

AT MBUS Configuration

I. AT-MBUS conf

1) Main window

- Connect AT-MBUS-(NA)-0X modules to MBus Master.
- Connect MBus Master to PC.

Main application window:

The screenshot shows the 'AT MBUS conf 1.19' application window. It has a menu bar with 'Program' and 'Language'. The main interface is divided into several sections. On the left, a box labeled '1.' contains 'Port COM:' with a dropdown set to 'COM1' and 'Baud rate:' with a dropdown set to '2400', along with a 'Refresh COMs' button. To the right, a box labeled '2.' contains 'Module No.' (an empty text field) and 'Secondary address' (a dropdown). Below this, a box labeled '3.' contains 'Set new baud rate:' (a dropdown set to '300') and a 'Set baud' button. A row of three buttons is labeled '4.' (Events reset), '5.' (Serial writing), and '6.' (Check firmware). The main configuration area, labeled '7.', contains a list of checkboxes and input fields: 'Volume' (checkbox), 'Secondary address' (checkbox and text field), 'Set present time' (checkbox), 'Backward flow' (checkbox and text field), 'Min./max flow' (checkbox and dropdown set to 'JS 1,6'), 'Leakage duration' (checkbox and text field with '* 10 minutes (1-255)'), 'Primary adress' (checkbox and text field with '1 - 250'), 'Lack of flow' (checkbox and text field with 'days'), and 'Events reset' (checkbox). A 'Total volume [L]' label is next to the 'Lack of flow' field. At the bottom of this section is a 'Set data' button. The status bar at the very bottom is labeled '8.'.

1. Port COM configuration. Default device baud rate is 2400.
2. Configured device secondary/primary address. By default secondary address is number on device sticker.
3. Device baud rate configuration.

Important! After changing Baud Rate, in order to set data you must change "Baud rate" to actual.

4. "Events reset" button for address in 2. .
5. Button for open "Serial writing" mode.
6. Check firmware version. For older modules information is unavaible.
7. Device configuration parameters. In order to change data:

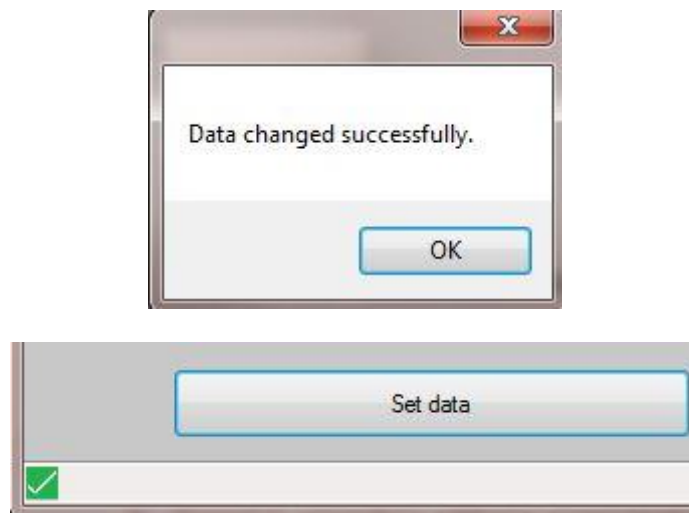
- Select desired check box, and type in data.

- Click "Set data", to send values to module.

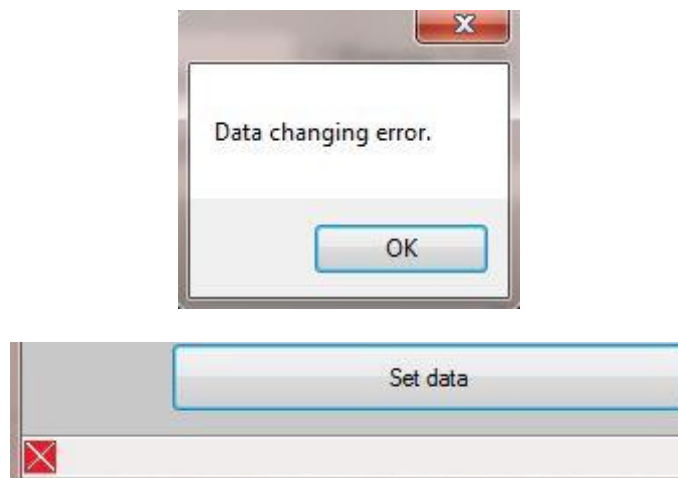
8. Progress/Status bar.

2) Writing confirmation.

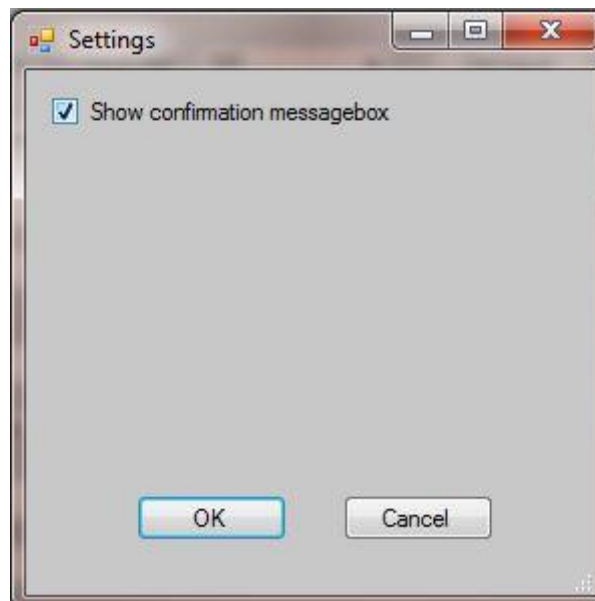
Buttons "Set baud", "Events reset" and "Set data" performs data writing to device. Operation status is shown in confirmation box, and on status/progress bar . In case of success will be shown:



In case of writing problems information shown will be:

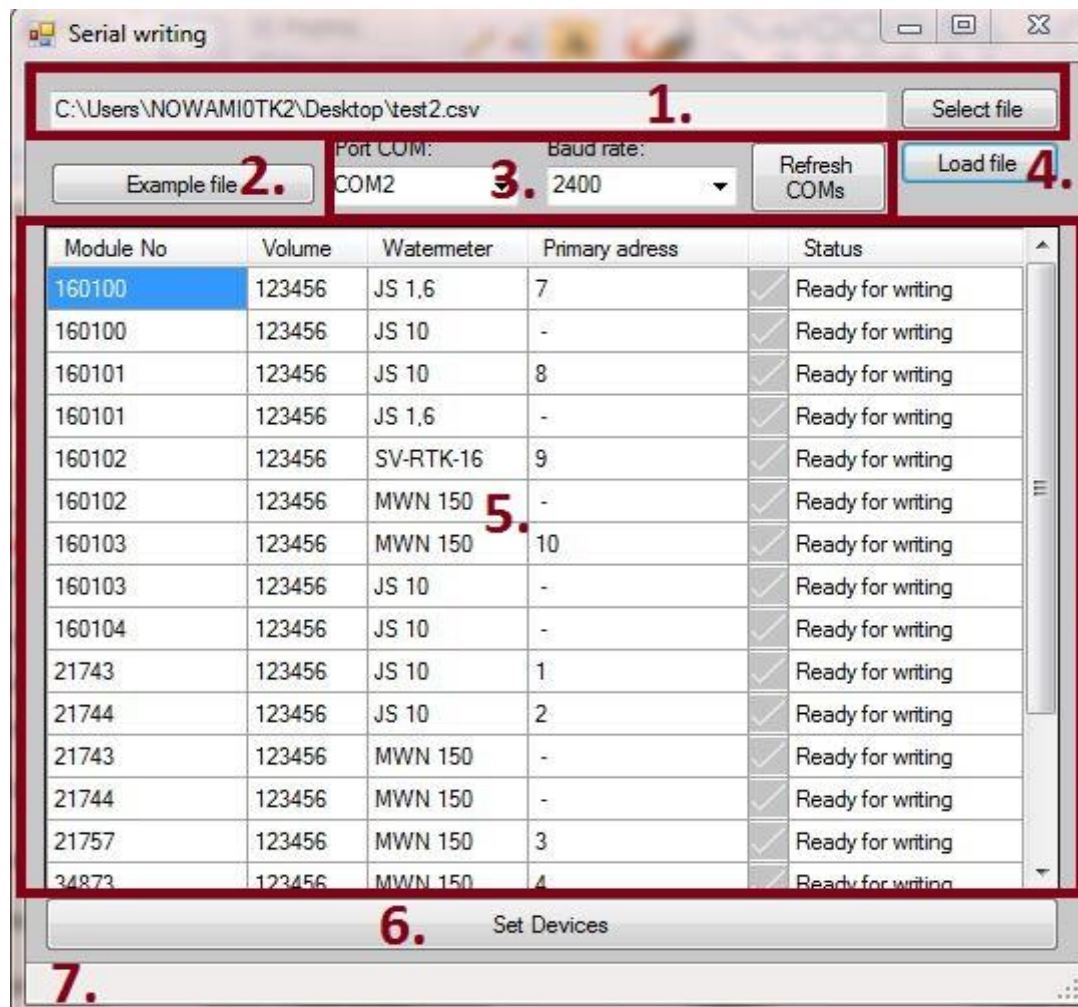


Message box required confirmation with "OK" button. They can be turned off, then there will be only icon on status bar. In order to turn them off go to menu "Program" -> "Settings", and uncheck box "Show confirmation messagebox".



II. Serial writing

1) Serial writing window



1. Template selection section.
2. Button for creating example of template.
3. Port COM configuration.
4. If template is selected in section 1., this button will load file.
5. Main table with device to be set, parameters, and operation status.
6. Button "Set Devices" for start operation.
7. Progress bar.

2) Writing template

	A	B	C	D	E
1	Module number	Volume[L]	Watermeter type	Primary address	Comment
2	160100	123456	JS 1,6	7	
3	160100	123456	JS 10		
4	160101	123456	JS 10	8	
5	160101	123456	JS 1,6		
6	160102	123456	SV-RTK-16	9	
7	160102	123456	MWN 150		
8	160103	123456	MWN 150	10	
9	160103	123456	JS 10		
10	160104	123456	JS 10		
11	21743	123456	JS 10	1	
12	21744	123456	JS 10	2	

Template contain 5 columns.





- Module number – module secondary address. By default number on a sticker. **This is only mandatory field.**
- Volume[L] – value in litres to be set on device. If volume is given, also “Watermeter type” must be specified.
- Watermeter type – Which watermeters threshold must be set.
- Primary address – address to be set.
- Comment – field for user purpose only, this column is not imported.

Allowed watermeter types according to MBUS module can be found in table below.

MBUS modules	AT-MBUS-01 AT-MBUS-NA-01	AT-MBUS-02 AT-MBUS-NA-02	AT-MBUS-03 AT-MBUS-NA-03	AT-MBUS-04 AT-MBUS-NA-04	
Allowed watermeter types	JS 1,6	JS 6,3	SV-RTK-2,5	MWN 40	MP 40
	JS 2,5	JS 10	SV-RTK-4	MWN 50	MP 50
	JS 4	JS 16	SV-RTK-6,3	MWN 65	MP 65
			SV-RTK-10	MWN 80	MP 80
			SV-RTK-16	MWN 100	MP 100
				MWN 125	MK 50
				MWN 150	MK 80
				MWN 200	MK 150
				MWN 250	JS 50
				MWN 300	JS 65
					JS 80
					JS 100

3) Writing procedure

Application will first try to select given secondary address. Next will read device module type, and compare it with watermeter to be set (if any). Then will set parameters, reset event flags and set standard frame type. If problem occurred, program will skip this device, and retry configuration later up to 3 times in cycle (unless problem is inappropriate watermeter type). Possible final status outcome in table below.

Status	Description
 OK	Device is set.
 Device selection error	Device with this number doesn't answered. Check number or cable connection.
 Incorrect watermeter type error	Inappropriate watermeter type for given MBUS module.
 Setting data error	Problem during configuration.

How to connect AT-MBUS module to MBUS master



1. Put MBUS device on watermeter. There is only one possible way to place module. Push it, make sure MBUS device is fixed to watermeter.



2. Connect wires to MBUS module. In MBUS network polarization of inputs doesn't matter. To configure device use "AT MBUS conf" program.

