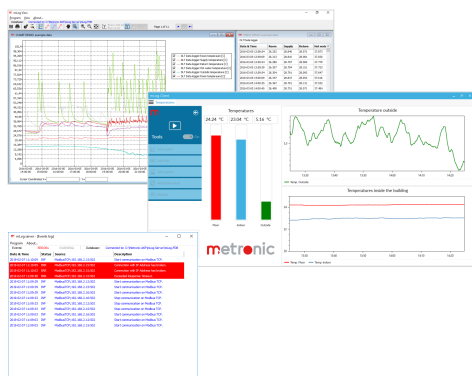


mLog

Process Data Acquisition and Visualization Software



- On-line process data presentation from one or more measuring devices (table, single values, chart, bar graph)
- Data recording into the database
- Presentation of archived data in form of tables and charts
- Export archived data to the *.csv format
- Modbus TCP and Modbus RTU protocols
- Available languages: EN, ES, FR, PL

Software mLog enable reading, visualization and archiving data from devices and transducers with RS485 port (Modbus RTU protocol) or Ethernet port (Modbus TCP protocol).

Data are archived in the database (Firebird 2.5 via the mLog Server program), from where they can be read and visualized (the mLog View program) in the form of graphs and tables, as well as printed and exported to *.csv format. The current results are displayed and visualized in the mLog Client program.

Easy configuration of the basic application (mLog Server, mLog Client and mLog View operating on the same computer), does not require additional programming skills.

VISUALIZATION AND ARCHIVING DATA

The mLog software consists of three modules: mLog Server, mLog Client and mLog View. The software allows access to data from many computers (for many operators).

- **mLog Server:**
reading data from devices and transducers in Modbus RTU/TCP protocol, data recording into the database (Firebird 2.5), information about the status of communication
- **mLog Client:**
on-line visualization of process values (table, single values, chart, bar graph, possibility of adding additional own graphic)
- **mLog View:**
reading archived data from the database (from the date to the date), visualization (table, chart), export the table to the *.csv format, export the chart to the *.bmp, *.jpg, *.pdf or *.html format

MODBUS RTU/MODBUS TCP

- Functions: 04 – Read Input Registers, 03 – Read Holding Registers
- Data formats: unsigned integer 16b, signed integer 16b, unsigned integer 32b, signed integer 32b swapped, signed integer 32b, signed integer 32b swapped, floating point 32b, floating point 32b swapped, signed integer 64b, floating point 64b
- Baud rate: 1.2, 2.4, 4.8, 9.6, 19.2, 38.4, 57.6, 115.2 kbps (Modbus RTU)
- Parity: None + 1 bit stop, None + 2 bit stop, Even, Odd (Modbus RTU)

SOFTWARE ACTIVATION

The software requires activation (registration). After purchasing, programs are available:

mLog Server	mLog Client	mLog View
Single user	No limit of users	No limit of users

APPLICATION WINDOW mLog Server

mLog server - [Events log]

Program About...

Events: ERRORS WARNINGS Database: Connected to: C:\Metronic AKP\mLog Server\mLog.FDB

Date & Time	Status	Source	Description
2019-02-07 11:10:09	INF	ModbusTCP;192.168.2.15:502	Start communication on Modbus TCP.
2019-02-07 11:10:09	ERR	ModbusTCP;192.168.2.15:502	Connection with IP Address has broken.
2019-02-07 11:10:03	ERR	ModbusTCP;192.168.2.15:502	Connection with IP Address has broken.
2019-02-07 11:09:58	ERR	ModbusTCP;192.168.2.15:502	Exceeded Response Timeout.
2019-02-07 11:09:39	INF	ModbusTCP;192.168.2.12:502	Start communication on Modbus TCP.
2019-02-07 11:09:39	INF	ModbusTCP;192.168.2.15:502	Start communication on Modbus TCP.
2019-02-07 11:09:39	INF	ModbusTCP;192.168.2.16:502	Start communication on Modbus TCP.
2019-02-07 11:09:33	INF	ModbusTCP;192.168.2.16:502	Stop communication on Modbus TCP.
2019-02-07 11:09:33	INF	ModbusTCP;192.168.2.12:502	Stop communication on Modbus TCP.
2019-02-07 11:09:33	INF	ModbusTCP;192.168.2.15:502	Stop communication on Modbus TCP.
2019-02-07 11:09:03	INF	ModbusTCP;192.168.2.16:502	Start communication on Modbus TCP.
2019-02-07 11:09:03	INF	ModbusTCP;192.168.2.12:502	Start communication on Modbus TCP.
2019-02-07 11:09:03	INF	ModbusTCP;192.168.2.15:502	Start communication on Modbus TCP.

Program Configuration

Transmission Registers Settings Administration

Data Sources - Transmission Settings

ModbusTCP;192.168.2.16:502
ModbusTCP;192.168.2.15:502
ModbusTCP;192.168.2.12:502
ModbusRTU;COM1

Modbus RTU Modbus TCP

Data Read Refresh Time: 1 [s]

Modbus RTU

Port: COM1

Baud Rate: 19200

Parity: even

Additional Timeout: 0 [s]

Modbus TCP

IP Address: 1.0.0.1

Port: 502

Additional Timeout: 0 [s]

Delete from the List Modify or Add to the List

Program Configuration

Transmission Registers Settings Administration

Register Blocks

New Settings

DL2;ModbusTCP
FP4;ModbusTCP
DL2-temperatures;ModbusTCP
DL7;ModbusRTU

Data Source: ModbusRTU;COM1

Frequency of write results to database: 1

Description: DL7

Address*: 1

Data Format*: floating point 32b

Starting Register Addr. (dec)*: unsigned short integer 16b
signed short integer 16b
unsigned integer 32b
unsigned integer 32b swapped
signed integer 32b
signed integer 32b swapped
floating point 32b

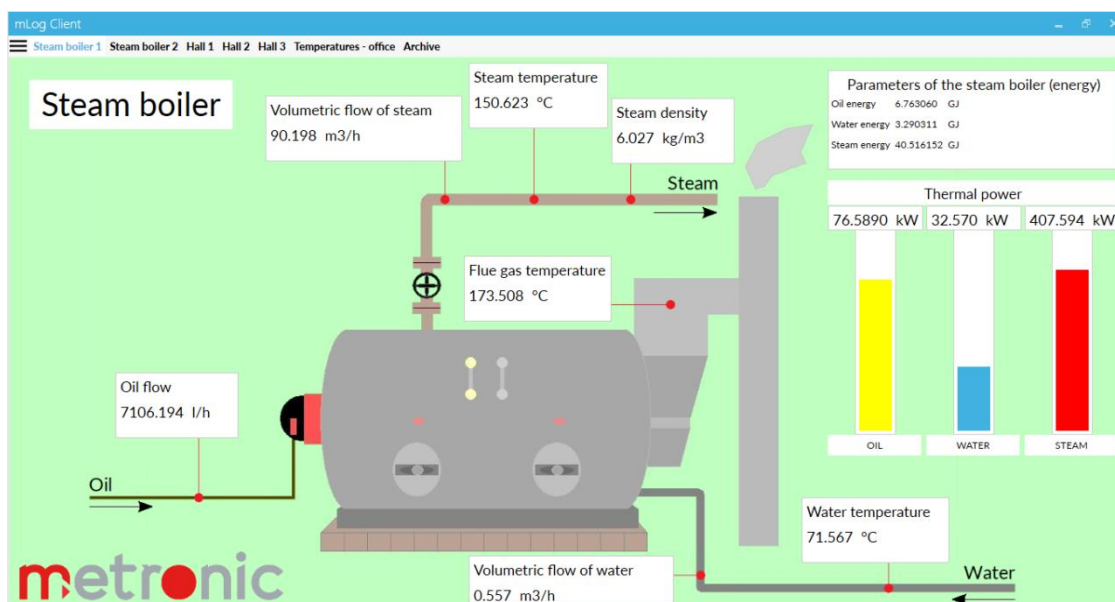
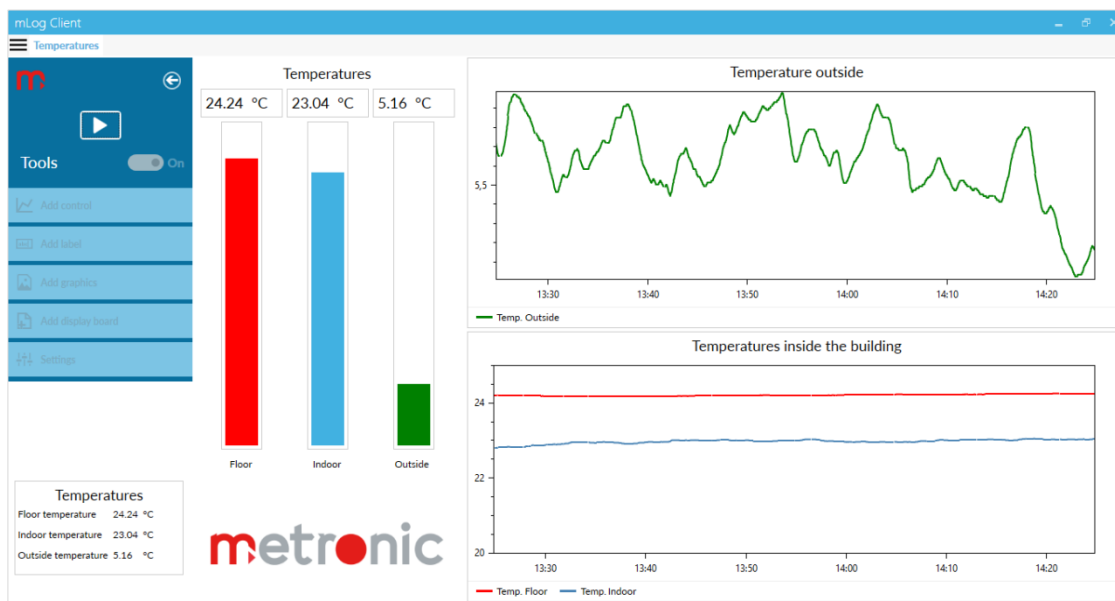
Number of Read Values*: floating point 32b swapped
signed long integer 64b
double floating point 64b

** When once set, cannot be modified.*

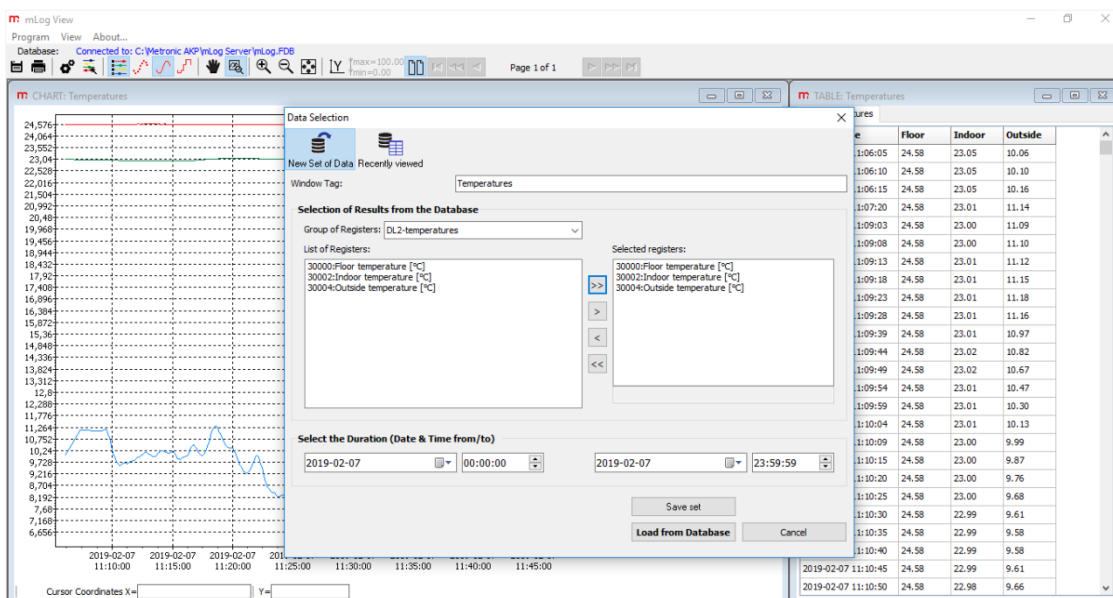
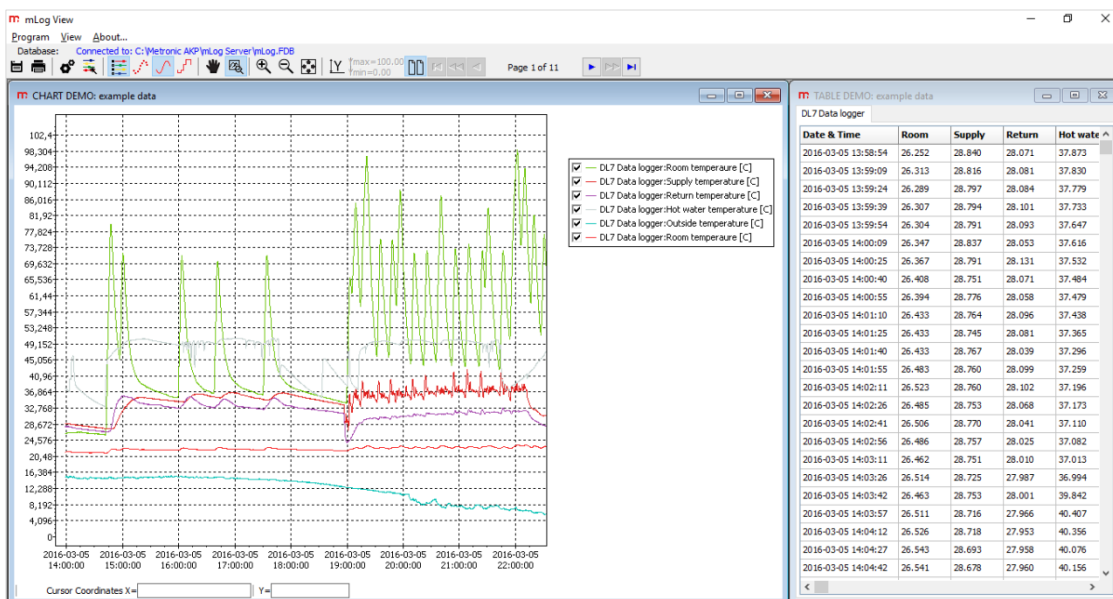
Addr	Resoluti	Multiple	Offs		
30000	0.0000	1.0000	0.00		
30002	0.0000000	2.542252	0.22		
30004	0.00	1.00	0.00	m	Water level tank 1
30006	0.00	1.00	0.00	%	Humidity (storage)
30008	0.00	1.00	0.00	l/s	Gas flow
30010	0.00	1.00	0.00	m	Pool
30012	0.00	1.00	0.00	°C	Temperature

Delete from the List Add to the List Modify Online Test

APPLICATION WINDOW mLog Client



APPLICATION WINDOW mLog View



mLog View - [TABLE DEMO: example data]

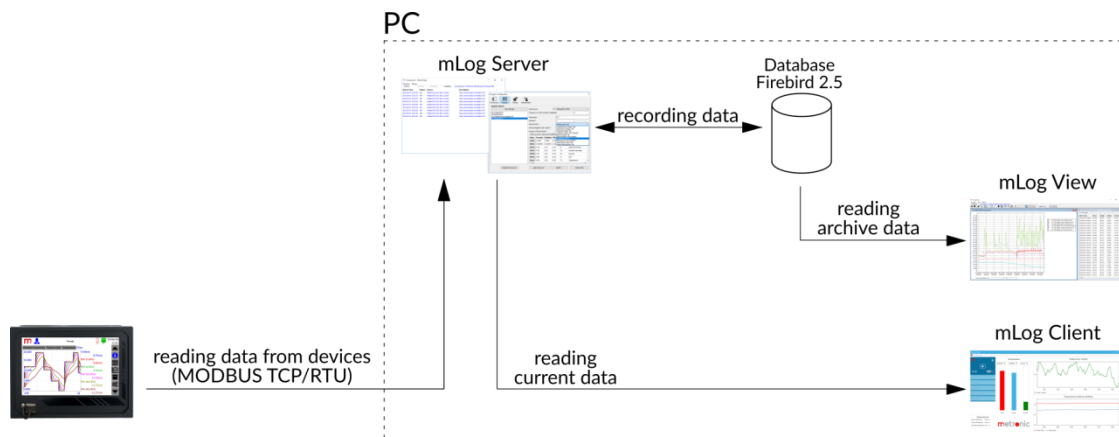
Database: Connected to: C:\Metronic AKP\mLog Server\mLog.FDB

DL7 Data logger

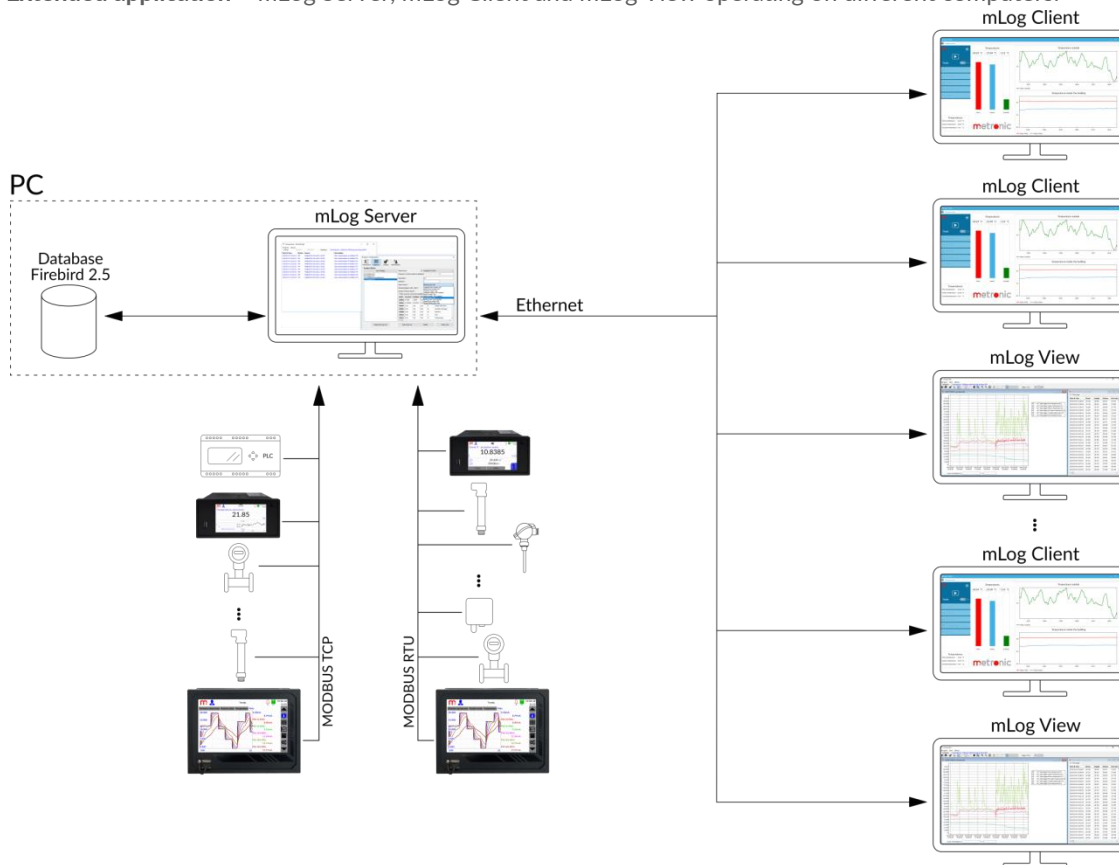
Date & Time	Room	Supply	Return	Hot water	Outside	Room
2016-03-06 07:55:36	60.898	38.295	32.015	50.094	8.941	22.812
2016-03-06 07:55:51	59.789	38.247	31.986	50.091	8.954	22.797
2016-03-06 07:56:06	58.830	37.810	32.006	50.117	8.916	22.781
2016-03-06 07:56:21	58.712	37.516	32.000	50.147	8.954	22.768
2016-03-06 07:56:36	59.300	37.363	32.036	50.159	8.963	22.748
2016-03-06 07:56:51	60.550	37.573	32.078	50.076	8.973	22.747
2016-03-06 07:57:06	62.266	38.202	32.044	50.103	8.972	22.755
2016-03-06 07:57:21	64.008	38.724	32.030	50.113	8.926	22.772
2016-03-06 07:57:36	66.275	39.118	32.012	50.103	8.936	22.794
2016-03-06 07:57:52	68.530	39.118	32.004	50.076	8.913	22.808
2016-03-06 07:58:07	70.827	38.645	32.023	50.082	8.905	22.825
2016-03-06 07:58:22	73.198	38.067	32.035	50.082	8.920	22.842
2016-03-06 07:58:37	75.383	37.852	32.047	50.125	8.953	22.865
2016-03-06 07:58:52	76.956	37.889	32.170	50.111	9.150	22.903
2016-03-06 07:59:07	77.950	38.176	32.199	50.139	9.203	22.921
2016-03-06 07:59:22	78.243	38.255	32.138	50.207	9.153	22.936
2016-03-06 07:59:38	78.082	38.126	32.152	50.263	9.133	22.956
2016-03-06 07:59:53	77.538	37.698	32.106	50.323	9.226	22.974
2016-03-06 08:00:08	76.691	37.453	32.095	50.397	9.211	22.971
2016-03-06 08:00:23	75.575	37.484	32.075	50.451	9.224	22.984
2016-03-06 08:00:38	74.518	38.407	32.052	50.501	9.270	22.983
2016-03-06 08:00:53	73.319	39.733	32.043	50.499	9.307	22.985
2016-03-06 08:01:08	72.059	40.471	32.010	50.531	9.279	22.982
2016-03-06 08:01:23	70.535	39.833	31.963	50.550	9.372	22.978
2016-03-06 08:01:38	69.278	38.887	32.029	50.573	9.328	22.969

APPLICATION EXAMPLE

Basic application- mLog Server, mLog Client and mLog View operating on the same computer.



Extended application - mLog Server, mLog Client and mLog View operating on different computers.



TECHNICAL SPECIFICATIONS

System requirements

Operating system	Windows 8 or later
Processor	min. 1 GHz
RAM	Compliant with operating system requirements
Hard disk	>80 MB of free disc space ⁽¹⁾

(1) Does not include space needed for database file. When using the program, depending on the intensity and number of results read, the need for free disc space may increase in connection with increasing size of the database file.

Data sheet version: 190208EN Software version: 3.0.0.0