

# Pulse adapter PA-1 Configuration software description

## User instruction

1. Select language English/Lithuanian in *Settings/Language* window.
2. When opening *Settings/Port settings* select COM port number ( DTR, RTS status, RS232/Mbus if needed)

### 1. *Integral parameters and archive*

PA-1 v.1.0.2.2

Settings Operations

Integral parameters and archive Configuration

Integral parameters

1st chan. integrator val.:

2nd chan. integrator val.:

1st channel flow:

2nd channel flow:

Battery life, days:

Power on time, h:

1st ch. working time, h:

2ns ch. working time, h:

1st channel error date:

2nd channel error date:

1st channel error code:

2ns channel error code:

Error coding: 20 - disconnected  
40 - short circuit  
80 - q>qo

Write archive parameters

Read from device Write to device

Reporting parameters

Reporting readings date:

1st channel:

2nd channel:

Reporting readings:

1st channel:

2nd channel:

Archive

Date of the last record:

1st channel:

2nd channel:

Archive records:

1st channel	2nd channel
<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>

Setting parameters:

*1st (2nd) chan. integrator val.:* - current integrator readings.  
Multiplication of integrator and pulse value is the actual parameter value.

**1st (2nd) channel flow:** (*view mode*) - The mean flow (or power) measured during the last *time interval* T (only when the configuration of pre-programmed parameter *Time Interval* T is more than zero).

**Battery life, days:** - Left battery time in days. The unit with a new battery is ensuring 4380 working days (12 years). Working time decreases to zero and informs when it is necessary to change the battery.

**Power on time, h:** - total working time is summarized from battery connection moment. For new device it is close or equal to zero.

**1st (2nd) ch. working time, h:** - total channel working time is summarized from battery connection moment when actual pulse channel is without working error (error is possible only when the selected NAMUR pulse input type - if the channel stops working the channel summarize time is also stopped. For new device it is close or equal to zero.

**1st (2nd) channel error date:** (*view mode*) - the date (year, month, d) when the last time interval started and the error was recorded in the measurement channel (error is possible only when the selected NAMUR pulse input type).

**1st (2nd) channel error code:** (*view mode*) – present moment error code:

”00” – no error, normal working mode;

”20” – line break (input resistance greater than 5.6 kom) (possible only when the selected NAMUR pulse input type);

”40” –short circuit line (input resistance less than 2.2 kcom) (possible only when selected NAMUR pulse input type);

”80” – flow (or capacity) greater than a threshold value (only possible when preprogrammed configuration leverage for parameters *time interval* and *threshold values* is greater than zero).

Even in the absence of the error, the error indication is remaining in the first reply will not reach the last error code, only during the next query the error will be deleted.

**Reporting parameters / Reporting readings date: 1st (2nd) channel:** – date of last registered reference data.

**Reporting parameters / Reporting readings: 1st (2nd) channel:** – integrator values recorded by the channel last reporting date (reference date), the reporting day (00:00h).

Multiplication of integrator and pulse value is the actual parameter value.  
For new device is zero.

**Archive / Date of the last record: 1st (2nd) channel:** - date (one a year or ones a month) depending on configuration.

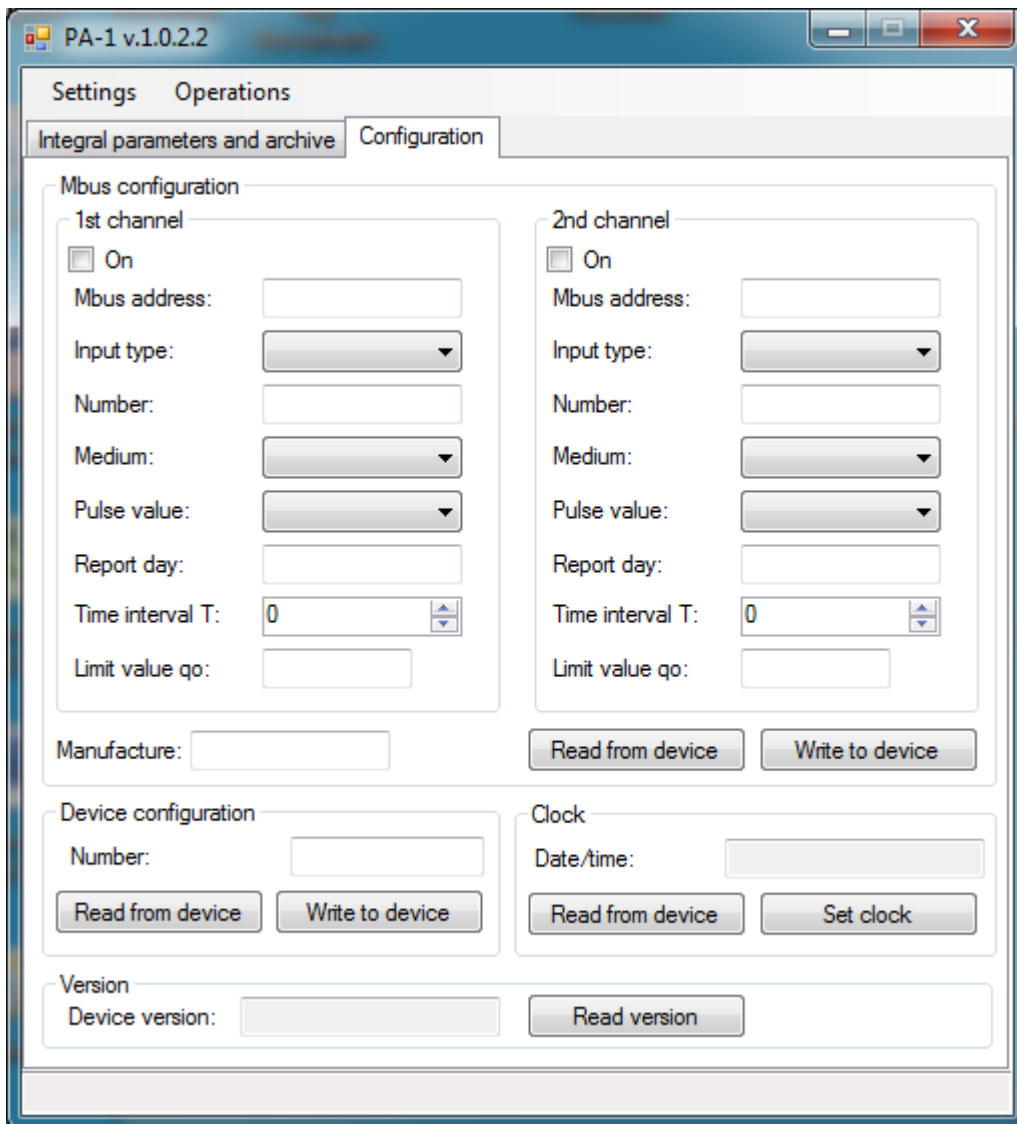
**Archive / Archive records: 1st (2nd) channel** - integrator values recorded by the channel day before reporting date and 3 earlier reference dates.

Multiplication of integrator and pulse value is the actual parameter value.

For new device is zero.

Fee editable field values can be written to the device by selecting **Write to device**. The values in the fields **Reporting parameters** and **Archive** will be written to the device only if box “**Write archive parameters**” is selected.

### 3. Configuration window



Device configuration:

**Device configuration / Number**- the device serial number must comply with the individual device on the label. In MBUS telegram transmitted coding as the "**Serial number**".

Setting value is inserted into the device by pressing the "Write to device".

**Clock /Date/time** - device internal calendar/clock time. By selecting "**Set clock**" – device clock is updated according to the computer time.

**Mbus configuration / Manufacture** - device manufacturer code is transmitted by Mbus telegram ("Manufacture"). Change is possible by selecting "**Write to device**".

For the newly produced device is "**AXI**".

**Mbus configuration / 1st (2nd) channel / On** – If the box is unchecked - pulse measurement channels is switched off. The change is done by pressing the "**Write to device**".

For the new device the measurement channels are in off mode (battery saving purposes).

**Mbus configuration / 1st (2nd) channels / Mbus address:** – M-bus address primary addressing. For the new device is “1” and “2”.

**Mbus configuration / 1st (2nd) channel / Input type:** – pulse input type:

**Open collector** – connection to electronic meters (at a pulse rate up to 16 Hz and a pulse pause time less than 30 ms.)

**Mechanical contact** – mechanical meters (at a pulse rate up to 2 Hz, pulse / pause time less than 260 ms, the potential exposure to vibration 1ms),

**NAMUR** – mechanical meters (at a pulse rate up to 2 Hz, pulse / pause time less than 260 ms, the potential exposure to vibration 1ms), pulse shaping scheme with an additional resistor (5.6 and 2.2 in parallel kom series) for line defects (terminated or short circuit) error detection.

The newly manufactured device „**Mechanical contact**”

**Mbus configuration / 1st (2nd) channel / Number:** – measurement channel identification number, which is transmitted to the device channel MBUS telegram ("Identification Number") and is used for secondary addressing. Can be pre-programmed initial meter serial number

For newly manufactured device equal number of the device factory and factory unit number + 1, respectively.

**Mbus configuration / 1st (2nd) channel / Medium:** – medium of the meter proposed from the list. For the new device is “Water” and “Hot water”, respectively.

**Mbus configuration / 1st (2nd) channel / Pulse value:** – pulse value and units.

For the new device is “10 liter /pulse”.

**Mbus configuration / 1st (2nd) channel / Report day:** – To ensure that the reference values are recorded ones a year - enter real month number. Reference values are recorded once a month - month number is "00".

For the new device is “01.01”.

**Mbus configuration / 1st (2nd) channel / Time interval T:** – time interval [s] for average flow (or power) estimation. If the pre-programmed value is zero - the average flow (or power) will not be calculated and the response telegram will not include these data.

For the new device “0”.

**Mbus configuration / 1st (2nd) channel / Limit value qo:** – the limit for flow (power) for Error code „q> qo”. If the measured average flow (or power) exceeds the limit values - error code "80" will be formed for an actual channel. When flow (or power) falls below the threshold value - error code will be deleted only when answer to a query is sent via a digital interface.

If the preprogrammed threshold value is "0" - Errors q> qo "code will not be generated.

The newly manufactured device is set to "0".

By pressing **Version/ Read version** – field **Device version:** the device software version number.