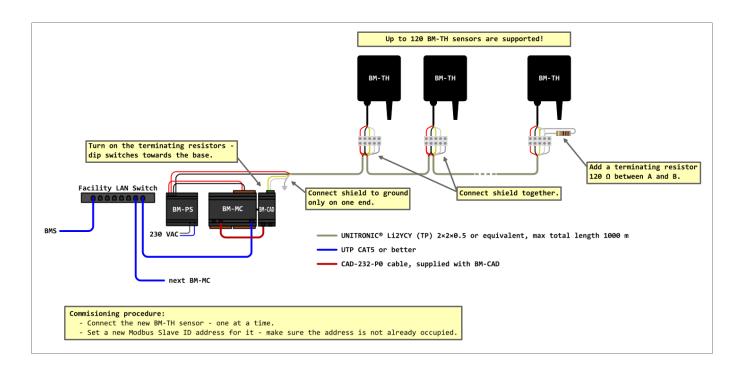


Temperature and humidity monitoring

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	1	- 🗆 X
New unassigned sensor: - 00,0 °C 00,0 %RH	2	robotina
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 1	🚽 Main
002. 00,0 °C 00,0 %RH 026. 00,0 °C 00,0 %RH 050 003. 00.0 °C 00.0 %RH 027. 00.0 °C 00.0 %RH 051	. 00,0 °C 00,0 %RH 074. 00,0 °C 00,0 %RH 098. 00,0 °C 00,0 %RH . 00,0 °C 00,0 %RH 075. 00,0 °C 00,0 %RH 099. 00,0 °C 00,0 %RH	Events
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	
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 055 008. 00,0 °C 00,0 %RH 032. 00,0 °C 00,0 %RH 056	. 00,0 °C 00,0 %RH 079. 00,0 °C 00,0 %RH 103. 00,0 °C 00,0 %RH . 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 057 010. 00,0 °C 00,0 %RH 034. 00,0 °C 00,0 %RH 058	. 00,0 °C 00,0 %RH 081. 00,0 °C 00,0 %RH 105. 00,0 °C 00,0 %RH . 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 059 012. 00,0 °C 00,0 %RH 036. 00,0 °C 00,0 %RH 060	00,0 °C 00,0 %RH 083. 00,0 °C 00,0 %RH 107. 00,0 °C 00,0 %RH 00,0 °C 00,0 %RH 084. 00,0 °C 00,0 %RH 108. 00,0 °C 00,0 %RH	
913. 00.0 °C 00.0 %RH 037. 00.0 °C 00.0 %RH 061 914. 00.0 °C 00.0 %RH 038. 00.0 °C 00.0 %RH 062	00,0 °C 00,0 %RH 085. 00,0 °C 00,0 %RH 109. 00,0 °C 00,0 %RH 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 064 017. 00,0 °C 00,0 %RH 041. 00,0 °C 00,0 %RH 065	. 00,0 °C 00,0 %RH 088. 00,0 °C 00,0 %RH 112. 00,0 °C 00,0 %RH . 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 066 019. 00,0 °C 00,0 %RH 043. 00,0 °C 00,0 %RH 067	. 00,0 °C 00,0 %RH 090. 00,0 °C 00,0 %RH 114. 00,0 °C 00,0 %RH . 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 068 021. 00,0 °C 00,0 %RH 045. 00,0 °C 00,0 %RH 069	. 00,0 °C 00,0 %RH 092. 00,0 °C 00,0 %RH 116. 00,0 °C 00,0 %RH . 00,0 °C 00,0 %RH 093. 00,0 °C 00,0 %RH 117. 00,0 °C 00,0 %RH	
922. 09,0 °C 00,0 %RH 046. 00,0 °C 00,0 %RH 070 923. 00,0 °C 00,0 %RH 047. 00,0 °C 00,0 %RH 071	00,0 °C 00,0 %RH 094. 00,0 °C 00,0 %RH 118. 00,0 °C 00,0 %RH 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	
all OK err alarm Sensors count 1 1 0 0	average min max Temperature 21,8 °C 0,0 °C 21,8 °C Humidity 58,2 %RH 0,0 %RH 58,2 %RH	System
23.04.2024 15:02	3	

- **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.

Configurator v1.0.0								Press Assi			
	nassigned ssign	sensor: »	21,8	°C 5	8,1	%RH				g t	gn] :o assig
001.	00,0 °C	00,0 %RH	025.				RH 0			00, n	new
002.	00,0 °C	00,0 %RH	026.				RH 0			00,	senso
003.			027.				RH 0			00	to selec
004.			028.				RH 0				ed
005.			029.				RH 0			00,	ell
006.			030.				RH 0			00,	001.

Press
[Unas
sign]
to
move
selec
ted

🚺 ТН	TH Monitoring Configurator v1.0.0							ser	nso 01					
New	unassign	ed			_ `	°C	00,0	%RH					to Ne	W
			Unas	sign									r.	nso
001	. 21,8	°C	58,1	%RH	025.					049.			00,	
002	. 00,0	°C	00,0	%RH	026.	00,0	°C	00,0	%RH	050.	00,0	°C	00,	
003					027.					051.			00,	
004					028.					052.			00,	
005					029.					053.			00,	
006	. 00,0	°C	00,0	%RH	030.	00,0	°C	00,0	%RH	054.	00,0	°C	00,	

💽 TH N	Nonitoring Confi	gurator v1.0.0								Press [Clea
New u	nassigned	sensor: - Unassign		°C 00, lear al	0 %RH .arm					r Alarm s] to clear
001.	^21,8 °C	58,1 %RH	025.	00,0 °C	00,0		049.	00,0 °C	1	alarm
002.	00,0 °C	00,0 %RH	026.	00,0 °C	00,0		050.	00,0 °C		s from
003.			027.				051.		0.0	selec
004.			028.				052.			ted
005.			029.				053.		00,	cell.
006.	00,0 °C	00,0 %RH	030.	00,0 °C	00,0	%RH	054.	00,0 °C		Multi ple cells can be selec ted.

💽 тн	W TH Monitoring Configurator v1.0.0							Pres				
New	unassioneo	d sensor: -	00.0	°C	00,0	%RH					r	_
	ondoorgnot			Ŭ		Jurti		Clear	error		erro to clea	-
001.	^ 21,8 °C	58,1 %RH									erro	r
002.	. 00,0 °C	00,0 %RH	026.								00, s from	n
003.	. 00,0 °C	00,0 %RH	027.					051.			00, sele	
004.	. 00,0 °C	00,0 %RH	028.	00,0	°C	00,0	%RH	052.	00,0	°C	00, ted	
005.	. 00,0 °C	00,0 %RH	029.	00,0	°C	00,0	%RH	053.	00,0	°C	00, cell.	
006.	. 00,0 °C	00,0 %RH	030.	00,0	°C	00,0	%RH	054.	00,0	°C	00, Mult	ti

ple cells can be selec ted.

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.

C TH Monitoring Configurator v1.0.0				- 🗆 X
Events				P robotina
date time event yyymdd hhmmss.ddd eeceei 20240412 101314.153 0040600 20240412 100711.714 004050 20240412 100634.094 0040100 20240412 100634.094 0040100 20240412 10005.932 0040100 20240412 10000.281 0040100 20240412 100000.281 0040100 20240412 095854.000 0010010 20240412 095522.000 0010010 20240411 132810.000 0010010 20240411 130766.135 0040060 20240411 13076.135 0040000 20240411 13076.135 0040000 20240411 13076.135 0040000 20240411 13076.135 0040000 20240411 13076.135 0040000 20240411 13076.135 0040000 20240411 130647.32 0040000 20240411 130640.732 0040000	11 VVVVVVVV 001 0000000648 001 0000000649 000 000000001 001 0000000001 001 0000000001 000 0000000001 000 0000000000 000 0000000000 000 0000000000 000 0000000000 000 0000000000 000 0000000000 000 0000000000 000 0000000000 000 0000000000 000 0000000000 000 0000000000 000 0000000000 000 000000000 000 0000000000 000 0000000000 000 0000000000 000 00000000000 000 0000000000 000 0000000000 000 0000000000 000 0000000000 000 0000000000 0000 0000000000 <tr< th=""><th>Legend: - yyyy year - mm month - dd date - hh hour - mm minut - ss secon - ddd milis - eeeeee event - iii senso - vvvvvvvvv value Events: eeeeee iii vvvvvvvvv 001001 000 reset_cnt 001002 000 0 0064001 iii temperature 004002 iii temperature 004005 iii humidity 004005 iii humidity 004005 iii humidity 004008 iii humidity 004010 iii new_index</th><th>e id econd : (001xxx=general, 004xxx=TH) r index (0120)</th><th>Main > Events System</th></tr<>	Legend: - yyyy year - mm month - dd date - hh hour - mm minut - ss secon - ddd milis - eeeeee event - iii senso - vvvvvvvvv value Events: eeeeee iii vvvvvvvvv 001001 000 reset_cnt 001002 000 0 0064001 iii temperature 004002 iii temperature 004005 iii humidity 004005 iii humidity 004005 iii humidity 004008 iii humidity 004010 iii new_index	e id econd : (001xxx=general, 004xxx=TH) r index (0120)	Main > Events System
12.04.2024 10:13				

System

System overview and settings.

🥸 TH Monitoring Configurator v1.0.0	– 🗆 X
1 Alarm settings Cybro-3 SN 20031 Temperature HI alarm: 0,0 °C clear: 0,0 °C TH monitoring v1.0.0 Temperature L0 alarm: 0,0 °C clear: 0,0 °C Kernel v3.2.3 IP: 192.168.69.164 autodetect 0,0 %RH clear: 0,0 %RH	Main Events
2 Real Time Clock 23.04.2024 tue 15:16:34 × ✓	
Permanent memory <u>init</u> save read parameters saved	
23.84.2024 15:16	> System

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.