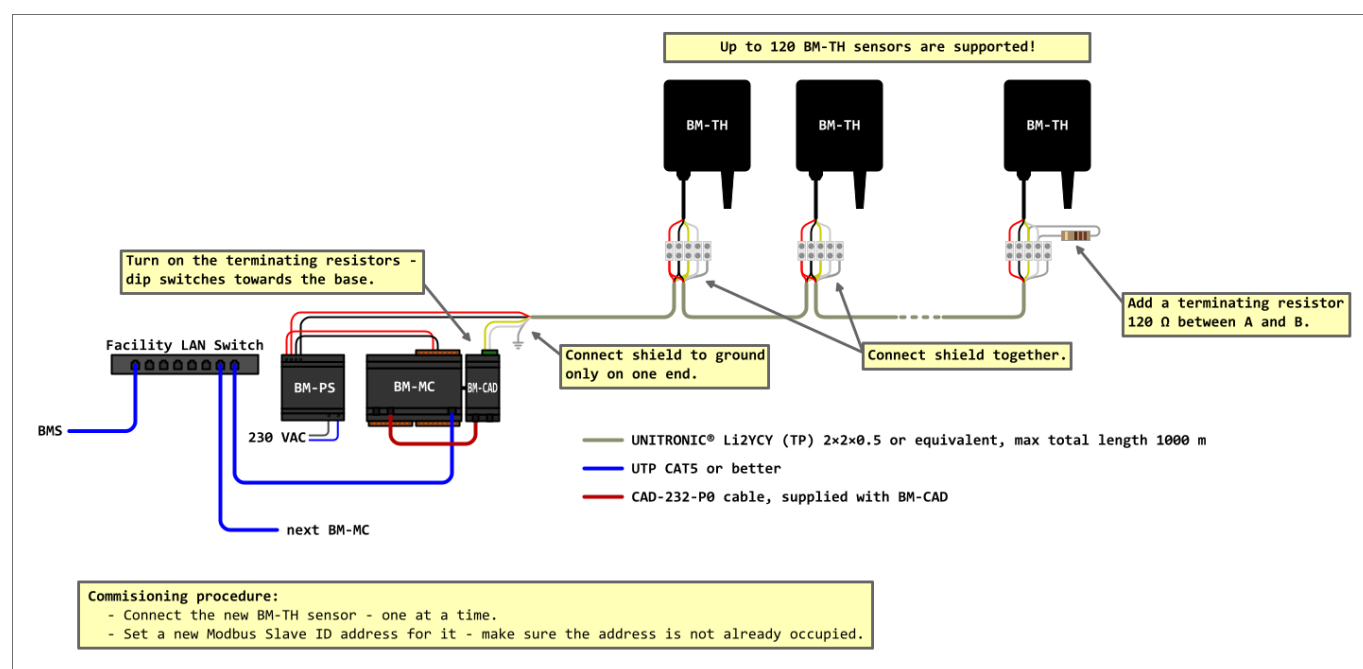


Temperature and humidity monitoring

The system is intended for monitoring temperatures and relative humidity in rack cabinets of data centers. Allows connection of up to 120 sensors to one controller. The number of controllers per system is practically unlimited.

HW and wiring



SW (TH-MC & Configurator)

Main page

TH Monitoring Configurator v1.0.0

New unassigned sensor: - 00,0 °C 00,0 %RH

1

001.	21,8 °C	58,2 %RH	025.	00,0 °C	00,0 %RH	049.	00,0 °C	00,0 %RH	073.	00,0 °C	00,0 %RH	097.	00,0 °C	00,0 %RH
002.	00,0 °C	00,0 %RH	026.	00,0 °C	00,0 %RH	050.	00,0 °C	00,0 %RH	074.	00,0 °C	00,0 %RH	098.	00,0 °C	00,0 %RH
003.	00,0 °C	00,0 %RH	027.	00,0 °C	00,0 %RH	051.	00,0 °C	00,0 %RH	075.	00,0 °C	00,0 %RH	099.	00,0 °C	00,0 %RH
004.	00,0 °C	00,0 %RH	028.	00,0 °C	00,0 %RH	052.	00,0 °C	00,0 %RH	076.	00,0 °C	00,0 %RH	100.	00,0 °C	00,0 %RH
005.	00,0 °C	00,0 %RH	029.	00,0 °C	00,0 %RH	053.	00,0 °C	00,0 %RH	077.	00,0 °C	00,0 %RH	101.	00,0 °C	00,0 %RH
006.	00,0 °C	00,0 %RH	030.	00,0 °C	00,0 %RH	054.	00,0 °C	00,0 %RH	078.	00,0 °C	00,0 %RH	102.	00,0 °C	00,0 %RH
007.	00,0 °C	00,0 %RH	031.	00,0 °C	00,0 %RH	055.	00,0 °C	00,0 %RH	079.	00,0 °C	00,0 %RH	103.	00,0 °C	00,0 %RH
008.	00,0 °C	00,0 %RH	032.	00,0 °C	00,0 %RH	056.	00,0 °C	00,0 %RH	080.	00,0 °C	00,0 %RH	104.	00,0 °C	00,0 %RH
009.	00,0 °C	00,0 %RH	033.	00,0 °C	00,0 %RH	057.	00,0 °C	00,0 %RH	081.	00,0 °C	00,0 %RH	105.	00,0 °C	00,0 %RH
010.	00,0 °C	00,0 %RH	034.	00,0 °C	00,0 %RH	058.	00,0 °C	00,0 %RH	082.	00,0 °C	00,0 %RH	106.	00,0 °C	00,0 %RH
011.	00,0 °C	00,0 %RH	035.	00,0 °C	00,0 %RH	059.	00,0 °C	00,0 %RH	083.	00,0 °C	00,0 %RH	107.	00,0 °C	00,0 %RH
012.	00,0 °C	00,0 %RH	036.	00,0 °C	00,0 %RH	060.	00,0 °C	00,0 %RH	084.	00,0 °C	00,0 %RH	108.	00,0 °C	00,0 %RH
013.	00,0 °C	00,0 %RH	037.	00,0 °C	00,0 %RH	061.	00,0 °C	00,0 %RH	085.	00,0 °C	00,0 %RH	109.	00,0 °C	00,0 %RH
014.	00,0 °C	00,0 %RH	038.	00,0 °C	00,0 %RH	062.	00,0 °C	00,0 %RH	086.	00,0 °C	00,0 %RH	110.	00,0 °C	00,0 %RH
015.	00,0 °C	00,0 %RH	039.	00,0 °C	00,0 %RH	063.	00,0 °C	00,0 %RH	087.	00,0 °C	00,0 %RH	111.	00,0 °C	00,0 %RH
016.	00,0 °C	00,0 %RH	040.	00,0 °C	00,0 %RH	064.	00,0 °C	00,0 %RH	088.	00,0 °C	00,0 %RH	112.	00,0 °C	00,0 %RH
017.	00,0 °C	00,0 %RH	041.	00,0 °C	00,0 %RH	065.	00,0 °C	00,0 %RH	089.	00,0 °C	00,0 %RH	113.	00,0 °C	00,0 %RH
018.	00,0 °C	00,0 %RH	042.	00,0 °C	00,0 %RH	066.	00,0 °C	00,0 %RH	090.	00,0 °C	00,0 %RH	114.	00,0 °C	00,0 %RH
019.	00,0 °C	00,0 %RH	043.	00,0 °C	00,0 %RH	067.	00,0 °C	00,0 %RH	091.	00,0 °C	00,0 %RH	115.	00,0 °C	00,0 %RH
020.	00,0 °C	00,0 %RH	044.	00,0 °C	00,0 %RH	068.	00,0 °C	00,0 %RH	092.	00,0 °C	00,0 %RH	116.	00,0 °C	00,0 %RH
021.	00,0 °C	00,0 %RH	045.	00,0 °C	00,0 %RH	069.	00,0 °C	00,0 %RH	093.	00,0 °C	00,0 %RH	117.	00,0 °C	00,0 %RH
022.	00,0 °C	00,0 %RH	046.	00,0 °C	00,0 %RH	070.	00,0 °C	00,0 %RH	094.	00,0 °C	00,0 %RH	118.	00,0 °C	00,0 %RH
023.	00,0 °C	00,0 %RH	047.	00,0 °C	00,0 %RH	071.	00,0 °C	00,0 %RH	095.	00,0 °C	00,0 %RH	119.	00,0 °C	00,0 %RH
024.	00,0 °C	00,0 %RH	048.	00,0 °C	00,0 %RH	072.	00,0 °C	00,0 %RH	096.	00,0 °C	00,0 %RH	120.	00,0 °C	00,0 %RH

2

Main

Events

System

all OK err alarm

average min max

Sensors count 1 1 0 0

Temperature 21,8 °C 0,0 °C 21,8 °C

Humidity 58,2 %RH 0,0 %RH 58,2 %RH

3

23.04.2024 15:02

1	New sensor
2	Sensor table - Select empty single cell to Assign new sensor to cell or select assigned cer to un-assign (only if new sensor is empty)
3	Statistics of all sensors.

TH Monitoring Configurator v1.0.0

New unassigned sensor: » 21,8 °C 58,1 %RH

Assign

001.	00,0 °C	00,0 %RH	025.	00,0 °C	00,0 %RH	049.	00,0 °C	00,0 %RH
002.	00,0 °C	00,0 %RH	026.	00,0 °C	00,0 %RH	050.	00,0 °C	00,0 %RH
003.	00,0 °C	00,0 %RH	027.	00,0 °C	00,0 %RH	051.	00,0 °C	00,0 %RH
004.	00,0 °C	00,0 %RH	028.	00,0 °C	00,0 %RH	052.	00,0 °C	00,0 %RH
005.	00,0 °C	00,0 %RH	029.	00,0 °C	00,0 %RH	053.	00,0 °C	00,0 %RH
006.	00,0 °C	00,0 %RH	030.	00,0 °C	00,0 %RH	054.	00,0 °C	00,0 %RH

Press [Assign] to assign new sensor to selected cell 001.

Press [Unassign] to move selected

TH Monitoring Configurator v1.0.0

New unassigned sensor: - 00,0 °C 00,0 %RH

Unassign

001.	21,8 °C	58,1 %RH	025.	00,0 °C	00,0 %RH	049.	00,0 °C	00,
002.	00,0 °C	00,0 %RH	026.	00,0 °C	00,0 %RH	050.	00,0 °C	00,
003.	00,0 °C	00,0 %RH	027.	00,0 °C	00,0 %RH	051.	00,0 °C	00,
004.	00,0 °C	00,0 %RH	028.	00,0 °C	00,0 %RH	052.	00,0 °C	00,
005.	00,0 °C	00,0 %RH	029.	00,0 °C	00,0 %RH	053.	00,0 °C	00,
006.	00,0 °C	00,0 %RH	030.	00,0 °C	00,0 %RH	054.	00,0 °C	00,

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TH Monitoring Configurator v1.0.0

New unassigned sensor: - 00,0 °C 00,0 %RH

Unassign

Clear alarm

001.	▲ 21,8 °C	58,1 %RH	025.	00,0 °C	00,0 %RH	049.	00,0 °C	00,
002.	00,0 °C	00,0 %RH	026.	00,0 °C	00,0 %RH	050.	00,0 °C	00,
003.	00,0 °C	00,0 %RH	027.	00,0 °C	00,0 %RH	051.	00,0 °C	00,
004.	00,0 °C	00,0 %RH	028.	00,0 °C	00,0 %RH	052.	00,0 °C	00,
005.	00,0 °C	00,0 %RH	029.	00,0 °C	00,0 %RH	053.	00,0 °C	00,
006.	00,0 °C	00,0 %RH	030.	00,0 °C	00,0 %RH	054.	00,0 °C	00,

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TH Monitoring Configurator v1.0.0

New unassigned sensor: - 00,0 °C 00,0 %RH

Clear error

001.	▲ 21,8 °C	58,1 %RH	025.	00,0 °C	00,0 %RH	049.	00,0 °C	00,
002.	00,0 °C	00,0 %RH	026.	00,0 °C	00,0 %RH	050.	00,0 °C	00,
003.	00,0 °C	00,0 %RH	027.	00,0 °C	00,0 %RH	051.	00,0 °C	00,
004.	00,0 °C	00,0 %RH	028.	00,0 °C	00,0 %RH	052.	00,0 °C	00,
005.	00,0 °C	00,0 %RH	029.	00,0 °C	00,0 %RH	053.	00,0 °C	00,
006.	00,0 °C	00,0 %RH	030.	00,0 °C	00,0 %RH	054.	00,0 °C	00,

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Events list

MC put all events (sensors move and alarms) in FIFO list (100 events in total). On Configurator page Events last 25 events are shown.

TH Monitoring Configurator v1.0.0

robotina

Main

> Events

System

Events

date	time	event	data
yyyymmdd	hhmmss.ddd	eeeeeeiii	vvvvvvvvvv
20240412	101314.153	004006001	0000000648
20240412	100711.714	004005001	0000000649
20240412	100634.094	004010000	0000000001
20240412	100549.343	004010001	0000000000
20240412	100025.932	004010000	0000000001
20240412	100019.812	004010002	0000000000
20240412	100006.984	004010000	0000000002
20240412	100000.281	004010001	0000000000
20240412	095854.000	001001000	0000000010
20240412	095847.000	001001000	0000000009
20240412	095252.000	001001000	0000000008
20240412	094955.000	001001000	0000000007
20240411	132810.000	001001000	0000000006
20240411	130706.135	004008001	0000000645
20240411	130706.135	004006001	0000000645
20240411	130706.135	004004001	0000000227
20240411	130706.135	004002001	0000000227
20240411	130647.082	004007001	0000000645
20240411	130640.732	004005001	0000000645
20240411	130640.732	004003001	0000000227
20240411	130615.332	004001001	0000000227
20240411	130511.600	004010005	0000000001
20240411	130342.248	004010000	0000000005
20240411	130335.979	004010001	0000000000
20240411	130253.618	004010000	0000000001

clear

Legend:

- yyyy year
- mm month
- dd date
- hh hour
- mm minute
- ss second
- ddd milisecond
- eeeee event (001xxx=general, 004xxx=TH)
- iii sensor index (0..120)
- vvvvvvvvv value

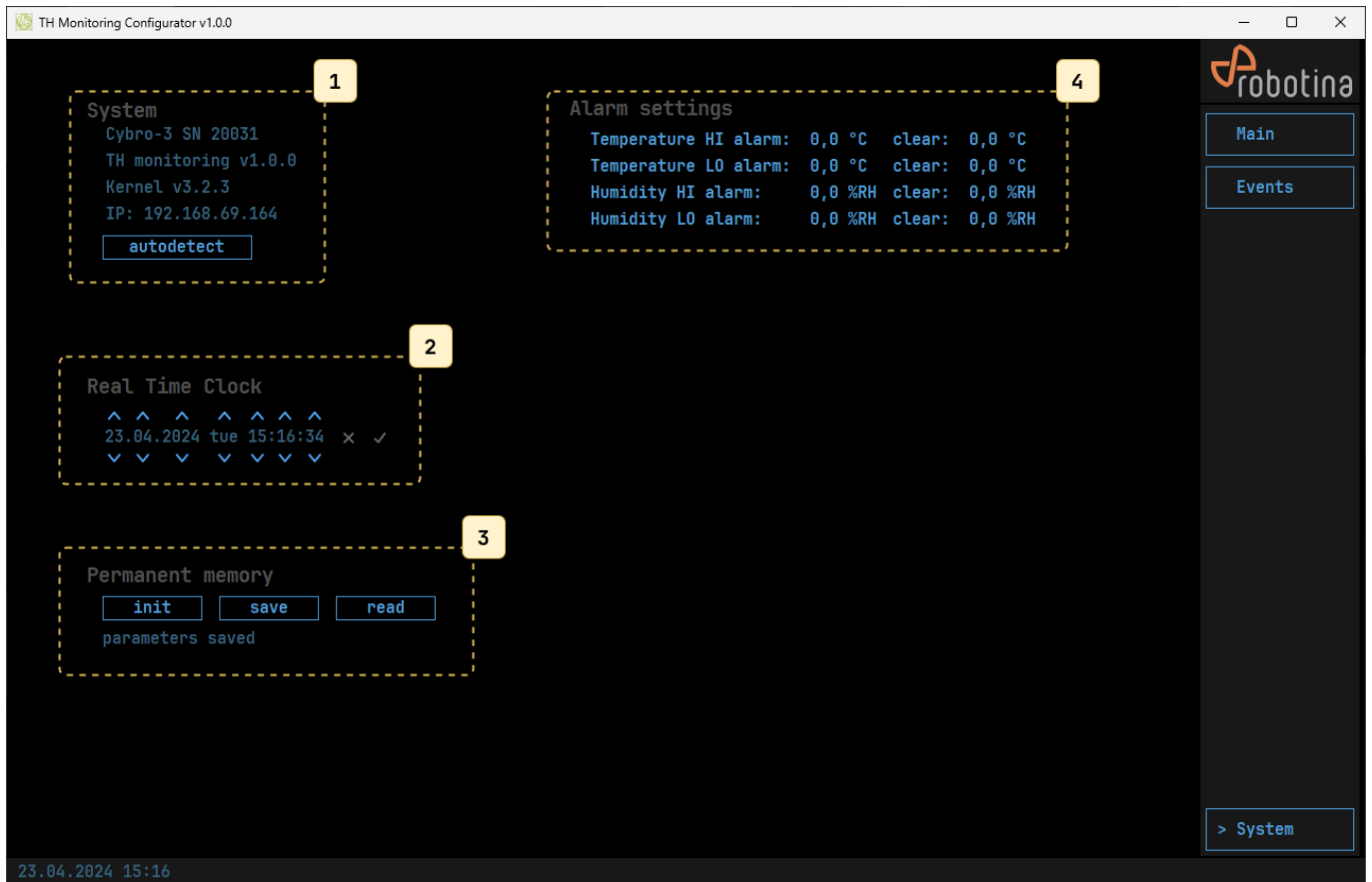
Events:

eeeeee iii vvvvvvvvv	
001001 000 reset_cnt	system reset
001002 000 0	events array cleared
004001 iii temperature	Temperature HI alarm triggered
004002 iii temperature	Temperature HI alarm gone
004003 iii temperature	Temperature LO alarm triggered
004004 iii temperature	Temperature LO alarm gone
004005 iii humidity	Humidity HI alarm triggered
004006 iii humidity	Humidity HI alarm gone
004007 iii humidity	Humidity LO alarm triggered
004008 iii humidity	Humidity LO alarm gone
004010 iii new_index	Sensor moved

12.04.2024 10:13

System

System overview and settings.



1	System settings: - MC serial number - SW version - MC Kernel version - MC IP
2	MC RTC Important for event logger
3	Permanent memory management: Alarm settings are stored to permanent (EEPROM) memory
4	Alarm settings Set to 0 to disable alarm or alarm clear functionality.