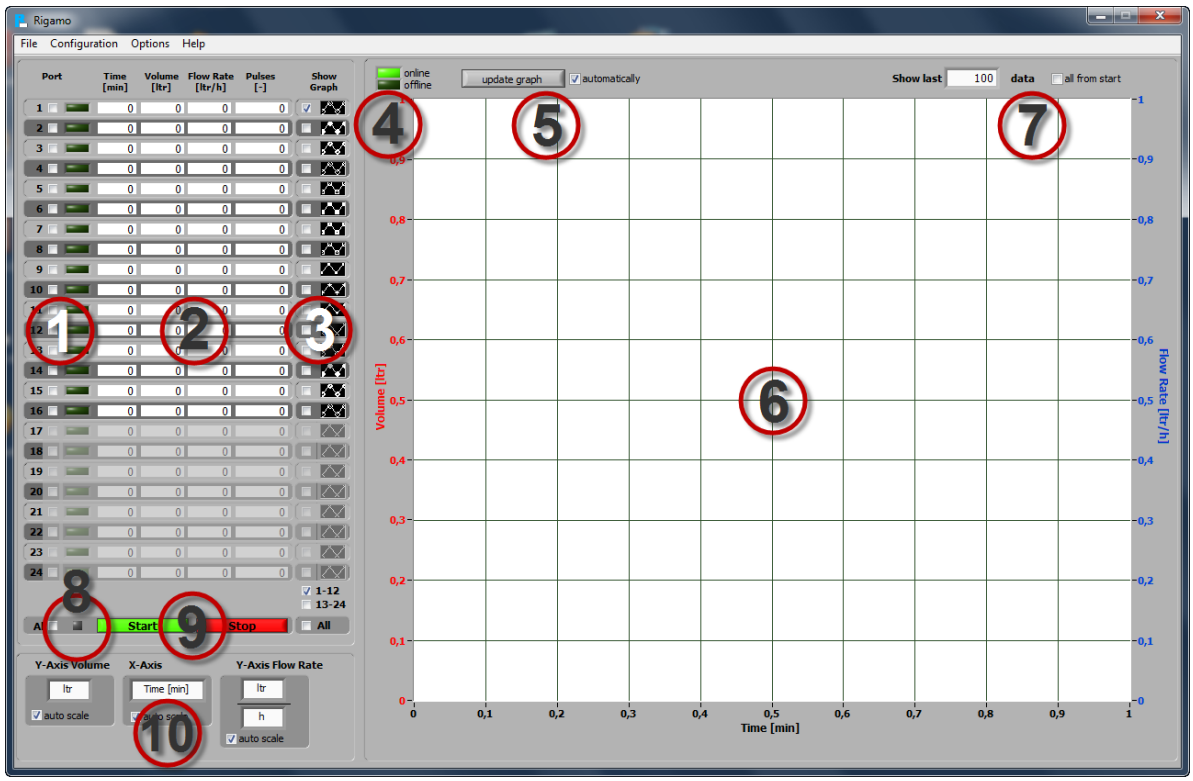
Software Features (overview):

- 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

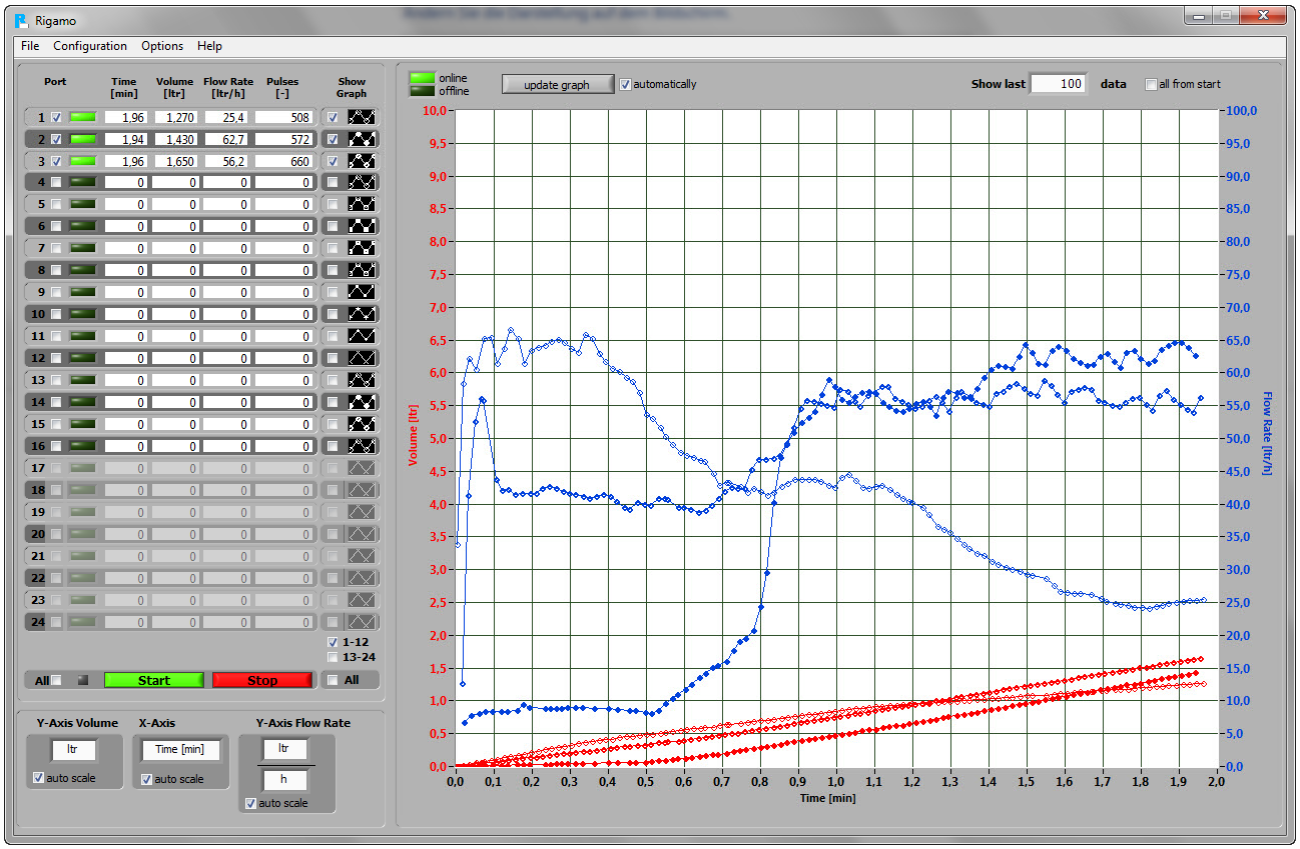
Please note:

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):

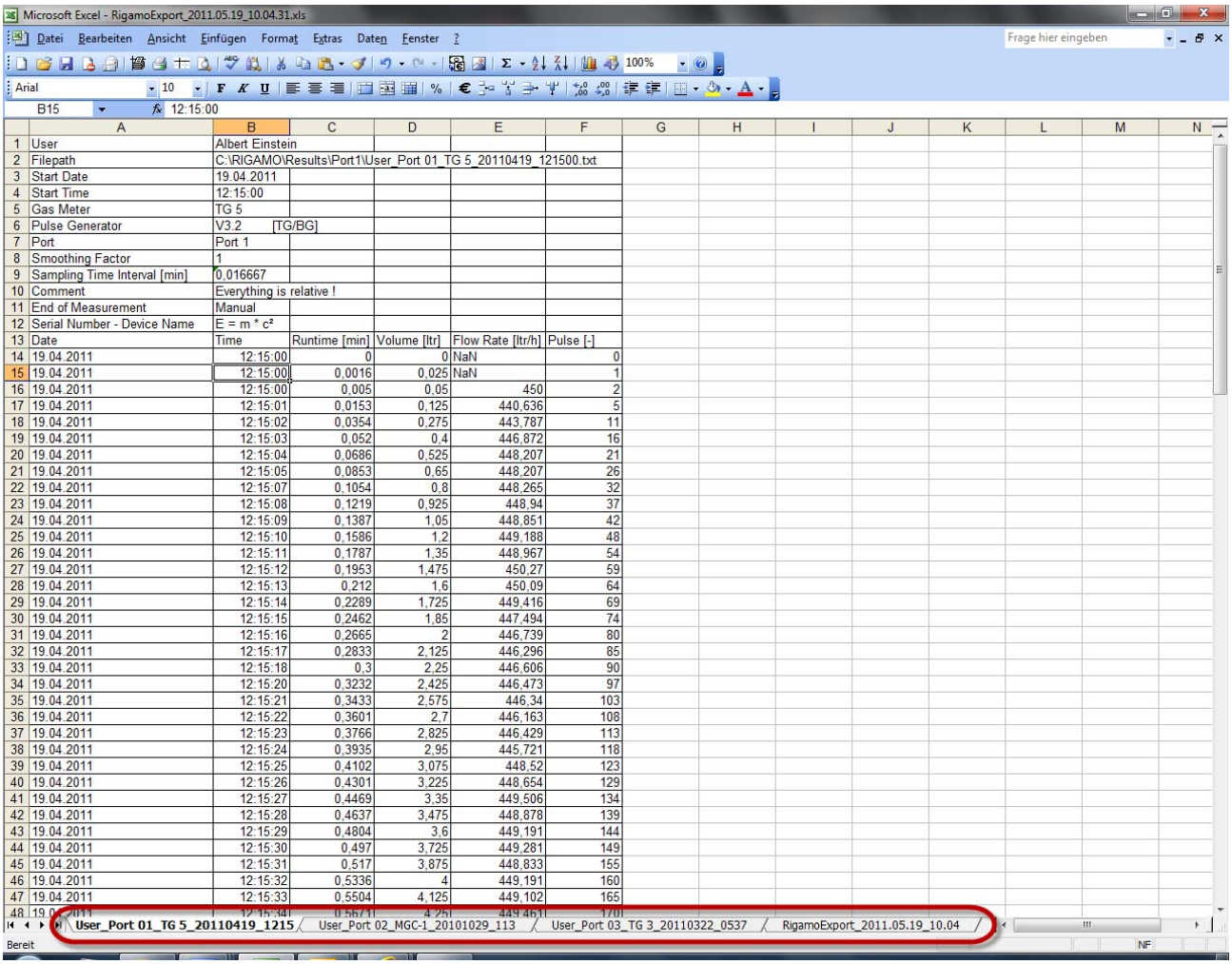
(Data acquisition from 3 gas meters; red graphs: volume; blue graphs: flow rates)



Data export to Microsoft Excel®:

System requirement: Microsoft Excel® 2003 or a later version

Export example of three data files:



	A	B	C	D	E	F
1	User	Albert Einstein				
2	Filepath	C:\RIGAMO\Results\Port1\User_Port 01_TG 5_20110419_121500.txt				
3	Start Date	19.04.2011				
4	Start Time	12:15:00				
5	Gas Meter	TG 5				
6	Pulse Generator	V3.2 [TG/BG]				
7	Port	Port 1				
8	Smoothing Factor	1				
9	Sampling Time Interval [min]	0,016667				
10	Comment	Everything is relative !				
11	End of Measurement	Manual				
12	Serial Number - Device Name	E = m * c²				
13	Date	Time	Runtime [min]	Volume [ltr]	Flow Rate [ltr/h]	Pulse [-]
14	19.04.2011	12:15:00	0	0	NaN	0
15	19.04.2011	12:15:00	0,0016	0,025	NaN	1
16	19.04.2011	12:15:00	0,005	0,05	450	2
17	19.04.2011	12:15:01	0,0153	0,125	440,636	5
18	19.04.2011	12:15:02	0,0354	0,275	443,787	11
19	19.04.2011	12:15:03	0,052	0,4	446,872	16
20	19.04.2011	12:15:04	0,0686	0,525	448,207	21
21	19.04.2011	12:15:05	0,0853	0,65	448,207	26
22	19.04.2011	12:15:07	0,1054	0,8	448,265	32
23	19.04.2011	12:15:08	0,1219	0,925	448,94	37
24	19.04.2011	12:15:09	0,1387	1,05	448,851	42
25	19.04.2011	12:15:10	0,1586	1,2	449,188	48
26	19.04.2011	12:15:11	0,1787	1,35	448,967	54
27	19.04.2011	12:15:12	0,1953	1,475	450,27	59
28	19.04.2011	12:15:13	0,212	1,6	450,09	64
29	19.04.2011	12:15:14	0,2289	1,725	449,416	69
30	19.04.2011	12:15:15	0,2462	1,85	447,494	74
31	19.04.2011	12:15:16	0,2665	2	446,739	80
32	19.04.2011	12:15:17	0,2833	2,125	446,296	85
33	19.04.2011	12:15:18	0,3	2,25	446,606	90
34	19.04.2011	12:15:20	0,3232	2,425	446,473	97
35	19.04.2011	12:15:21	0,3433	2,575	446,34	103
36	19.04.2011	12:15:22	0,3601	2,7	446,163	108
37	19.04.2011	12:15:23	0,3766	2,825	446,429	113
38	19.04.2011	12:15:24	0,3935	2,95	445,721	118
39	19.04.2011	12:15:25	0,4102	3,075	448,52	123
40	19.04.2011	12:15:26	0,4301	3,225	448,654	129
41	19.04.2011	12:15:27	0,4469	3,35	449,506	134
42	19.04.2011	12:15:28	0,4637	3,475	448,878	139
43	19.04.2011	12:15:29	0,4804	3,6	449,191	144
44	19.04.2011	12:15:30	0,497	3,725	449,281	149
45	19.04.2011	12:15:31	0,517	3,875	448,833	155
46	19.04.2011	12:15:32	0,5336	4	449,191	160
47	19.04.2011	12:15:33	0,5504	4,125	449,102	165
48	19.04.2011	12:15:34	0,5671	4,25	449,461	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)