

- max 28 words may be read out as a whole (i.e. 56 bytes)
- first 256 bits can be addressed bitwise (i.e. 1 LSB – 16 MSB)

Name	Address	Type	Description	Note
module ID LSB	1 LSB	R	module identification lower byte	module ID is 0400hex
module ID MSB	1 MSB	R	module identification upper byte	
firmware	2 LSB 2 MSB	R	FW version	3hex
status LSB	3 LSB	R,W RAM	module status lower byte bit 0 - EEPROM write enable bit 4 - EEPROM init bit 5 - calibration offset bit 6 - calibration span bit 7 - calibration enable	EEPROM init is enabled when the INIT switch was ON at power-up, and switched OFF before bit 4 was set to 1 (indicated by bit 2 in status MSB) calibration is enabled when the INIT switch was ON at power-up, and switched OFF before bit 7 was set to 1 (indicated by bit 3 in status MSB) calibration offset change bit 7 from 1 to 0 and set bit 5 to 1 calibration span change bit 7 from 1 to 0 and set bit 6 to 1
status MSB	3 MSB		module status upper byte bit 0 - 0 normal mode - 1 init mode bit 1 - 1 at the next EEPROM write attempt all data will be saved to EEPROM - 0 at the next write attempt received data will be written to RAM only bit 2 - 1 - EPROM initialised bit 3 - 1 - calibration enabled bit 4 - 0 bit 5 - 1 bit 6 - 0 bit 7 - 1	
address	4 LSB	R,W EEPROM	module Modbus RTU address	!!!The changes will become active only after

				module restart (the register is written immediately, but the new address is effective after restart)
baud rate (comm speed)	4 MSB	R,W EEPROM	no parity 10dec ... 1200 bps 11dec ... 2400 bps 12dec ... 4800 bps 13dec ... 9600 bps 14dec ... 19200 bps 15dec ... 38400 bps 16dec ... 57600 bps 17dec ... 115200 bps	!!!The changes will become active only after module restart (the register is written immediately, the new baud rate is effective after restart)
DI values	5 LSB	R	input states bit 0 - door bit 1 - LED bit 2 - beeper bit 3 - temperature alarm bit 4 - not used bit 5 - not used bit 6 - not used bit 7 - not used	
settings	5 MSB	R, W EEPROM	settings: bit 0 - door contact: log. 0 - door open when contact open log. 1 - door open when contact closed	
count0	6 LSB	R, W NVRAM	cumulated door open time in the current day [s]	count0 ... LSB
count1	6 MSB			...
count2	7 LSB			count3 ... MSB
count3	7 MSB			
actual0	8 LSB	R, W NVRAM	time of last door opening [s] (= duration)	actual0 ... LSB
actual1	8 MSB			...
actual2	9 LSB			actual3 ... MSB
actual3	9 MSB			
actual time0	10 LSB	R, W NVRAM	real time of last door opening [s] (= when the door was opened)	actual time0 ... LSB
actual time1	10 MSB			...
actual time2	11 LSB			actual time3 ... MSB
actual time3	11 MSB			
actual time4	12 LSB			
actual time5	12 MSB			
last count0	13 LSB	R, W NVRAM	cumulated time of door opening in the last day [s]	last count0 ... LSB
last count1	13 MSB			...

last count2	14 LSB			last count3 ... MSB
last count3	14 MSB			
actual temp	15 LSB	R	actual temperature minimum value: 0000dec -> -50.00 maximum value: 1500dec -> 100.00	real value = (read value/100) - 50
	15 MSB			
min temp	16 LSB	R, W NVRAM	actual temperature minimum value: 0000dec -> -50.00 maximum value: 1500dec -> 100.00	real value = (read value/100) - 50
	16 MSB			
max temp	17 LSB	R, W NVRAM	actual temperature minimum value: 0000dec -> -50.00 maximum value: 1500dec -> 100.00	real value = (read value/100) - 50
	17 MSB			
last min temp	18 LSB	R, W NVRAM	actual temperature minimum value: 0000dec -> -50.00 maximum value: 1500dec -> 100.00	real value = (read value/100) - 50
	18 MSB			
last max temp	19 LSB	R, W NVRAM	actual temperature minimum value: 0000dec -> -50.00 maximum value: 1500dec -> 100.00	real value = (read value/100) - 50
	19 MSB			
RTC0	20 LSB	R, W NVRAM	real time	See table below. When writing to these registers, write to EEPROM in register status LSB bit 0 must be enabled.
RTC1	20 MSB			
RTC2	21 LSB			
RTC3	21 MSB			
RTC4	22 LSB			
RTC5	22 MSB			
RTC6	23 LSB			
RTC7	23 MSB			
time LED	24 LSB	R, W EEPROM	time delay between open door and start flashing LED [s]	
	24 MSB			
time beep	25 LSB	R, W EEPROM	time delay between open door and start beeping [s]	
	25 MSB			

time temp	26 LSB	R, W EEPROM	time delay between temperature (in set temperature range) above/below limit and start/stop alarm [s]	
	26 MSB			
min alarm temp	27 LSB	R, W EEPROM	minimum temperature for start alarm minimum value: 0000dec -> -50.00 maximum value: 1500dec -> 100.00	real value = (read value/100) - 50
	27 MSB			
max alarm temp	28 LSB	R, W EEPROM	maximum temperature for start alarm minimum value: 0000dec -> -50.00 maximum value: 1500dec -> 100.00	real value = (read value/100) - 50
	28 MSB			

Real time table

Address	bit7	bit6	bit5	bit4	bit3	bit2	bit1	bit0	Function	Range
14 LSB		10xsecs			secs				sec	00-59
14 MSB	0	10xmins			mins				min	00-59
15 LSB	0	10xhour		10xhour	hours				hour	00-23
15 MSB	0	0	0	0	0	dav		day	01-07	
16 LSB	0	0	10xdate		date				date	01-31
16 MSB	0	0	0	10xmonth	month				month	01-12
17 LSB	10xyear				year				year	00-99
17 MSB	0	0	0	0	0	0	0	0	N/A	00