



Device Manual TEMP21

TEMP21



JENAer Meßtechnik GmbH
Göschwitzer Str.22
07745 JENA
GERMANY



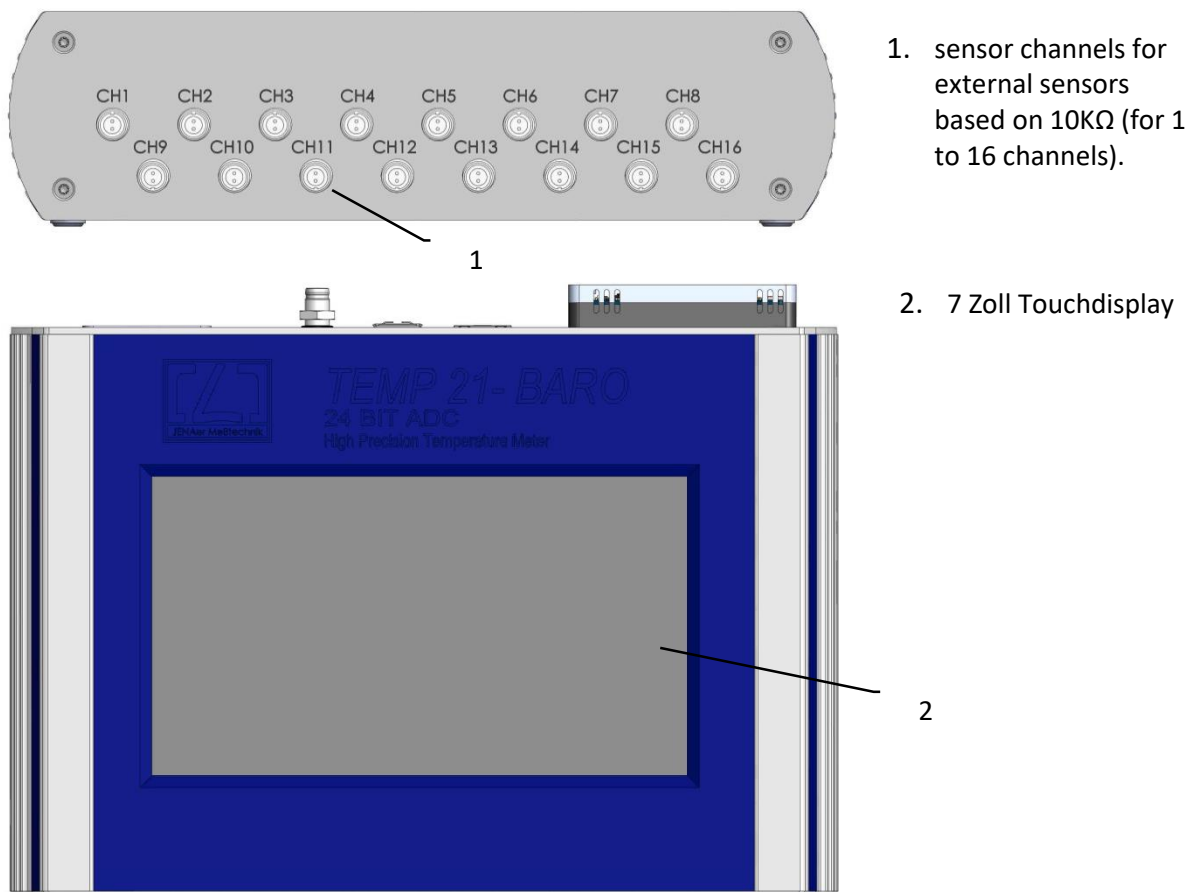
content

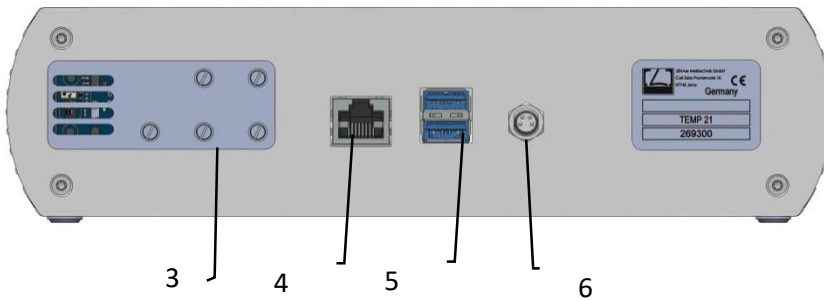
Operating instructions.....	3
Unit design and connection description	3
User interface	4
Functions Start screen.....	5
Menu display	5
Description of menu functions.....	5
Description of the functions in the display area	6
Description of the display functions.....	7
Program functions	7
Display functions in the module "DISPLAY"	7
Display modes	7
Temperature units.....	8
Selection of channels.....	8
Module "MEASURE"	9
"MEASUREMENTS" mode.....	10
Module "SENSORS"	11
Module "SETTINGS".....	12
Module "GRID"	12
Module "CHART"	13
Final note.....	13

Operating instructions

- The Temp21 needs a certain time to start the application for temperature measurement. Please have a little patience!
- When switching over the individual program 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 starting a measurement, please start the TEMP21 device first and wait until the program interface is displayed. Then please start the "TempLabSuite" program on your PC first, as this can lead to communication problems. If no device is found, close the "TempLabSuite" and restart it.

Unit design and connection description





- 3. Baro unit
(only for TEMP21 BARO)
- 4. LAN connection
- 5. USB socket for keyboard, mouse or memory stick)
- 6. power connection
12V / 3A

User interface

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

Display area

Menu area

MCP.Apps.JMT.TempLabOIT

HOME

TEMP21 - AIR PRESSURE

1013.00 hPa

ACTIVE TEMPERATURE SENSORS

# 01	# 02	# 03	# 04	# 05	# 06	# 07	# 08
# 09	# 10	# 11	# 12	# 13	# 14	# 15	# 16

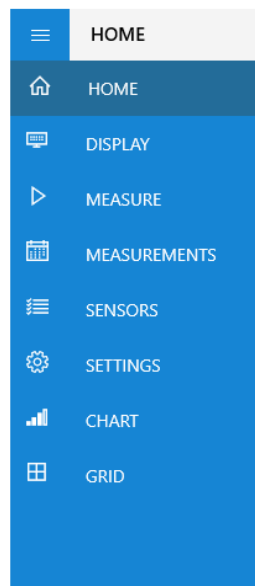
STATUS INFORMATION

TEMPERATURE TEMP DISCONNECTED	BAROMETER BARO CONNECTED	IP ADDRESS a:704:5301:6515:e914:db
CONNECTION CLIENT DISCONNECTED	MEASUREMENT NOT RUNNING ...	POWER

Functions Start screen
Menu display



Menu display closed



Menu display opened

Description of menu functions



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



By pressing the 3 bars, the menu can be opened or closed



Gets the start and information page of the application



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



Gets the page to control a measurement



Shows in a short overview, the series of measurements that are located on the device



Settings for active sensors and their parameters



Settings for controlling the device or the measuring sequence



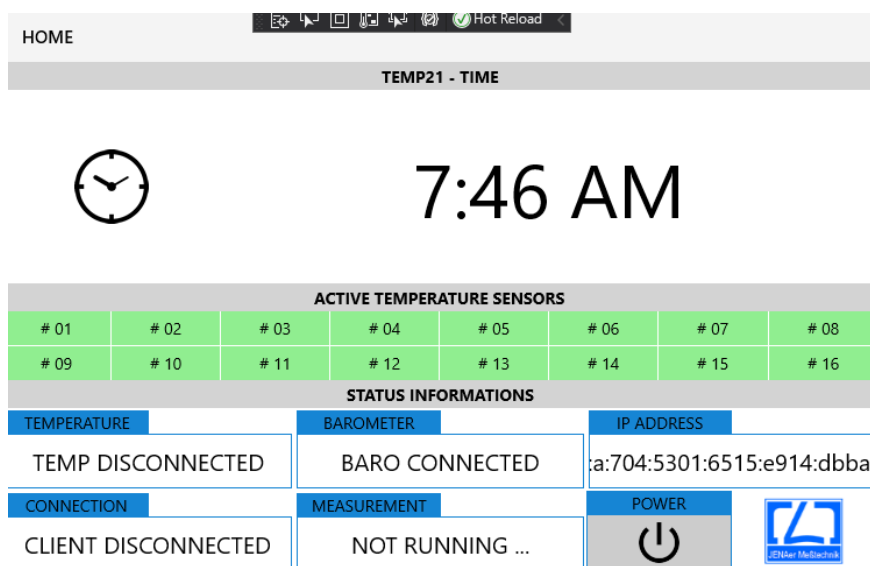
Displays the measured values of the display, or the measured values of a straight measurement in a table



Graphical representation of the measured values


Description of the functions in the display area

When starting the Temp21, the display shows the information of the TEMP21 device.





HOME Hot Reload

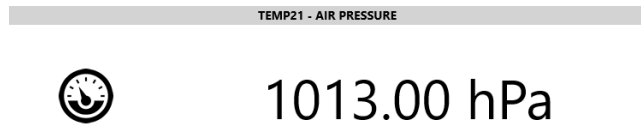
TEMP21 - TIME


7:46 AM

ACTIVE TEMPERATURE SENSORS							
# 01	# 02	# 03	# 04	# 05	# 06	# 07	# 08
# 09	# 10	# 11	# 12	# 13	# 14	# 15	# 16

STATUS INFORMATIONS		
TEMPERATURE	BAROMETER	IP ADDRESS
TEMP DISCONNECTED	BARO CONNECTED	IP: 192.168.1.100 mac:704:5301:6515:e914:dbba:...
CONNECTION	MEASUREMENT	POWER
CLIENT DISCONNECTED	NOT RUNNING ...	 



Description of the display functions



The first display shown information of the barometer device data, date and time in a cycle of 5 seconds.

ACTIVE TEMPERATURE SENSORS							
0.000.0	0.000.0	0.000.0	0.000.0	0.000.0	0.000.0	0.000.0	0.000.0
0.000.0	0.000.0	0.000.0	0.000.0	0.000.0	0.000.0	0.000.0	0.000.0

In this information display you can see all active temperature sensors. Temperature sensors with green back color are active for measure.

STATUS INFORMATIONS			
TEMPERATURE	BAROMETER	IP ADDRESS	
TEMP DISCONNECTED	BARO CONNECTED	192.168.1.704:5301:6515:e914:dbba	
CONNECTION	MEASUREMENT	POWER	
CLIENT DISCONNECTED	NOT RUNNING ...		

The "Status Information" displays the connection status of TEMP21 device. A button for completely shut down is also available.

Program functions

Display functions in the module "DISPLAY"

In the module "DISPLAY" you will receive up-to-date 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, as well as the data of the BARO module can be displayed. Furthermore, the different temperature units or the resistance display can be selected.



Display modes



Display of a single sensor



Display of two sensors



Display of four sensors



Display of 8 sensors



Display of all 16 sensors of the device



Display of barometer environmental data

Temperature units

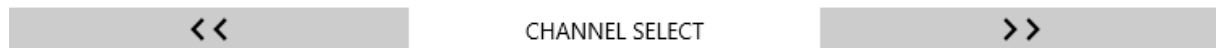
To display the different temperature units, this can be selected via the following buttons. A switch during a measurement has no influence on the measured values, which are stored only in °C.



Temperatureinheiten

degree centigrade	° C
Degree Fahrenheit	° F
Kelvin	Kelvin
Grade Rankine	° Out
Grade Réaumur	° Re
Resistance (in ohms)	oh

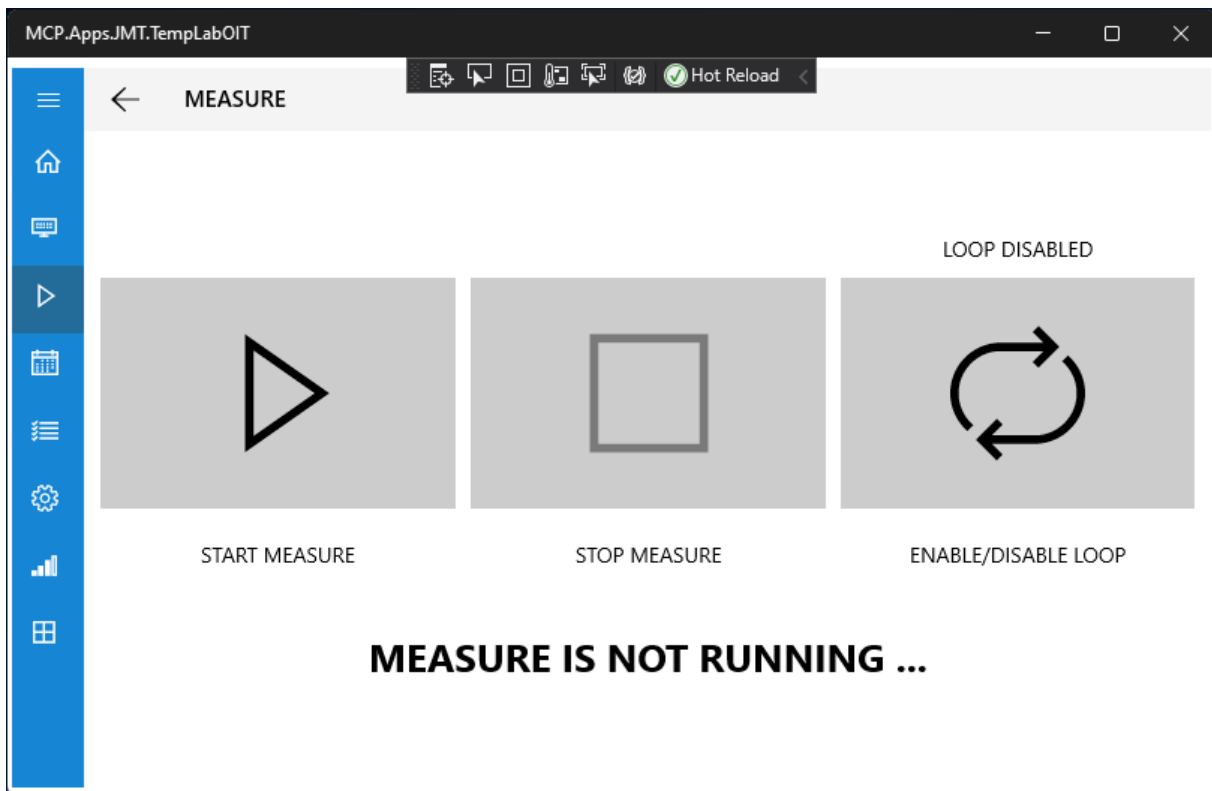
Selection of channels



The sensors can be changed to display via the buttons.

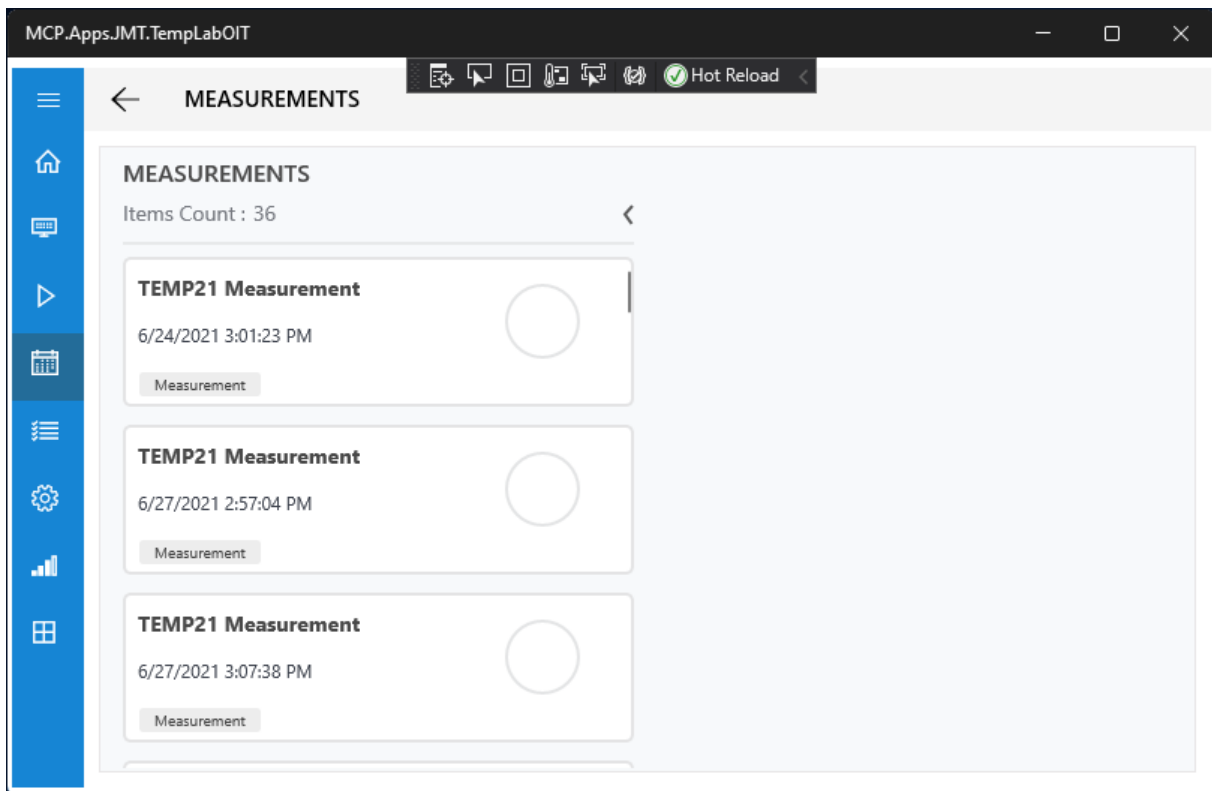
For individual sensors, you get the minimum, maximum and average temperature in the display.

Module "MEASURE"



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

"MEASUREMENTS" mode



In this module you can see the series of measurements that are stored in the device. Editing is not possible here. You can read/delete the stored measurements with the TempLabSuite-Software.

Please note that the device only offers limited storage space. If the available space is running out, you will be prompted by a warning to delete series of measurements from the device!

Module "SENSORS"

MCP.Apps.JMT.TempLabOIT

SENSORS

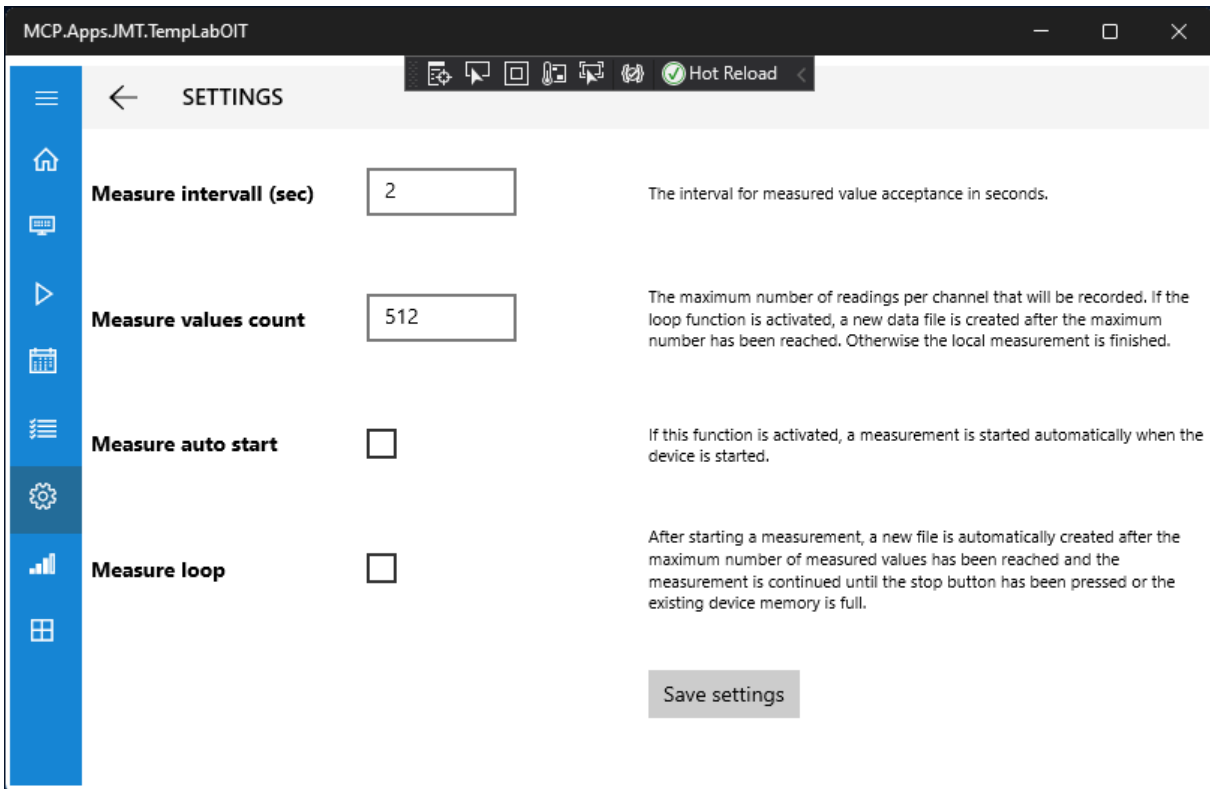
HINT: Please use TempLab Software for configuration! Active sensors can change here!

SensorID	SensorActive	SensorName	SensorParamet	SensorParamet	SensorParamet	Se
1	<input checked="" type="checkbox"/>	Sensor01	0.001	0.00025	1E-07	
2	<input checked="" type="checkbox"/>	Sensor02	0.001	0.00025	1E-07	
3	<input checked="" type="checkbox"/>	Sensor03	0.001	0.00025	1E-07	
4	<input checked="" type="checkbox"/>	Sensor04	0.001	0.00025	1E-07	
5	<input checked="" type="checkbox"/>	Sensor05	0.001	0.00025	1E-07	
6	<input checked="" type="checkbox"/>	Sensor06	0.001	0.00025	1E-07	
7	<input checked="" type="checkbox"/>	Sensor07	0.001	0.00025	1E-07	
8	<input checked="" type="checkbox"/>	Sensor08	0.001	0.00025	1E-07	

In the "SENSORS" module, you can actively set the sensors with which you want to record measurement series. Furthermore, the sensor parameters can also be processed by hand via a double click.

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

Module "SETTINGS"



MCP.Apps.JMT.TempLabOIT

SETTINGS

Measure intervall (sec) The interval for measured value acceptance in seconds.

Measure values count The maximum number of readings per channel that will be recorded. If the loop function is activated, a new data file is created after the maximum number has been reached. Otherwise the local measurement is finished.

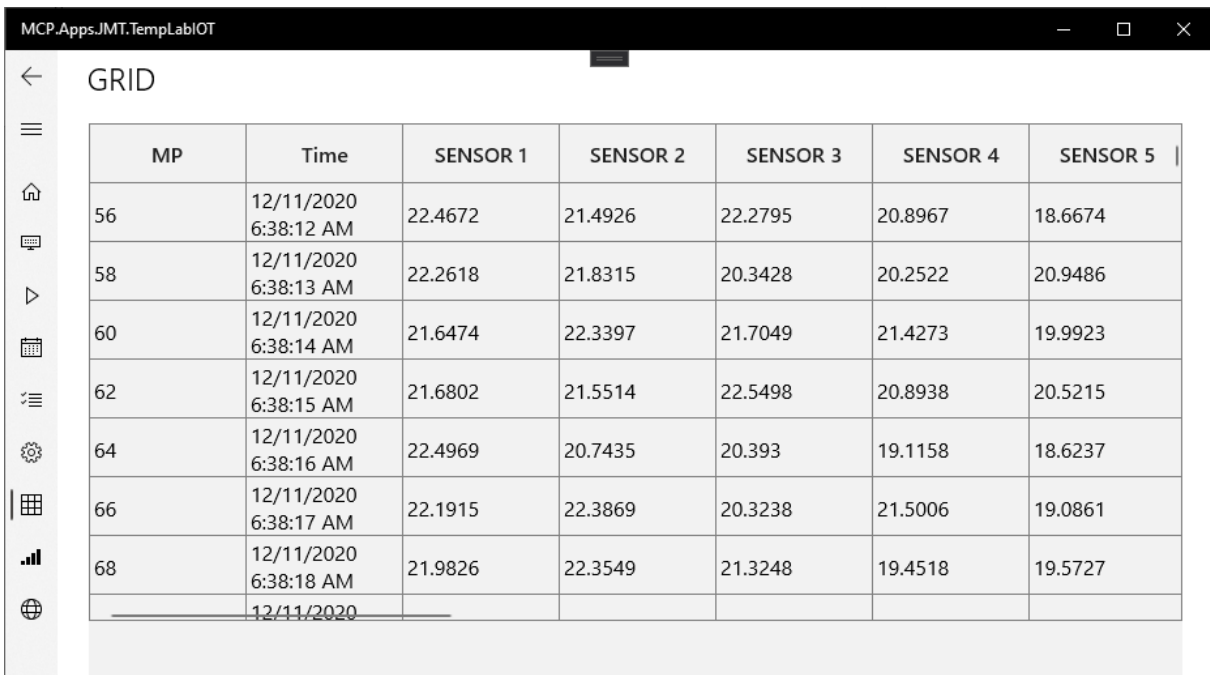
Measure auto start If this function is activated, a measurement is started automatically when the device is started.

Measure loop After starting a measurement, a new file is automatically created after the maximum number of measured values has been reached and the measurement is continued until the stop button has been pressed or the existing device memory is full.

Save settings

In this module, the number of Mes values, the time interval as well as autostart and loop can be defined.

Module "GRID"



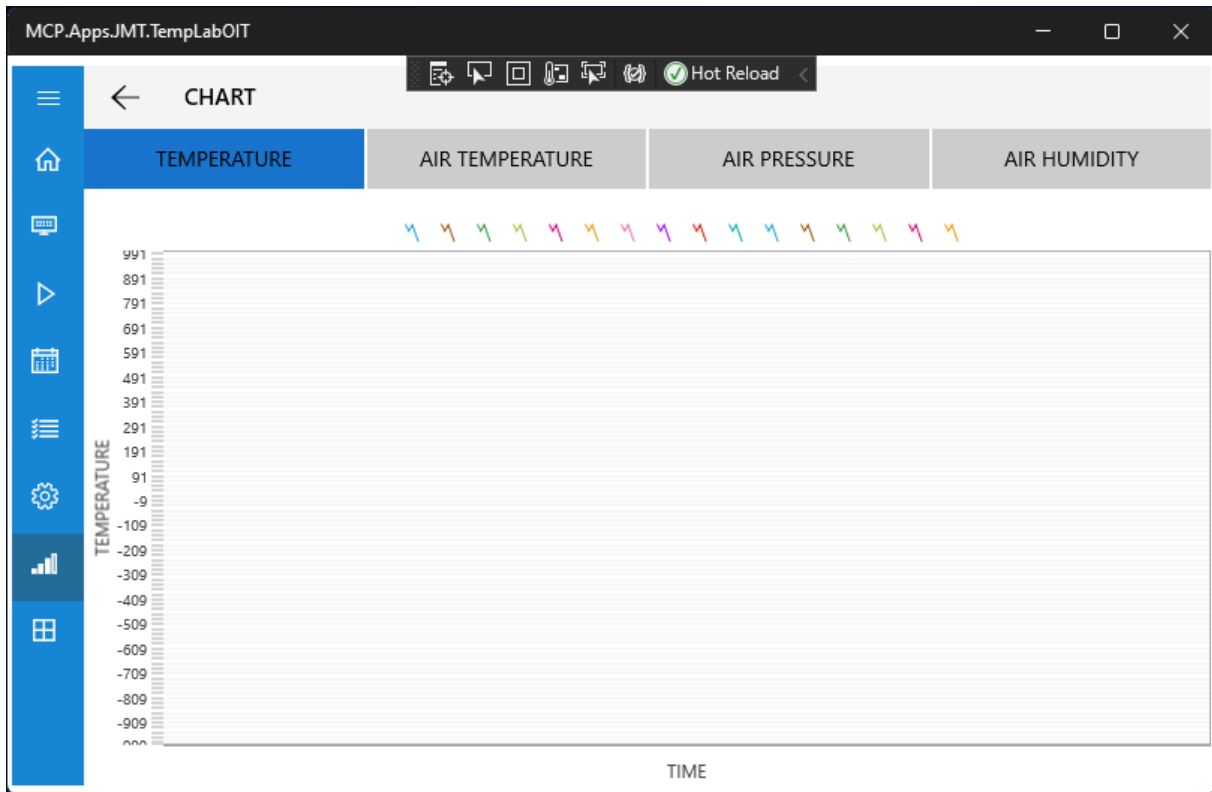
MCP.Apps.JMT.TempLabOIT

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.

Module "CHART"



In the "CHART" module, the currently selected sensors are displayed as a diagram. The diagram is ongoing. You can select the charts for temperature sensors, air temperature, pressure and humidity. The chart updates the zoom and pan every 5 seconds.

Final note

If you would like to change requests, please do not hesitate to let us know.

The program includes an update function occasionally checks for program updates.

If an update is available, you can decide for yourself when it will be installed.

Your team at JENAer Meßtechnik GmbH