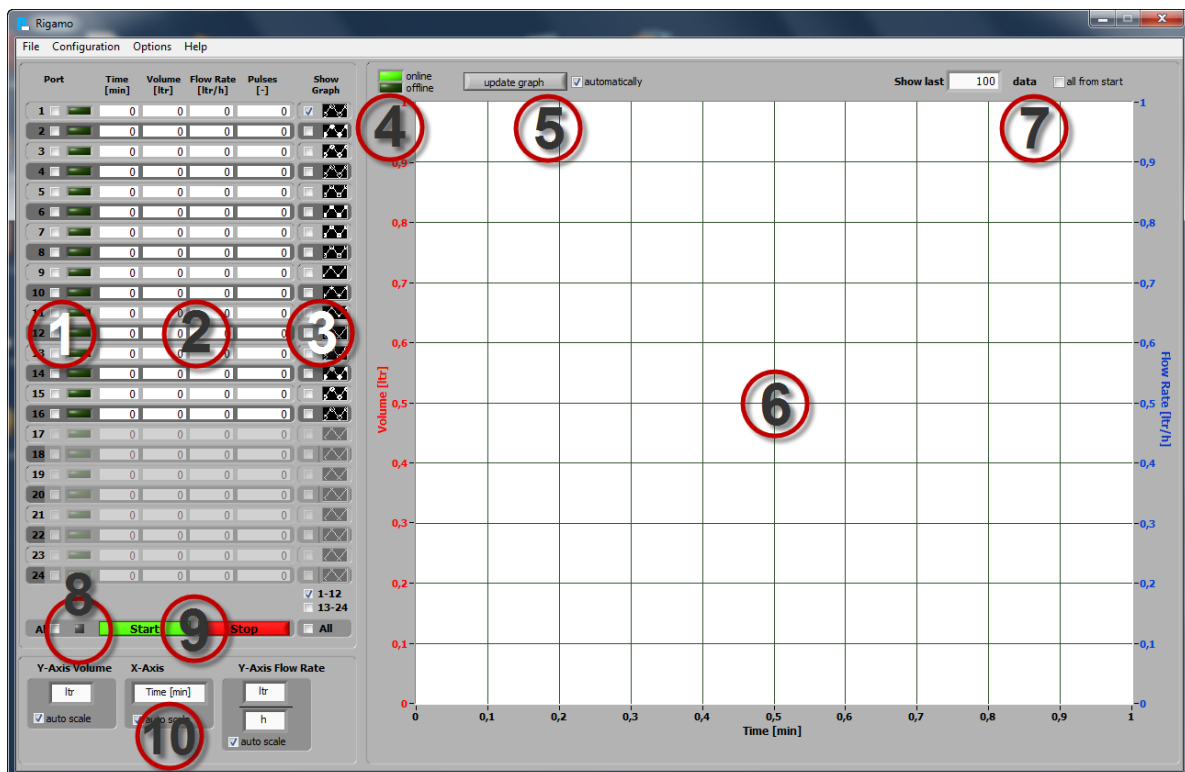


Software Features (overview):

- Windows software for **data acquisition** of gas volume and flow rate from up to 24 Ritter gas meters to a PC USB port.
- Support of **multi-core processors**
- **Graphical and tabular display** of measurement data
- **Storing** of data
- **Print out** (separately or in any combination) of
 - Diagram
 - Test parameters
 - Measured values in tabular form
- **Export** of stored data to Microsoft Excel® spread-sheet (Excel 2003 or higher)
- **Automatic correction** of the dynamic (flow rate dependent) measurement error (MGC only)

Please note: Rigamo can only started once at a time at one PC.

No support of bi-directional recognition of the measuring drum rotation with Pulse Generator V4.01



- Area 1: Display of port status
- Area 2: Tabular display of data for respective ports in real time
- Area 3: Tick boxes for display "show" / "no show" of graphs
- Area 4: Indicator for online / offline display of graphs
- Area 5: Selection of graph updating mode (automatically/manually)
- Area 6: Diagrams for gas volume and flow rate
- Area 7: Number of last measurement data to show in diagram
- Area 8: Indicator of processor load status
- Area 9: Buttons „Start/Stop“ of data acquisition
- Area 10: Dimensions of diagram axes

System Requirements:

- Gas meter with built-in pulse generator (option)
- Digital Input Module “DIM” (accessory)
- Operating system Windows® XP / ~Vista / ~7 / ~8 / ~10
- Licence (dongle) for requested number of ports (= gas meters to be connected)
- Microsoft Excel® 2003 or higher for data export to Excel®
- Recommended processor performance: ≥ 1.5 GHz
- Random access memory (RAM): ≥ 500 MB
- 2 free USB ports (1 port for data acquisition, 1 port for licence dongle)
- Monitor 17”
- Monitor setting: Optimised for monitor resolution of 1280x 1024 pixel or higher
- Mouse / mouse pointer

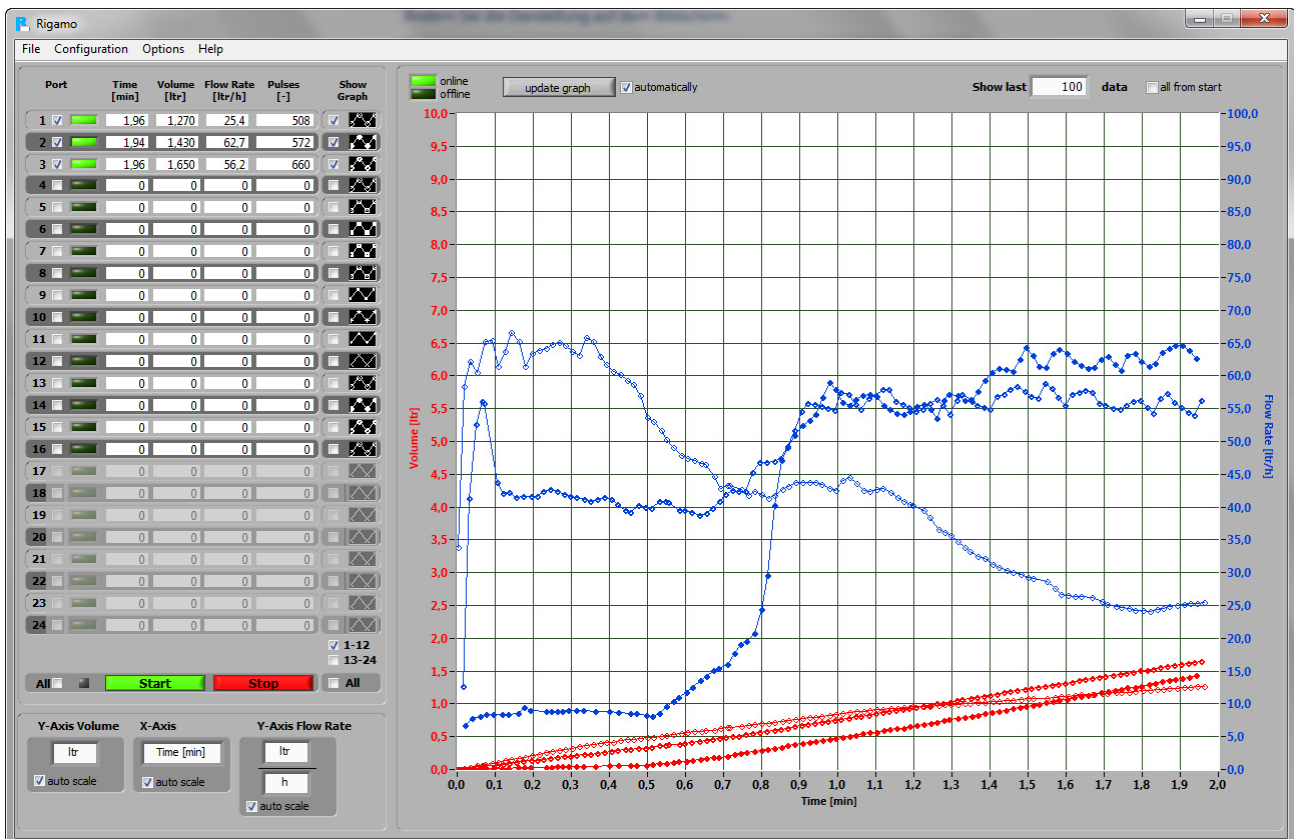
Please note:

No other National Instruments software should be installed on the respective computer as it may conflict with the Rigamo software.

A standard converter “USB to RS232” for connection to COM port cannot be used.

Monitor Display of Data Acquisition (Example):

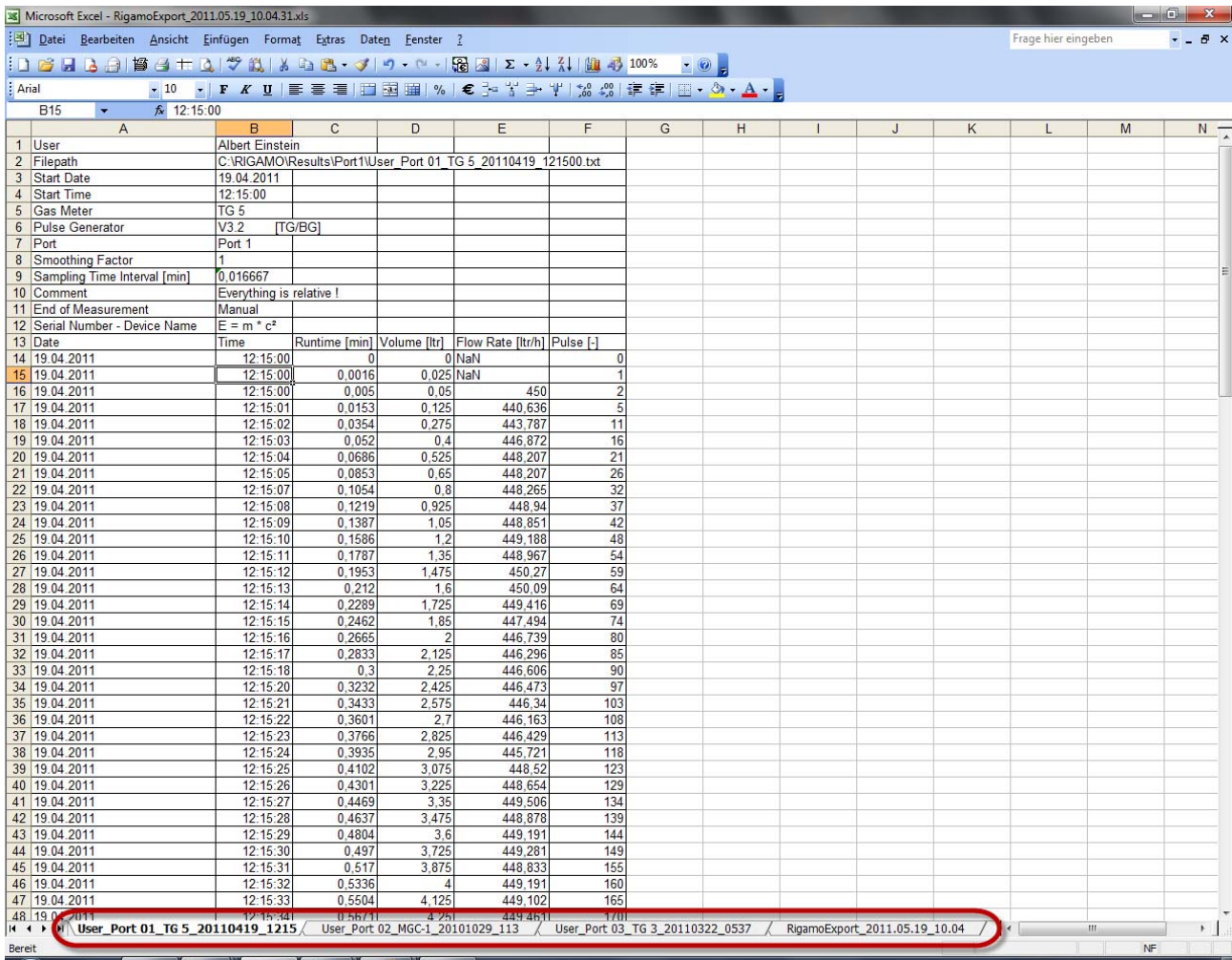
(Data acquisition from 3 gas meters; red graphs: volume; blue graphs: flow rates)



Data export to Microsoft Excel®:

System requirement: Microsoft Excel® 2003 or a later version

Export example of three data files:



Date	Time	Runtime [min]	Volume [ltr]	Flow Rate [ltr/h]	Pulse [-]
19.04.2011	12:15:00	0	0	NaN	0
19.04.2011	12:15:00	0.0016	0.025	NaN	1
19.04.2011	12:15:00	0.005	0.05	450	2
19.04.2011	12:15:01	0.0153	0.125	440.636	5
19.04.2011	12:15:02	0.0354	0.275	443.787	11
19.04.2011	12:15:03	0.052	0.4	446.872	16
19.04.2011	12:15:04	0.0686	0.525	448.207	21
19.04.2011	12:15:05	0.0853	0.65	448.207	26
19.04.2011	12:15:07	0.1054	0.8	448.265	32
19.04.2011	12:15:08	0.1219	0.925	448.94	37
19.04.2011	12:15:09	0.1387	1.05	448.851	42
19.04.2011	12:15:10	0.1586	1.2	449.188	48
19.04.2011	12:15:11	0.1787	1.35	448.967	54
19.04.2011	12:15:12	0.1953	1.475	450.27	59
19.04.2011	12:15:13	0.212	1.6	450.09	64
19.04.2011	12:15:14	0.2289	1.725	449.416	69
19.04.2011	12:15:15	0.2462	1.85	447.494	74
19.04.2011	12:15:16	0.2665	2	446.739	80
19.04.2011	12:15:17	0.2833	2.125	446.296	85
19.04.2011	12:15:18	0.3	2.25	446.606	90
19.04.2011	12:15:20	0.3232	2.425	446.473	97
19.04.2011	12:15:21	0.3433	2.575	446.34	103
19.04.2011	12:15:22	0.3601	2.7	446.163	108
19.04.2011	12:15:23	0.3766	2.825	446.429	113
19.04.2011	12:15:24	0.3935	2.95	445.721	118
19.04.2011	12:15:25	0.4102	3.075	448.52	123
19.04.2011	12:15:26	0.4301	3.225	448.654	129
19.04.2011	12:15:27	0.4469	3.35	449.506	134
19.04.2011	12:15:28	0.4637	3.475	448.878	139
19.04.2011	12:15:29	0.4804	3.6	449.191	144
19.04.2011	12:15:30	0.497	3.725	449.281	149
19.04.2011	12:15:31	0.517	3.875	448.833	155
19.04.2011	12:15:32	0.5336	4	449.191	160
19.04.2011	12:15:33	0.5504	4.125	449.102	165
19.04.2011	12:15:34	0.5671	4.25	449.451	170

The data of each data file (parameters plus measurement data) are exported into a separate table. Additionally, a blank table is created with the name of the export file (see red mark in the window above).

Schematic of a completed configuration
(Example for 4 connected gas meters)

