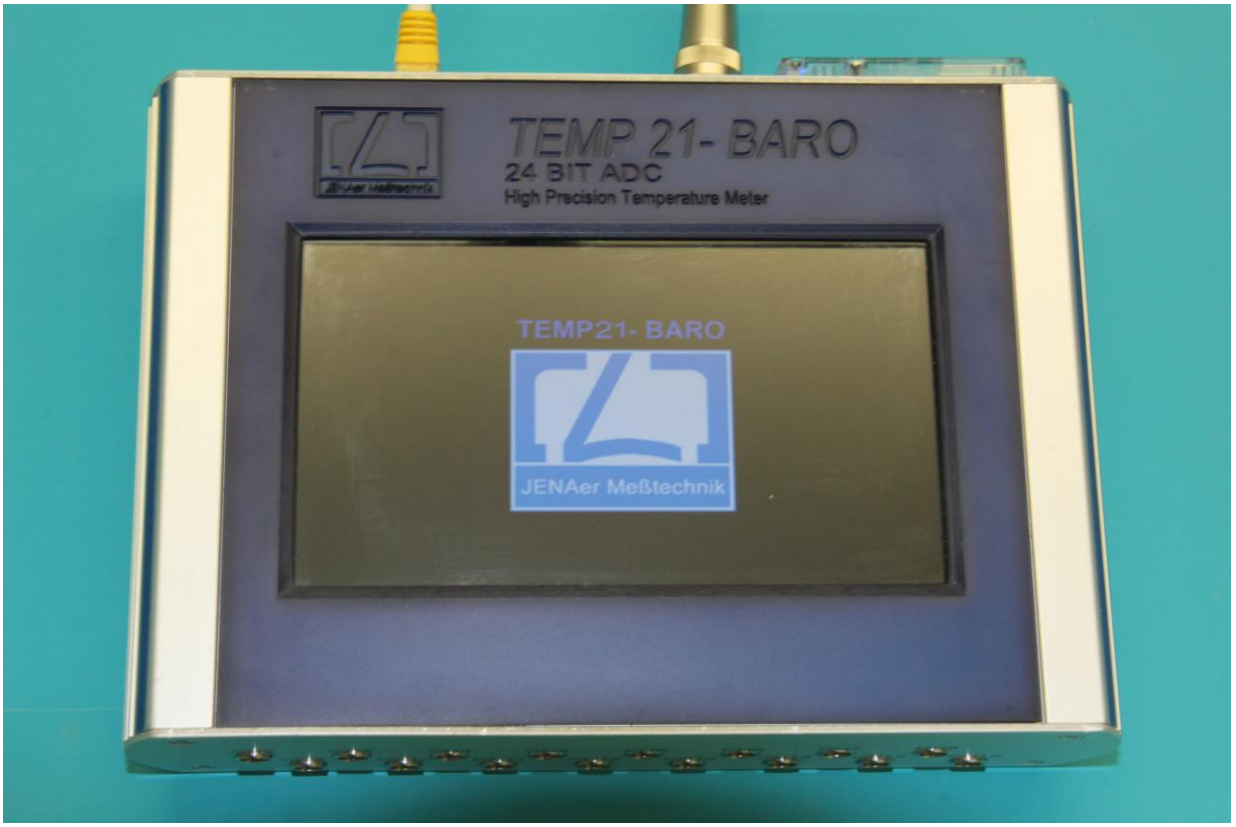
Device functions TEMP21

TEMP21



These operating instructions aren't subject to the update information service.

Published by: JENAer Meßtechnik GmbH
Carl-Zeiss-Promenade 10
D - 07745 Jena
GERMANY

Phone: +49 3641 2153 - 26
Fax: +49 3641 2153 - 28
Homepage: www.jenaer-mt.de
e-mail: info@jenaer-mt.de

Date of issue: 22.02.2021 (REV002)

The equipment described in this manual is subject to technical upgrading and other changes without prior notice.

Familiarity with the contents of this manual is imperative for safe operation of your equipment. Therefore study the manual thoroughly before starting up the equipment.

Keep this manual and any other user documentation supplied within reach of the operator.

Modifications and repairs of the equipment may not be carried out by persons other than our own service staff or competent engineers expressly authorized by us.

The TEMP 21 is guaranteed by the seller for a period of 24 months from the date of delivery.

The seller expressly disclaims any responsibility for damage to equipment and/or persons which should result from improper use, failure to observe the operating instructions, faulty or negligent handling or natural wear.

Furthermore, the purchase of the equipment is subject to the General Conditions of Sale of JENAer Messtechnik GmbH.

Content list

1. Operating instructions

- The Temp21 needs some time to start the temperature measurement application. Please be patient!
- When switching the individual programme functions, such as diagram and measurement data, there may be a slight delay in updating the display
- To set the settings for sensor parameters, we recommend using the TempLabSuite software
- Before taking a measurement, please start the TEMP21 device first and wait until the programme interface is displayed. Afterwards, please start the programme "TempLabSuite" on your PC first, as it can lead to problems with the communication. If no device is found, close "TempLabSuite" and restart it.

2. Programme interface

The programme interface is divided into 2 sub-areas (menu area and display area) Display

Display mode

Menu areal

2.1. Functions start screen

2.1.1 Display menu

Menu display closed

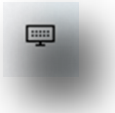
Menu display open

2.2. Description of the menu functions

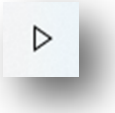
The arrow can be used to scroll back to the last display.

The menu can be opened or closed by pressing the 3 bars

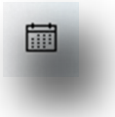
Calls up the start page of the application



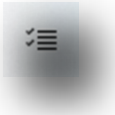
Shows the info page or the individual pages for the temperatures or resistances of the individual sensors.



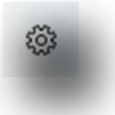
Calls up the page for controlling a measurement



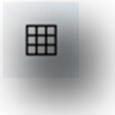
Shows a brief overview of the measurement series that are on the unit.



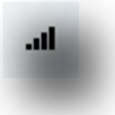
Settings for active sensors and their parameters



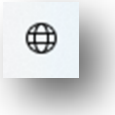
Settings for controlling the unit or the measuring sequence



Shows the measured values of the display, or the measured values of a currently running measurement in a table



Graphical representation of the measured values

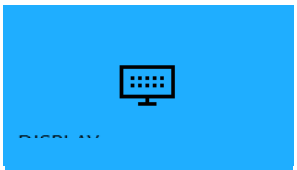


For new programme functions (currently without function)

2.3. Description of the functions in the display area

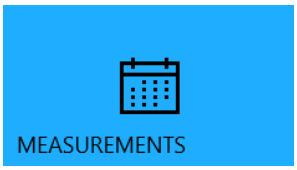
The display area is divided into 9 tiles when Temp21 is started:

2.4. Description of the display functions

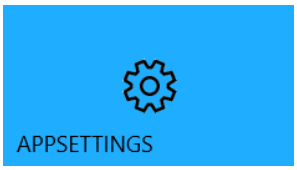


DISPLAY
Calling up the display elements for the individual sensors and displaying resistance and environmental parameters

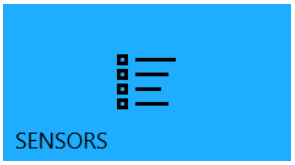
MEASURE
Control of the measurement (Start/Stop/LOOP)



MEASUREMENTS
Display of the individual measurement series recorded in the unit

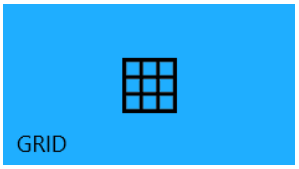


APPSETTINGS
Settings of the sampling rate and number of measuring points



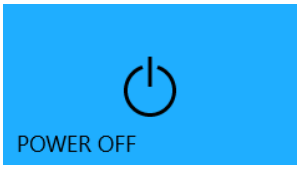
SENSORS
Display of the sensors and their setting options

CHART
Display of the current values in the diagram or during a measurement



GRID
Display of the current values in a table

WEBVIEW
For new programme functions (currently without function)

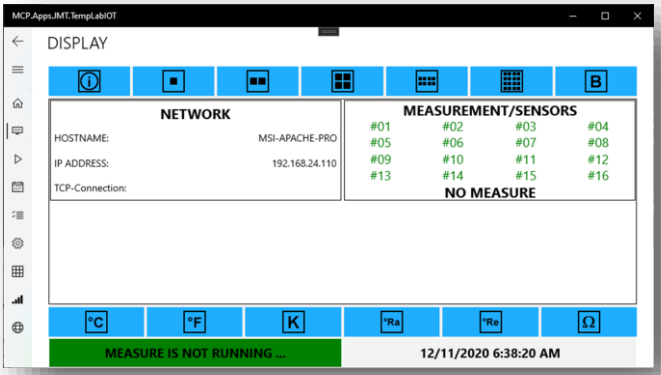


POWER OFF
Stops a measurement in progress and switches the unit off. The unit can be restarted by restoring the power supply.

3. Programme functions

Display functions in the "DISPLAY" module

In the "DISPLAY" module, you receive current information about the individual sensors, as well as the IP address of the device and the connection status. Furthermore, the current data of the individual sensors and the data of the BARO module can be displayed. Furthermore, the different temperature units or the resistance display can be selected.



3.1. Display modes

Display of the information page with network/connections and active sensors

Display of a single sensor

Display of 2 sensors

Display of 4 sensors

Display of 8 sensors

Display of all 16 sensors of the unit

Display of the barometer environmental data

4. Temperature units

To display the different temperature units, they can be selected using the following buttons. Switching over during a measurement has no effect on the measured values, which are only stored in °C.

Temperatureinheiten

Grad Celsius	° C
Grad Fahrenheit	° F
Kelvin	Kelvin
Grad Rankine	° Ra
Grad Réaumur	° Re
Widerstand (in Ohm)	Ω

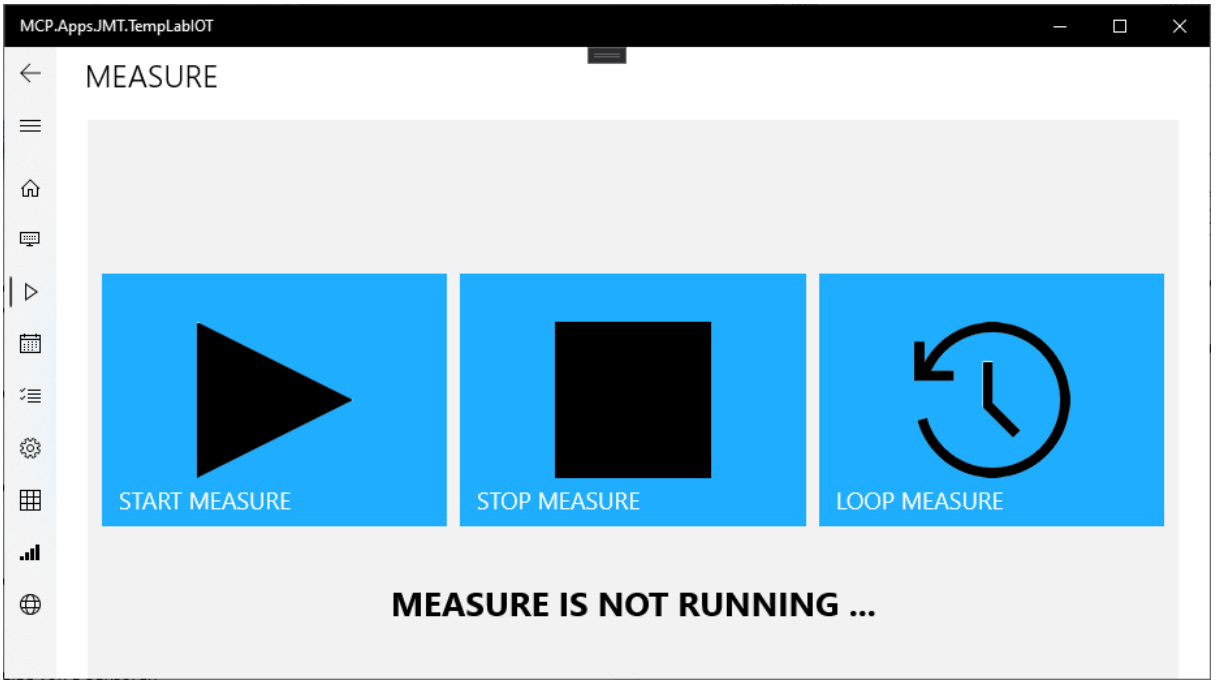
4.1. Selection of the channel

s

The sensors can be changed for display via the buttons.

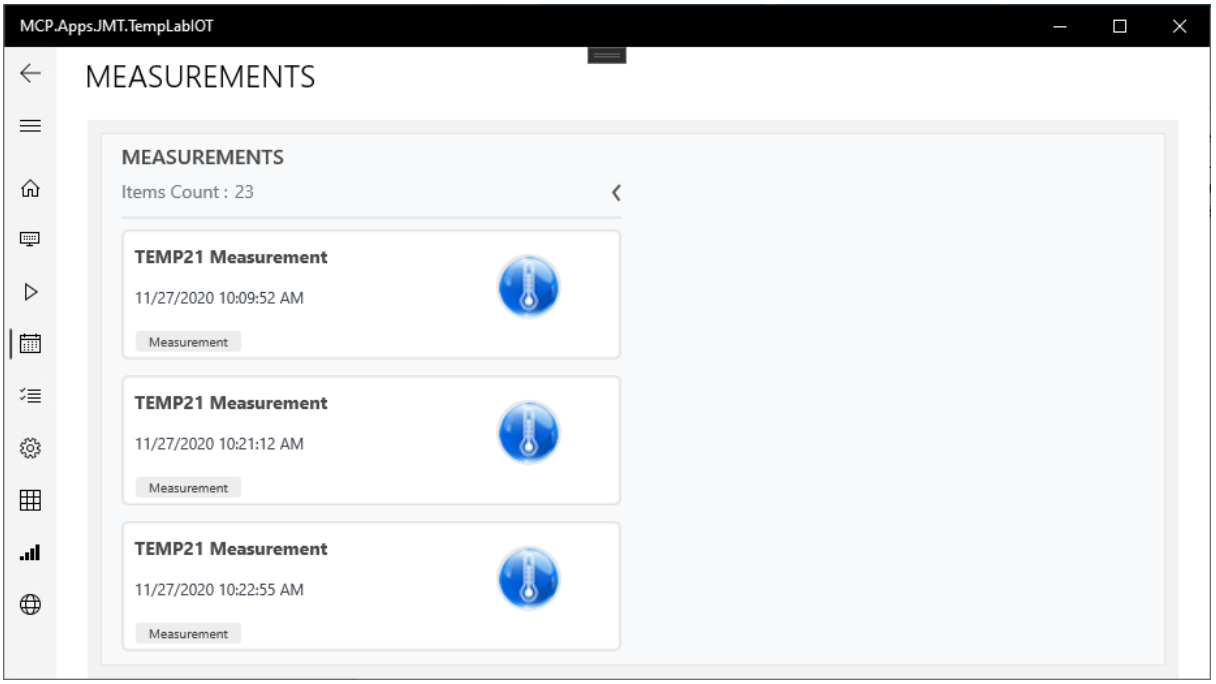
For individual sensors you get the minimum, maximum and average temperature in the Display.

5. Modul „MEASURE“



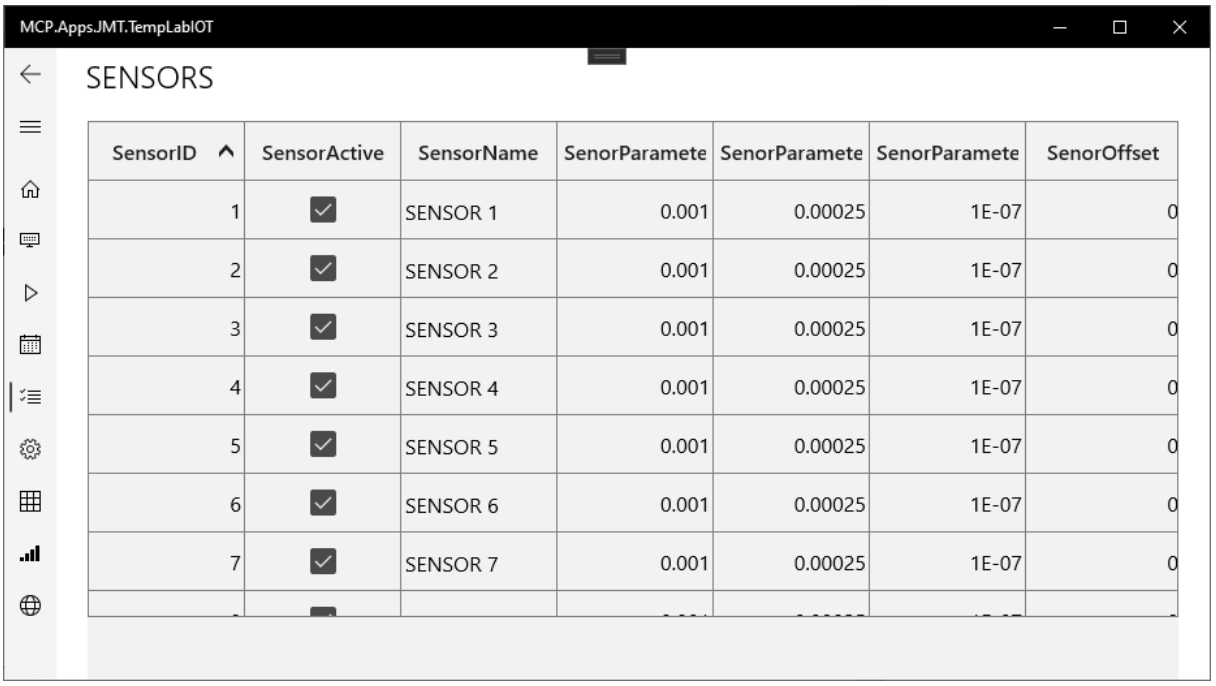
The "Measure" module is kept simple. Here you can start or stop a measurement using the Start/Stop buttons. The "LOOP Measure" button sets the device to loop mode. This means that a new series of measurements is recorded when the maximum set number of measurements has been reached. The measurement series are stored in the unit and can be read out via the TempLabSuite software.

5.1. Modul „MEASUREMENTS“



In this module you can see the measurement series that are stored in the device. Editing is not possible here.

5.2. Modul „SENSORS“

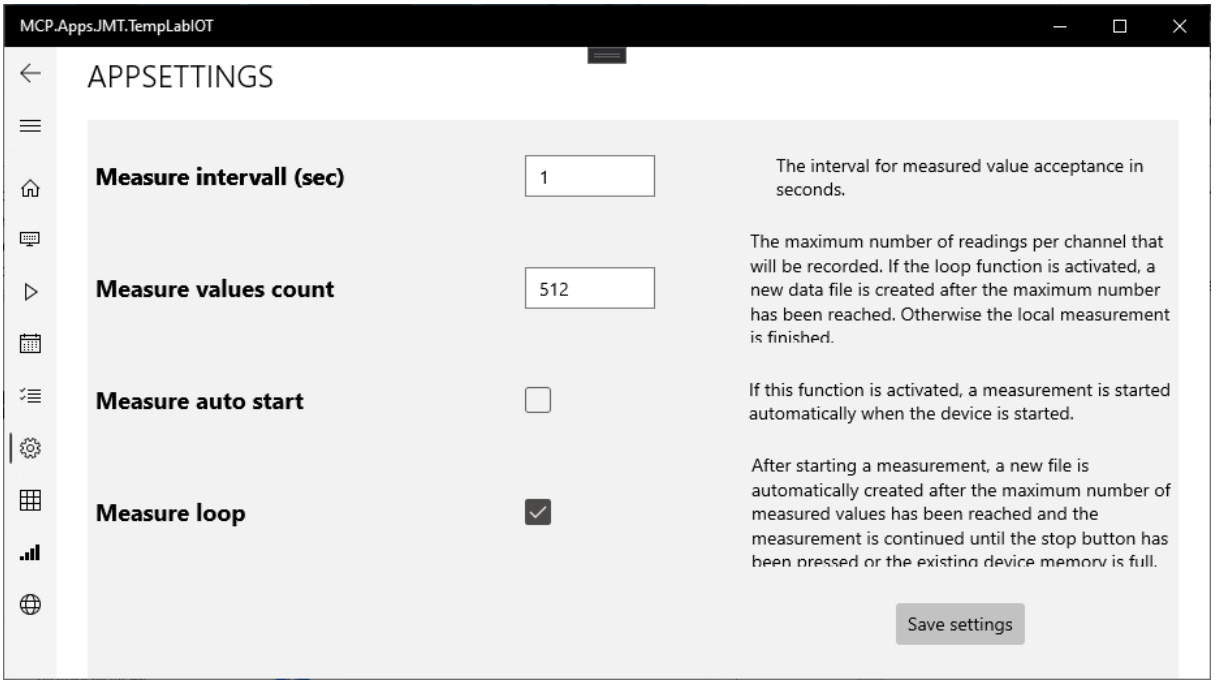


SensorID	SensorActive	SensorName	SenorParamete	SenorParamete	SenorParamete	SenorOffset
1	☑	SENSOR 1	0.001	0.00025	1E-07	0
2	☑	SENSOR 2	0.001	0.00025	1E-07	0
3	☑	SENSOR 3	0.001	0.00025	1E-07	0
4	☑	SENSOR 4	0.001	0.00025	1E-07	0
5	☑	SENSOR 5	0.001	0.00025	1E-07	0
6	☑	SENSOR 6	0.001	0.00025	1E-07	0
7	☑	SENSOR 7	0.001	0.00025	1E-07	0

In the "SENSORS" module, you can activate the sensors with which you want to record measurement series. Furthermore, the sensor parameters can also be edited here manually via a double click.

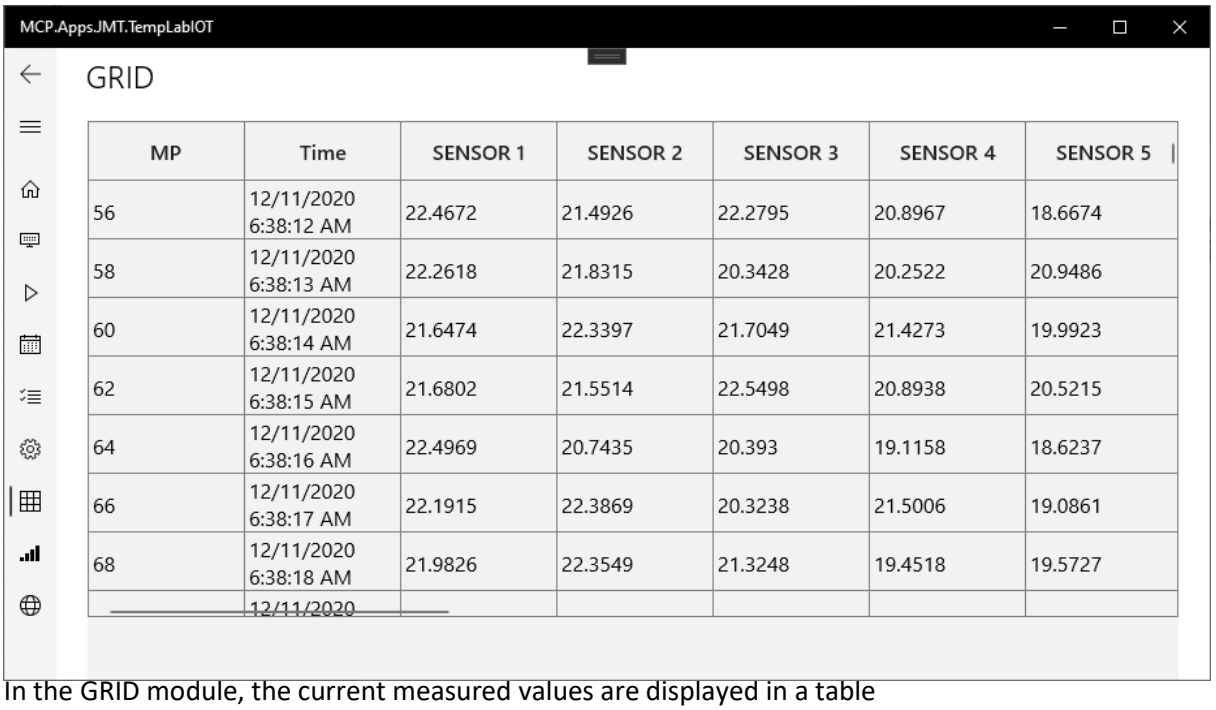
However, it is recommended to read in the sensors via the TempLabSuite software.

5.3. Modul „APPSETTINGS“



In this module, the number of measured values, the time interval as well as Autostart and Loop can be set.

5.4. Modul „GRID“

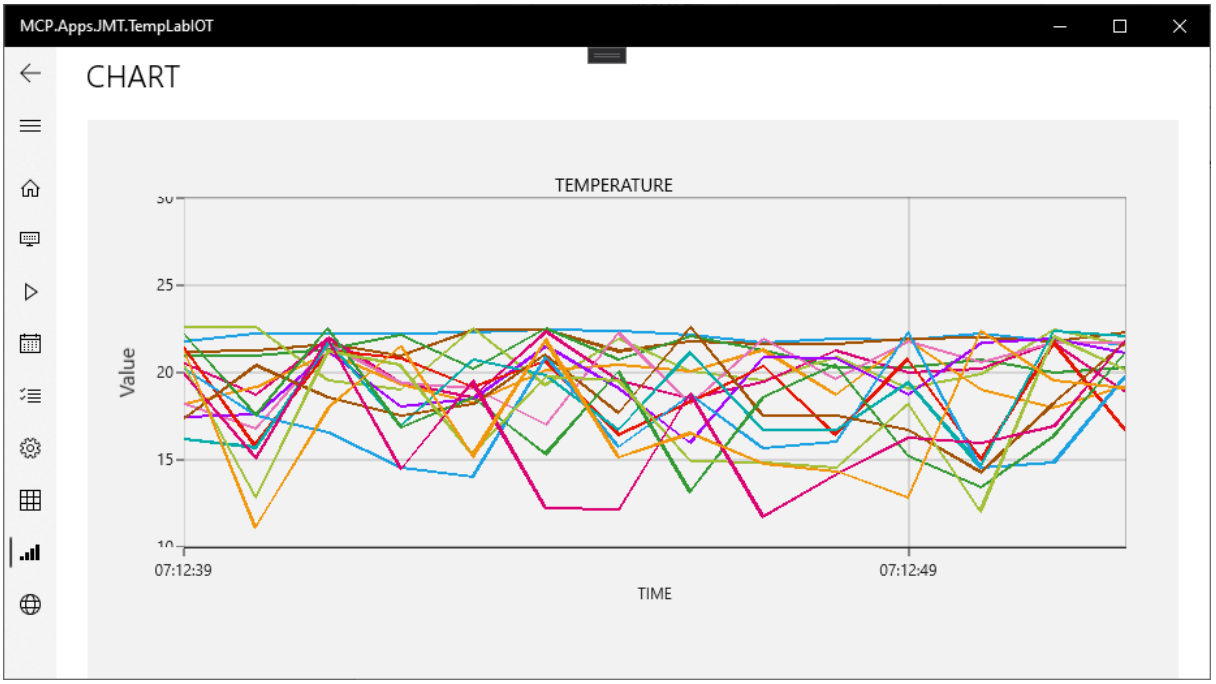


MP	Time	SENSOR 1	SENSOR 2	SENSOR 3	SENSOR 4	SENSOR 5
56	12/11/2020 6:38:12 AM	22.4672	21.4926	22.2795	20.8967	18.6674
58	12/11/2020 6:38:13 AM	22.2618	21.8315	20.3428	20.2522	20.9486
60	12/11/2020 6:38:14 AM	21.6474	22.3397	21.7049	21.4273	19.9923
62	12/11/2020 6:38:15 AM	21.6802	21.5514	22.5498	20.8938	20.5215
64	12/11/2020 6:38:16 AM	22.4969	20.7435	20.393	19.1158	18.6237
66	12/11/2020 6:38:17 AM	22.1915	22.3869	20.3238	21.5006	19.0861
68	12/11/2020 6:38:18 AM	21.9826	22.3549	21.3248	19.4518	19.5727
	12/11/2020					

In the GRID module, the current measured values are displayed in a table

If no measurement is started, 128 values are displayed here. After reaching this value, the table is restarted at 0.

5.5. Modul „CHART“



In the "CHART" module, the currently selected sensors are displayed as a diagram. The diagram is continuous. If no measurement is started, the first value in the diagram is deleted after 128 values and another measured value is appended.

6. Final note

Should you wish to make any changes, please feel free to let us know. The programme includes a software updater that occasionally checks for programme updates. If an update is available, you can decide for yourself whether and when it is installed.

Your team at JENAer Meßtechnik GmbH