Badger Meter Europa GmbH

ModMAG® M1000
PC Software

INSTALLATION AND OPERATION MANUAL

July 2016

MID_M1000_SA_02_16

1. PC programing kit

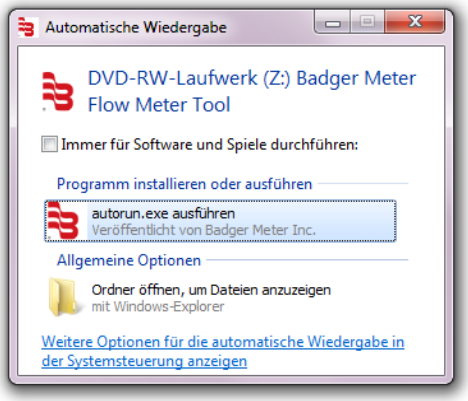
The kit includes:

- Installation manual
- USB remote cable with a 5 pin plug (total 6,5 m)
- CD

2. Software installation

Driver installation
Using USB remote cable: Install the USB driver (step 1A).

Program installation
Install now the PC program “Flow Meter Tool” (step 2) and follow the instructions.



Badger Meter Europa

MAG Flow Meter Tool
Version 1.1.5

- English
- Deutsch

Englisch

Step 1: USB Driver Installation (other drivers see CD – USB Driver)

- Click here to install USB Driver for Vista
- Click here to see Installation manual for USB Driver

Step 2: Installation of the MAG Flow Meter Tool

- Click here to run installer of Flow Meter Tool (automatically install all required packages)

Manual installation of required packages

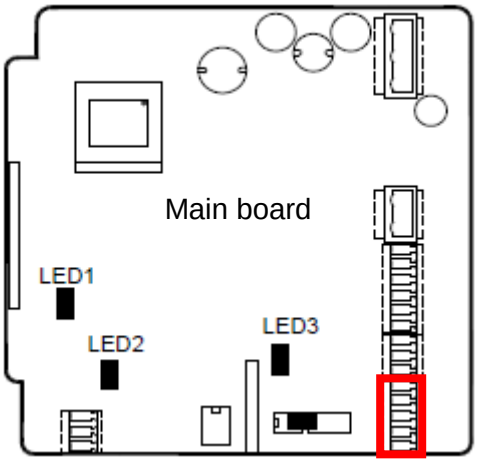
- Click here to run installer of Microsoft .NET Framework 4.0 (32 and 64bit)
- Click here to run installer of Microsoft SQL Compact 3.5 SP2 32bit
- Click here to run installer of Microsoft SQL Compact 3.5 SP2 64bit
- Click here to run installer of Microsoft Windows Installer 3.1 32bit

Step 3: Read Manual

- Flow Meter Tool Manual

3. ModMAG® M1000 connection - USB remote cable

Plug-in the remote cable (5 pin plug) to connection A/B/X/Y/GND on the ModMAG® M1000 amplifier board (see below red marked). Connect the USB plug into your PC.



Cable colours to the assigned terminal	
A=Rx	red
Z=Tx	white
GND	yellow

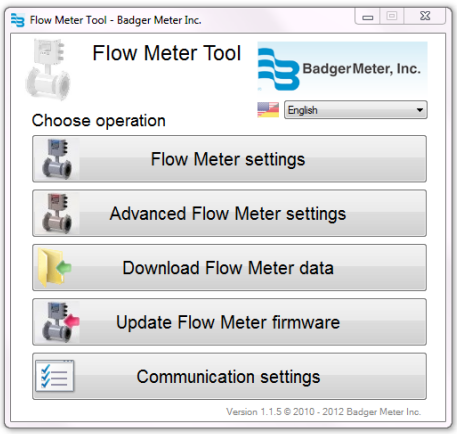
ModMAG® M1000 port A adjustment

Navigate to Main Menu / Communication / ModBus and adjust as follows:

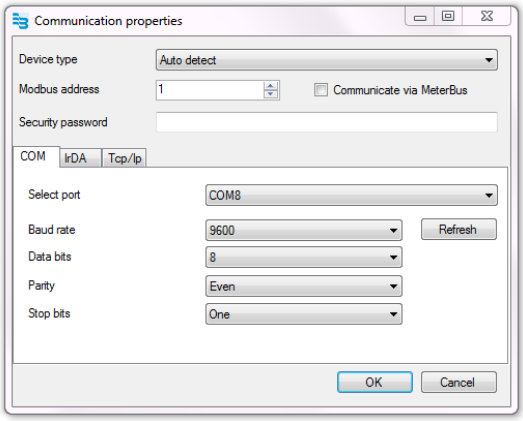
- Interface: Modbus
- ModBus address: 1
- Baud rate: 9600
- Parity: Even

4. Flow Meter Tool

Start on your PC the Flow Meter Tool under Program / Badger Meter / Flow Meter Tool and select the language.



4.1 Communication settings – USB remote cable



Navigate to the menu “Communication Settings”.
Select as device type “Auto detect” or M1000. The ModBus® address must match with the address programmed in the device (default is 1). If the device is password protected, you have to enter the right password for the different security levels (Admin/Service/User). The password of ModMAG® M1000 is a 5 digit number. Enter all digits even if the number have leading zeros like 00034.

Select folder “COM” and adjust as follows:

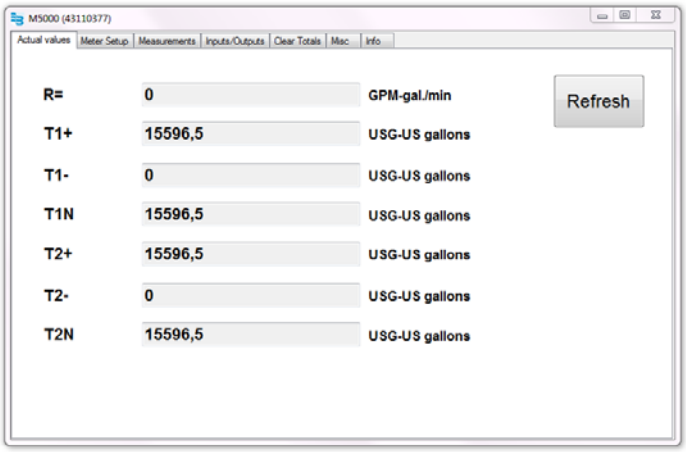
- Device type: Auto detect (or connect amplifier type)
- Modbus address: 1
- Comm. via M-Bus: Off
- Security password: XXXXXX (5 digits)
- Select port: PC Comm Port of the USB Profilic converter
- Bau rate: 9600
- Data bits: 8
- Parity: Even
- Stop bits: 1

To get the assigned Comm Port on your PC for the USB converter, open your Windows® Control Panel / Device Manager / Connections and check which port was assigned for the “Prolific-USB-to-Serial Comm Port”. This port number must be entered as selected port.

Leave this display by pressing OK.

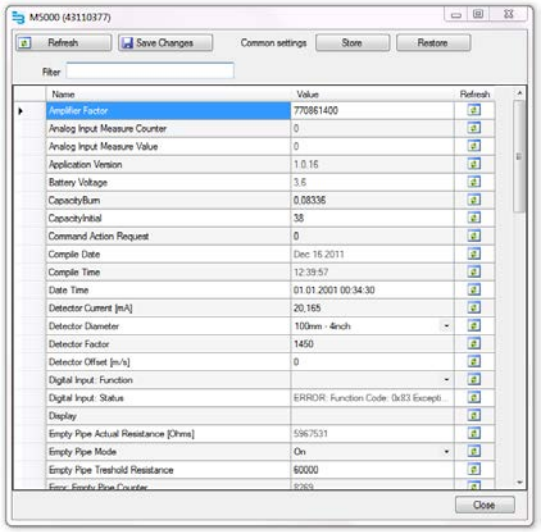
4.2 Flow meter settings

All parameters can be set according to the ModMAG® M1000 menu structure.



4.3 Advanced flow meter settings

All parameters are sorted out alphabetically in a list.



- Refresh: Upload the parameters from M1000
- Save changes: Download changed parameter to the M1000
- Store: Store the current settings to the PC (only for restore use)
- Restore: Download the stored parameters to the same or a other device.

Changed parameters are highlighted in red. Save a new parameter to change on the ModMAG® M1000 by pressing the button “Save changes”.

Note: The store and restore function can be used to set up several meters with the same settings.

5. Data logging

The data logging feature records three types of events:

- Totalizer/error events
- Configuration change events
- Startup events (power up or reset events)

Each type of event is recorded into three separate files stored on internal memory.

NOTE: Over time the data logging will reach the capacity of the memory. Any new events to be recorded will overwrite the oldest event on record.

Totalizer/Error events

The capacity of the logging memory is 30,000 messages. The table below defines the capacity of the memory configured for data logging. On each interval the totalizers are recorded in addition to any errors that have occurred from the last interval. To program the interval, go to *Miscellaneous > Datalog Period.*

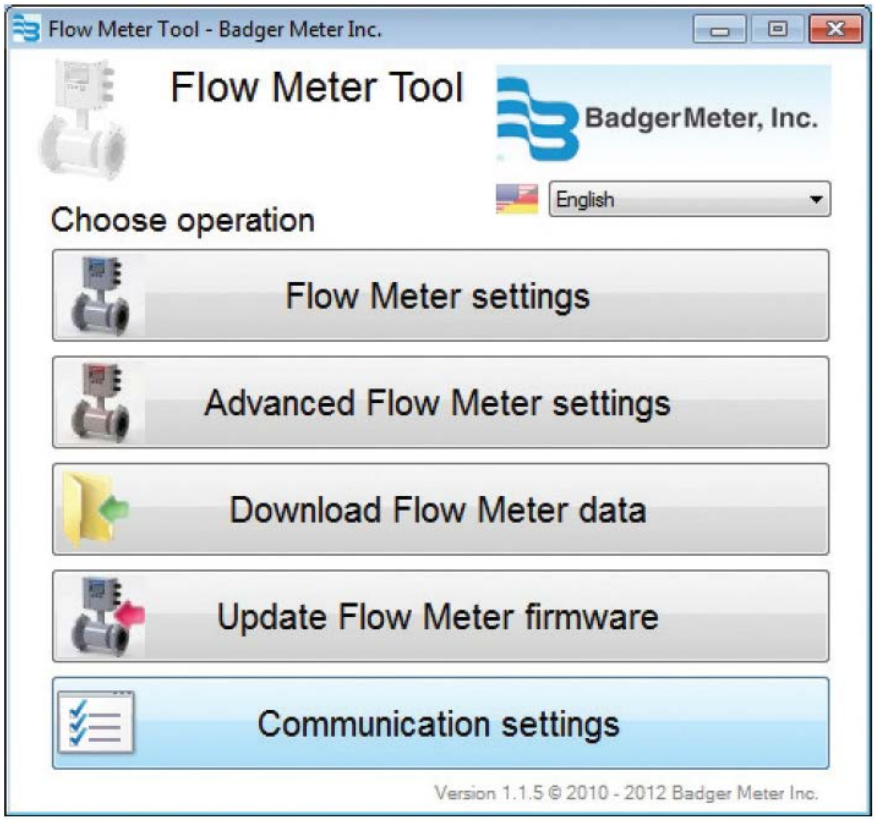
Interval	Totalizer / Error events
15 min	up to 312 days
1 hr	up to 1250 days
6 hr	up to 20 years
12 hr	up to 40 years
24 hr	up to 80 years

Configuration events

Each **Configuration event** identifies the parameter that was modified and to what value the parameter was changed. Up to 40 configuration events can be recorded.

Startup events

Each **Startup event** identifies the time and reason of the event. The ModMAG® M1000 does not record the date and time of a power off. A total of 20 startup events can be recorded.



To extract the event files:

a. Select **Download Flowmeter Data.**
b. Select the **Totalizer and Error Log** tab.
c. Select **Download.**
d. Optional: Select **Save as Excel file…** for each event file to save the history of events.
e. Select the **Startup Log** tab.
f. Select **Download.**
g. Optional: Select **Save as Excel file…** for each event file to save the history of events.
h. Select the **Configuration Event Log** tab.
i. Select **Download.**
j. Optional: Select **Save as Excel file…** for each event file to save the history of events.
k. Select **Cancel** to exit this application window.

6. Return of goods for repair

Please refer to our claims return form / harmlessness declaration under:
http://www.badgermeter.de/en/service/return-of-goods.html

Hotline

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