

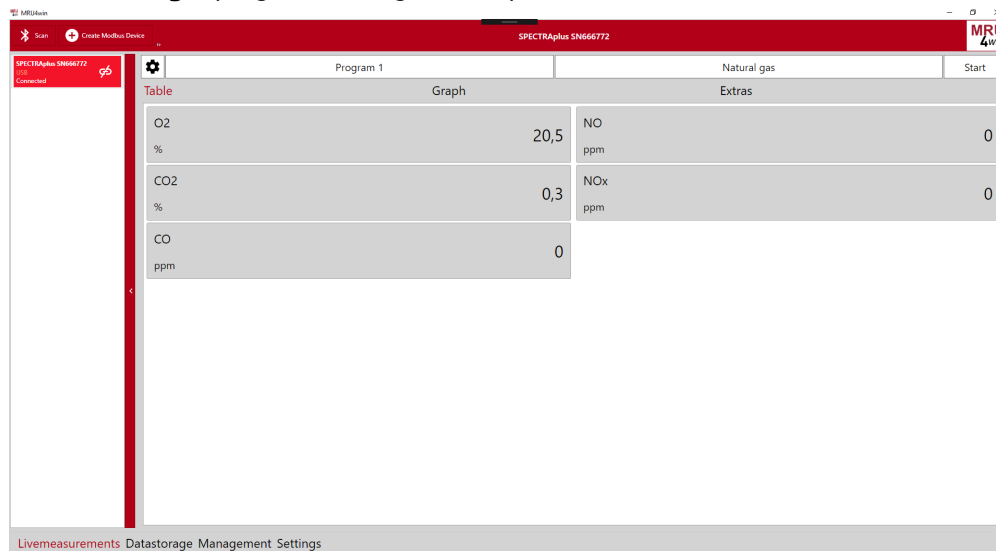
MRU4win Anleitung/en

Inhaltsverzeichnis	
1 Introduction	1
2 Connect instruments	1
3 Live measurements	2
4 Data base management	3
5 Settings	4

Introduction

All functions of MRU4Win are available via one of four categories:

1. **Live measurements:** view all data transferred by the instrument live in different views like table of graph. Both views may be configured by the user to define which data are displayed. All data are continuously logged to be available offline after stop of the measurement.
2. **Data base:** In a data base all customer's contact data, customer's sites, and measurements protocols are managed. When stopping a live measurement (or even offline at a later point in time) logged data may be assigned to a customer's site as a measurement protocol.
3. **Data storage:** stored data from a connected instrument may be read out, including tightness test or other
4. **Settings:** program settings, backup of the data base.



Connect instruments

In the left row all available instruments are listed. An instrument may be connected to the MRU4Win SW by click on the link symbol nex to the unit's name. Several different nits may be connected at the same time to allow for parallel data logging.

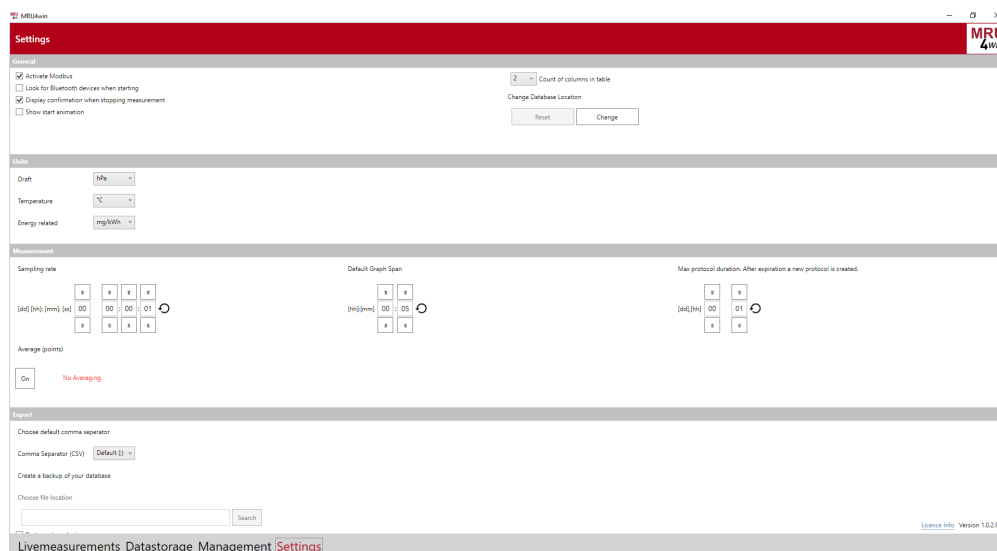
MRU4win Anleitung/en

MRU instruments supporting DADEX protocol (as available for portable units like Optima7, DELTA*smart*, NOVA*plus*) allow for a connection via Bluetooth or USB. Connections via USB are identified automatically while connections via Bluetooth are available after a Bluetooth scan process.

MRU instruments supporting the Modbus protocol (which is usually the fact for emission monitoring units like VARIO*luxx* or SWG100) may be connected via serial interface or TCP. they are not discovered automatically but need to be configured with the tab "Create Modbus device". Note that this is available only after enabling Modbus support in the settings tab.

Live measurements

Instruments supporting DADEX (portable units) allow for a limited control of the unit: select different measurement programs, fuel types, start or stop of the measurements. Via Modbus no control is possible, but data logging only.



Data may be displayed either as a table or as a graph. Which data out of the full set of available data are displayed, may be configured by the user. This can be done by the gear wheel symbol. Note that irrespectively which data are selected for display, all available data from the instrument are logged during the live measurement.

In the graph view use the mouse wheel to zoom display, use the left mouse key for a cursor with data display.

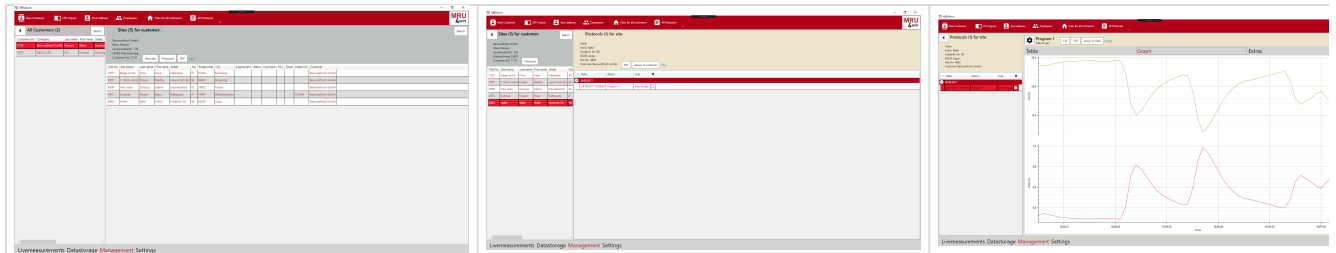
At stop of the live measurement the data logged may be saved. They are saved either as non-assigned set of data, or the user may assign the data to a certain customer's site.

Note that the MRU4Win light version supports only limited log time, while it is not limited in the full version.

The EXTRAS tab allows for more detailed information on the unit itself and the current log process.

Data base management

The data base is organized in three levels: customer contact data, details on site (several sites per customers supported), measurements per site (several measurement protocols per site supported). Additionally the MRU4Win user may enter different employee/user names to the data base and to allow for assigning user names to the measurement.



Customer contact data, site details and user data may be imported via csv import or manually. Measurement protocols or stored by assigning them to one site of one customer.

For any customer a site may be selected, edited or added. Using "PDF" button a pdf document with all sites and protocols may be generated.

For any site the assigned protocols may be selected or edited. PDF export of that protocol is supported.

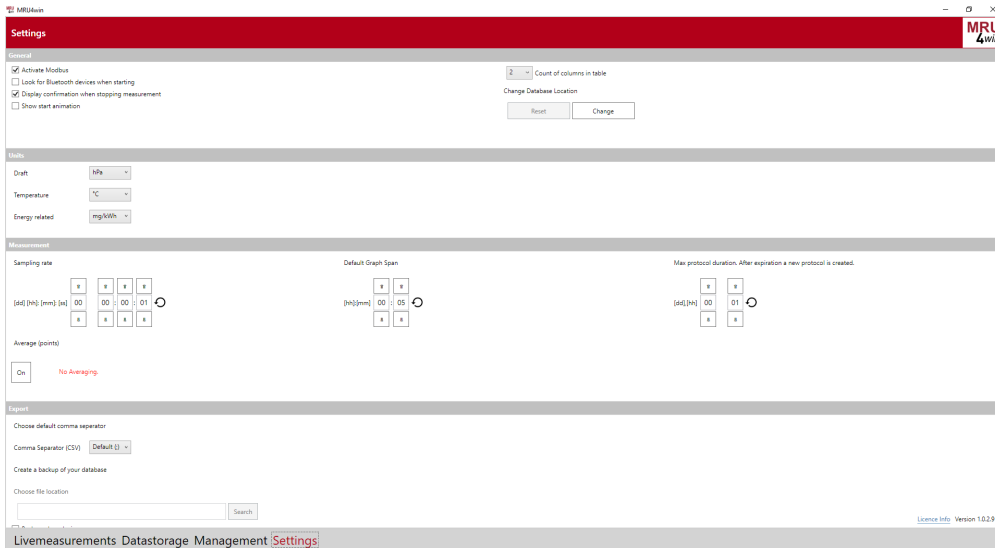
"Sites for all customers" shows a list with all sites, "all protocols" shows a list of all stored protocols. In this list as well those protocols are shown which are not yet assigned to any site.

After selecting a protocol, data may be displayed as table or graph very much like during the live measurement. The measurement may be exported as csv or pdf, or even assigned to a different customer /site.

The EXTRAS tab may be used to add comments or pictures (use right mouse key for showing/deleting added pictures).

Note that pdf and csv export are only available in the MRU4Win full version.

Settings



The sampling rate defines the time interval at which new data are retrieved from the instrument.

Graph span is the overall time interval which is used by the graph per default.

After max protocol duration, MRU4Win will store the current log data and start a new protocol. This is to prevent too much data volume per protocol. Set this duration to 0 to generate a data log protocol without starting a new ever.

Some settng for csv export may be entered here.

A full data base backup and restore may be triggered here.