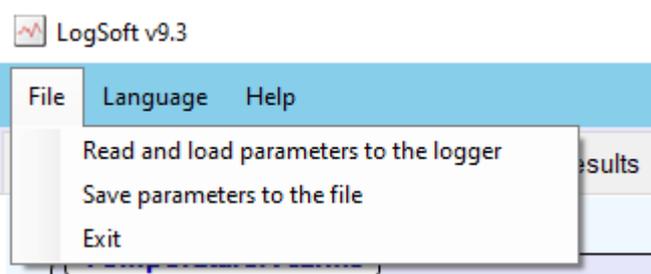
- Download the full Logsoft software version from <https://termoprodukt.co.uk/soft>,
- Connect the data logger to the USB port.

Logsoft software is only compatible with Windows 10 or newer operating systems. During installation, consent to installing the USB driver (FTDI CMD drivers package) is required.

3. Main menu

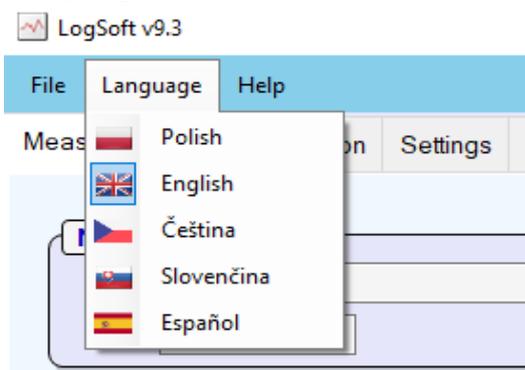
The top part of the main window contains a menu bar with access to 3 tabs:

File

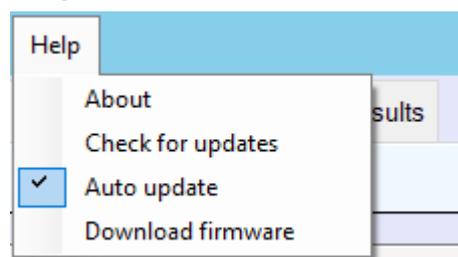


The first two options, 'Read and Load Parameters to the Logger' and 'Save Parameters to the file', enable programming multiple loggers with the same pre-set registration parameters.

Language



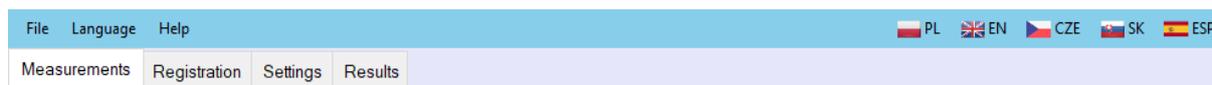
Help



About	Information about the current version of the software.
Check for updates	Information about the latest available software update is displayed.
Auto update	Recommended. The software will update automatically.
Download firmware	Changing the logger's firmware.

4. Program tabs

Below the main menu are the following tabs:



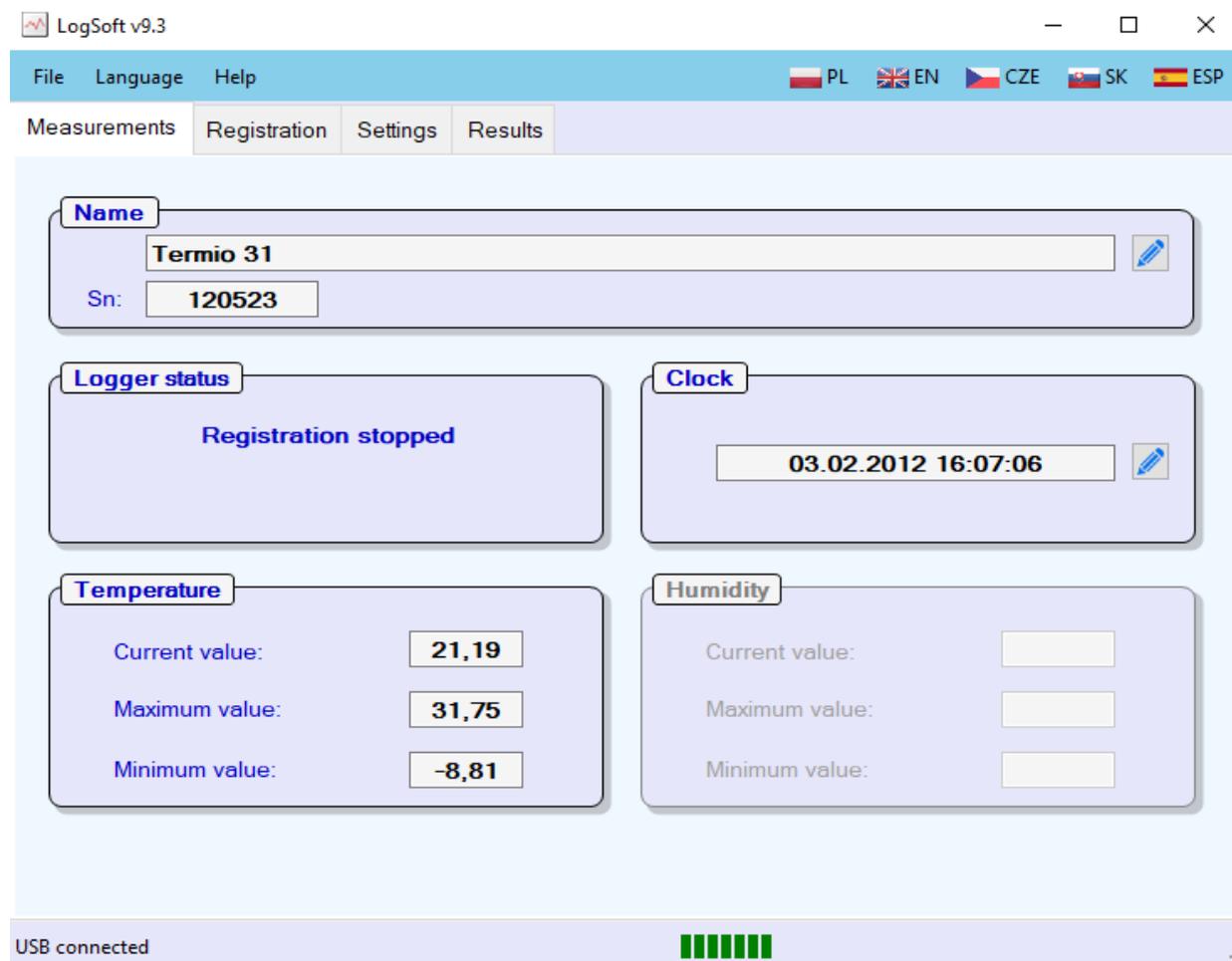
Measurements	Basic device information.
Registration	Parameters for starting the data logging.
Settings	Threshold alarm parameters. Battery settings and light signaling.
Results	Reading and presentation of registered data.

In the middle part of the bottom bar, there is graphically represented current status of communication between the computer and the logger. It allows for observing of whether the program is communicating correctly with the device. If there is no connection with the logger, the bar remains static. If connection error the bar is turning to red.



4.1. Measurements

After launching the software, the first active tab is 'Measurements', it contains basic information about the current status of the logger. The information is divided into sections - grouped in frames.

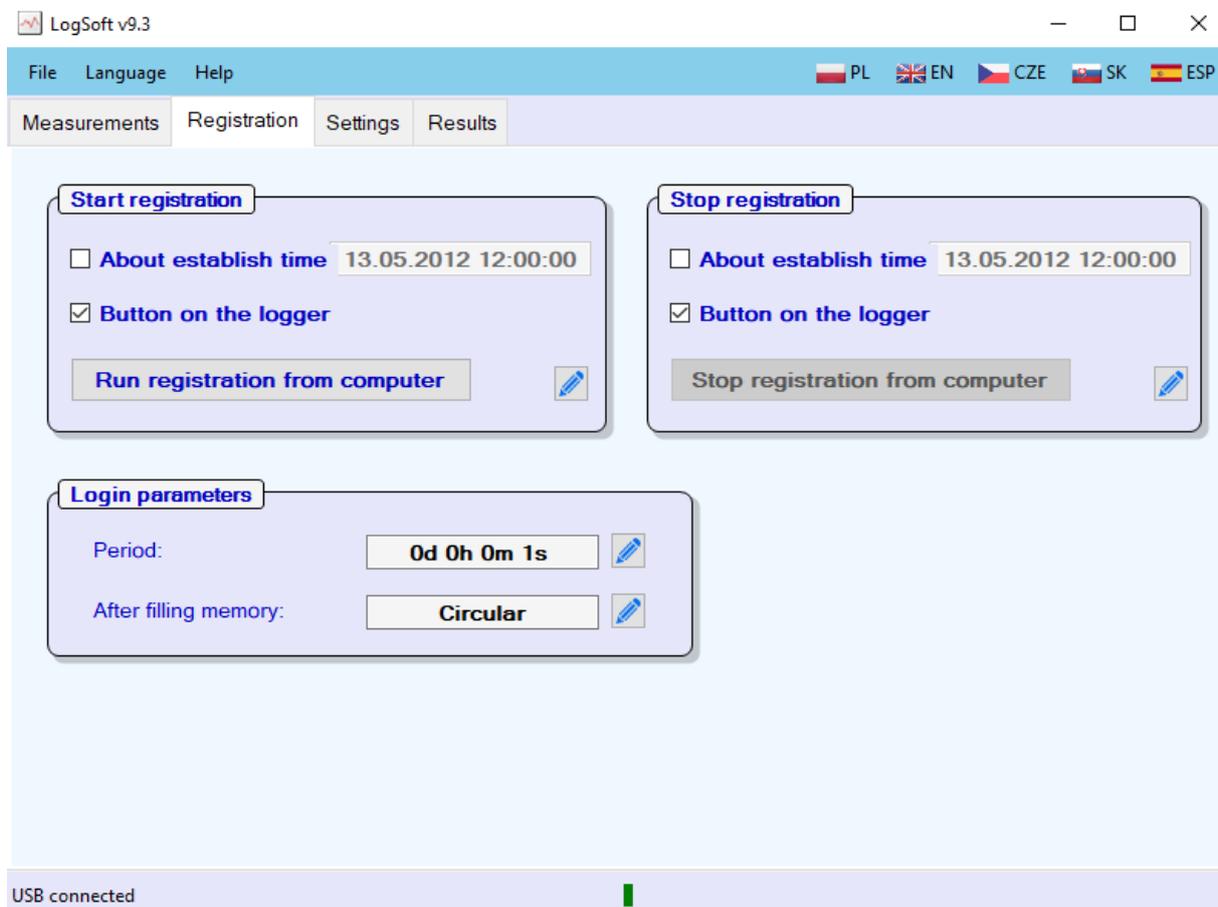


Section	Option	Functionality
Name		Each logger can have a distinct name identifying it's purpose, for example: Fridge 1.
		Edit device name.
	Sn	Device serial number.
Logger status		It informs about the current status of the logger - whether the device has been connected.
	The USB interface is not connected	The device is not connected to the USB port.

	Registration stopped	The registration function is inactive.
	Registration launched	The registration function is active. By selecting the 'Stop Registration from Computer' button, it's possible to stop the recording.
	Logger not responding	The logger is connected to the computer but cannot read data from it - the device has not been turned on.
Temperature		It indicates the measured temperature values.
	Current temperature	The current measured temperature value.
	Minimum value	Shows the minimum temperature, value since the device was turned on.
	Maximum value	Shows the recorded maximum temperature value, since the device was turned on.
Clock		It allows retrieving the current time and date from the operating system.
		To retrieve data from operating system, press the edit button, then retrieve 'Current Time' and 'Save'.

4.2. Registration

During registration (logging), the ability to change device parameters is locked. If an attempt is made to change them, a window will appear indicating the inability to modify them. **To make changes to device parameters, it's necessary to stop data registration.**



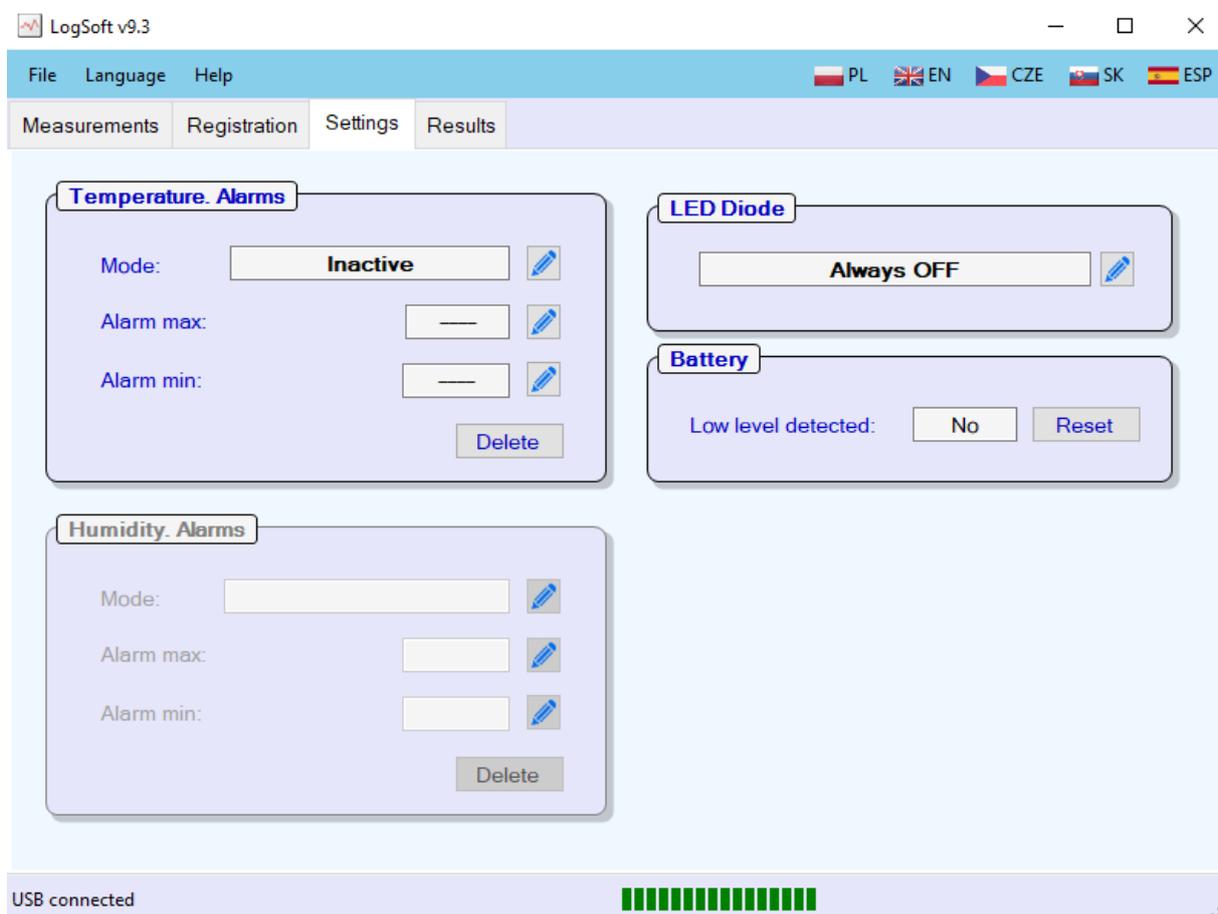
Section	Option	Functionality
Start registration	LOG - The LOG icon appears on the display when data registration is started.	The function allows starting registration as per the client's needs. It's important to note that each start and stop of registration will generate a separate file in the logger's memory.
	About establish time 	Press the edit button and set the date and time when the registration should start.
	Button on the logger	Starting registration directly from the logger using the 'START' button. Hold the button for 3 seconds - indicated by the appearance of the LOG icon.

	Run registration from computer	It allows to start data registration directly from the computer.
Logging parameters		The memory usage of the device depends on the set period (32703 samples). For instance, with a period frequency set to 1 minute, the device's memory will be sufficient for 22 days.
	Period 	The changes in data period frequency is possible in days, hours, minutes, or seconds, after pressing the edit button. TERMIO-1/TERMIO-31 loggers have a period frequency from 1 second. TERMIO+/TERMIO+S loggers have a period frequency from 15 seconds. TERMIO-2/TERMIO-15 loggers have a period frequency from 1 minute.
	After filling memory  "Circular"	The logger will continue data registration, freeing up space in the memory by overwriting the oldest logs.
	After filling memory  "Single run"	The registration will stop, once the last available memory cell is filled. An indication of device memory overflow is signaled by the flashing LOG icon on the display. To resume using the data registration function, it's necessary to clear the device's memory. To do this, enter the 'Results' tab, retrieve data - 'Read', save the file with the registered data - 'Save', then delete the registered data - 'Clear'. If registration is to be restarted, go to the 'Measurements' tab -> 'Registration' and select the data registration mode.
Stop registration WAIT - the icon appears on the display when data registration ends.		The function allows stopping registration as per the client's needs. It's important to note that each start and stop of registration will generate a separate file in the logger's memory.
	About established time 	Press the edit button and set the date and time for when the registration should end.

	Button on the logger	When stopping the registration, hold the 'STOP' button for 3 seconds - indicated by the appearance of the 'WAIT' icon.
	Stop registration from computer	It allows to stop data registration directly from the computer.

4.3. Settings

The loggers have the capability to signal exceeded alarm thresholds. If these thresholds are exceeded, the device's display will show an icon indicating the exceeded threshold value (upward or downward arrow). It's also possible to activate light signaling - LED blinking.



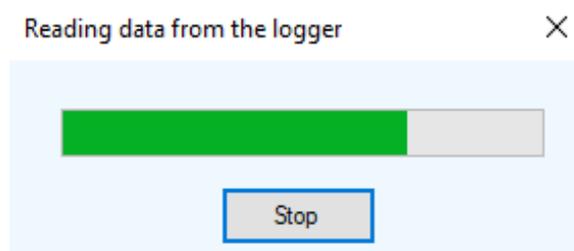
Section	Option	Functionality
Temperature. Alarms		Active for all loggers.
	Inactive	Temperature monitoring is turned off, alarms will not appear.

Mode 	Always active	Temperature monitoring is enabled, exceeding the temperature will be signaled.
	Active when logging	The temperature will only be monitoring when the device is in registration mode, alarms will appear during that time.
Alarm max 	Value	The maximum threshold temperature. When exceeded, the device will signal the exceeding of the allowed temperature by upward arrow.
Alarm min 	Value	The minimum threshold temperature. When exceeded, the device will signal the exceeding of the allowed temperature by downward arrow.
Humidity. Alarms		Available for registrators with humidity measurements TERMIO+ , TERMIPLUS-S .
Mode 	Inactive	Humidity monitoring is enabled, exceeding the temperature will be signaled.
	Always active	Humidity monitoring is enabled, exceeding the temperature will be signaled.
	Active when logging	The humidity will only be monitoring when the device is in registration mode, alarms will appear during that time.
Alarm max 	Value	The maximum threshold humidity. When exceeded, the device will signal the exceeding of the allowed humidity.
Alarm min 	Value	The minimum threshold humidity. When exceeded, the device will signal the exceeding of the allowed humidity.
LED Diode 		Light signaling in case of an alarm occurrence.
	Always OFF	LED diode inactive.
	Blink on any alarm threshold	LED diode active.

Battery		
Low level detected:	No	Battery is charged.
	Yes	A low battery state has occurred, indicating the need to replace the battery. After replacing the battery, it's necessary to use the 'Reset' button.
	Reset	The button will clear the occurrence of a low battery state. Use the button only after replacing the battery.

4.4. Results

In the Results section, it's possible to retrieve registered measurements from the device. To initiate data retrieval, press the 'Read' button - a window will appear:



Subsequently, all registered data will appear in the program window:

LogSoft v9.3

File Language Help

PL EN CZE SK ESP

Measurements Registration Settings Results

Name	Date	Measurements
File 1	06.02.20...	20
File 2	08.01.20...	12
File 3	03.02.20...	54
File 4	03.02.20...	8
File 5	03.02.20...	396
File 6	03.02.20...	1260

File 5
Start: 03.02.2012 17:23:45 Period: 0d:0h:0m:1s
Number of records: 396

Lp	Date	Time	Temperature
1	03.02.2012	17:23:45	21,63
2	03.02.2012	17:23:46	21,63
3	03.02.2012	17:23:47	21,58
4	03.02.2012	17:23:48	21,63
5	03.02.2012	17:23:49	21,58
6	03.02.2012	17:23:50	21,63
7	03.02.2012	17:23:51	21,58
8	03.02.2012	17:23:52	21,63
9	03.02.2012	17:23:53	21,58
10	03.02.2012	17:23:54	21,58
11	03.02.2012	17:23:55	21,58
12	03.02.2012	17:23:56	21,58
13	03.02.2012	17:23:57	21,58
14	03.02.2012	17:23:58	21,58
15	03.02.2012	17:23:59	21,58

Read

Delete

Chart

Save

USB connected

Button	Functionality
Read	The data from the device will be downloaded and displayed in the program window. Each of the started registrations is presented as a separate 'file' with information about the number of measurements registered along with the start date.
Delete	All registered data in the device memory will be deleted.
Chart	An additional window will appear, presenting a chart generated based on the selected file with downloaded data. Detailed instructions in section 4.1.1.
Save	In the additional window, it will be possible to save the downloaded data. Detailed data-saving instructions in section. 4.4.3.

4.4.1. Chart

To display the chart of a specific file, select it in the window on the left side of the program, then press the 'Chart' button - a window with the chart will appear:

Option	Functionality
Labels	<p>With each measurement, precise temperature information will appear.</p>
Alarms	The occurrences of alarms will appear

	on the chart.
°C	Displaying registered temperature measurements.
%	Displaying registered humidity measurements. (Available only for loggers with humidity measurement)
Print	Printing the generated chart. Detailed printing instructions in section 4.4.2.
	You can manipulate with the size of the chart. It's possible to zoom in, zoom out, and return to the original size.

In the 'Chart' section, the generated chart is displayed, and in the 'Table' tab, data based on which the chart was created are shown.

4.4.2. Printing chart

To print the chart or table with registered data, press the 'Print' button. After clicking the button, a window will appear allowing for the configuration of print parameters.

Print ×

Printer

Name: Microsoft Print to PDF Properties

Header

Name
 Serial number
 Dates of logging
 Period
 Print date

Refrigerator 1

Typ dokumentu

Chart
 Table

Footer

Preview
Page settings
Cancel
Print

Option	Functionality
Printer	Selecting the printer to be used for printing the chart.
Header	To display information as the header of the generated chart. Each displayed option can be selected or rejected, and you can add your own text, for example, 'Refrigerator 1.' To put your text, select the symbol next to the blank field <input checked="" type="checkbox"/> .
Document type	Chart - the chart with data will be printed. Table - a table containing all measured data from the selected file will be printed.

Footer	The information to be placed below the generated chart. To include the information, select the symbol next to the blank field <input checked="" type="checkbox"/> .
Preview	A preview of the document that will be printed based on the selected options.

4.4.3. Saving data

After pressing the 'Save' button, a window will appear:

Sections	Option
File name	Setting the file name for saving the data. Using fields like Name, Serial Number, etc., you can include specific information in the file name that

	will be automatically downloaded. With the PDF and TXT options, you can select the format in which the file will be generated.
Header	The data to be included in the header of the generated file. Using fields like Name, Serial Number, etc., you can select which data will be displayed in the header. In the blank field, you can input your own text, which will also be placed in the file's header. To include text in the file, select the symbol <input checked="" type="checkbox"/> .
Footer	The information that will be placed in the footer of the generated file. To add text, select the symbol next to the blank field <input checked="" type="checkbox"/> .

To save the file, press the 'Save' button. A new window will appear, select the location where the file should be saved.