EWA1xxC-PO
Programming Instructions

These instructions are valid for the following modules:

Table 1. OS-Numbers covered

OS-Number	Item
EWA110C1520-PO	Pulse out clipon module for EW110 Series, DN15 and DN20
EWA110C2540-PO	Pulse out clipon module for EW110 Series, DN25 to DN40
EWA171C-PO	Pulse out clipon module for EW171 Series, DN50 to DN300

1   Preparation

1.1   Standard Values

Before programming modules check if the standard values are not sufficient and thus make the programming exercise redundant:

Table 2. Standard values

OS-No.	For DN sizes	Pulse value	Output 1	Output 2
EWA110C1520-PO	15…20	1 litre	IB	PR
EWA110C2540-PO	25…40	1 litre	IB	PR
EWA171C-PO	50…300	1,000 litres	IB	IB

1.2   Required Parts

The following parts are required to change the programming of the module:

Table 3. Required parts

Part	Function	
Programming interface (OS-No. EWA3001797)	Interface between PC and module	

Part	Function	
USB cable	Connect programming interface to PC	
Socket terminals (2)	Connect programming interface to module	
Configuration software	Readout current state values from module and program new values into module	AT_MBUS_NE_Konfigurator

1.3 Wiring to PC

Wiring between PC and module is done by a USB cable and programming interface EWA3001797.
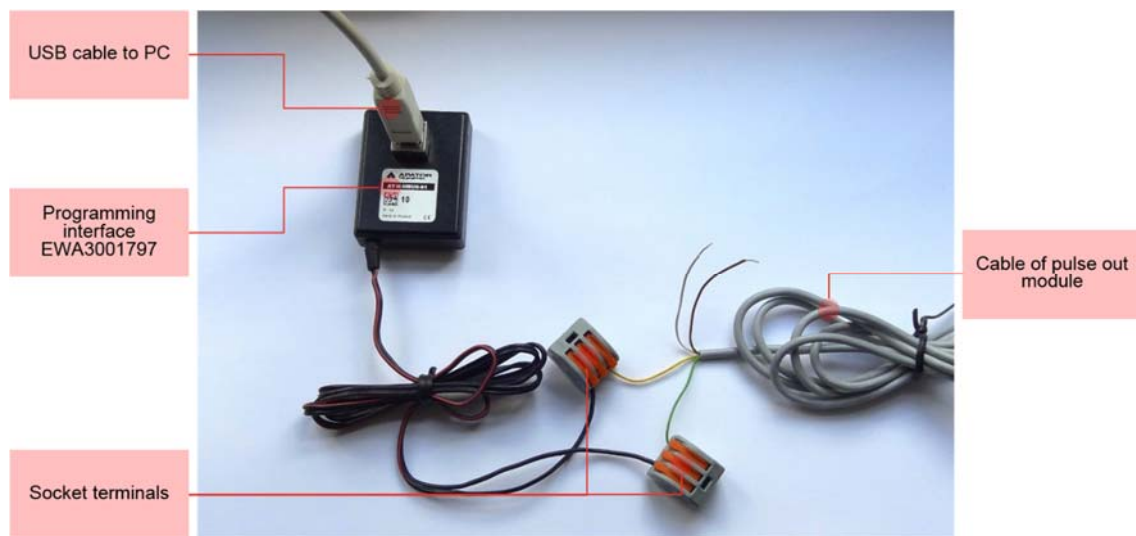

Figure 1. Connection of programming interface

The cables are connected as follows:

Table 4. Cable colours

Function	Wire colour pulse out module	Wire colour interface
Ground	Green	Black
Data	Yellow	Black and red

To wire the module into the programmer normal strip terminals can be used. If a number of modules have to be programmed consider reusable socket terminals, for example Wago type 222 as in above example.

1.4   Installation of Programming Interface

When the programming interface is connected with the PC the driver is automatically installed and displayed as "Silicon Labs CP210x USB to UART Bridge". The COM port used can be checked in the device manager of the PC. In below example it is COM6.
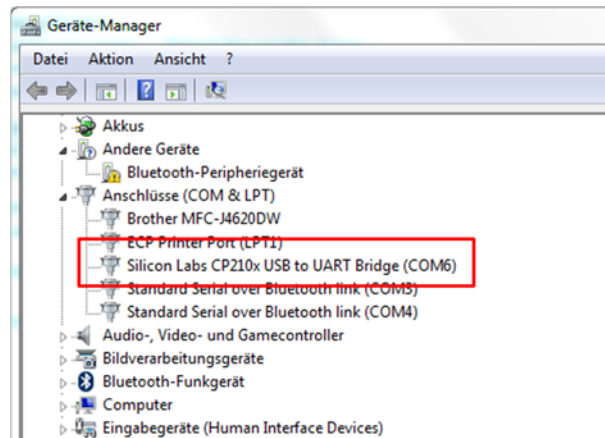

Figure 2. Device manager

When the software has been installed and the module connected it can be parametrised. Parametrisation is not mandatory, if the module is not parametrised standard values are applied (see Chapter 1.1 Standard Values above).

The parametrisation software is available for free download on the Honeywell metering website under http://metering.ecc.emea.honeywell.com/dl_centre.htm

Honeywell

2   Programming

2.1   Wake up

After production the module is put into sleep mode to save battery life. Before programming or installation briefly place a magnet near the reed switch of the module. By this the module is woken up from sleep mode.

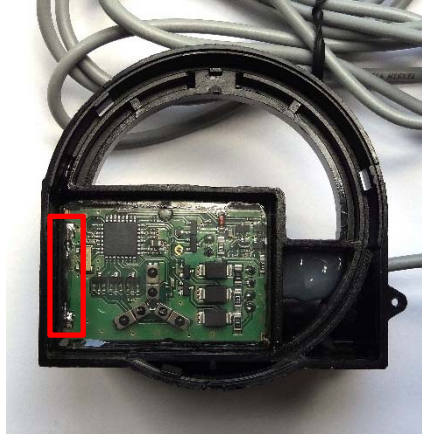Figure 3. Position of reed switch in module EWA110C1520-PO and EWA110C2540-PO

Figure 4. Position of reed switch in module EWA171C-PO

Figure 5. Briefly place magnet near reed switch

2.2   Software

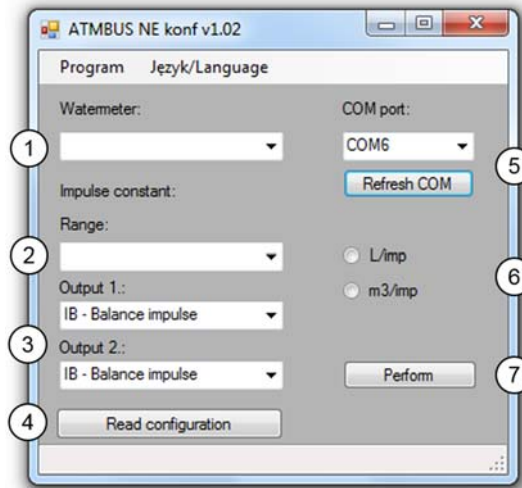The pulse out module configuration software is a simple tool with only few functions:

Figure 6. Screenshot of parametrisation program

2.2.1   Fields

Table 5. Overview of fields

Field No.	Field name	Field type	Function
1	Watermeter	Pulldown	Defines meter connected to module

Field No.	Field name	Field type	Function
2	Range	Pulldown	Selection of pulse value
3	Outputs	Pulldown	Selection of pulse output 1 and 2
4	Read configuration	Execute button	Read and display configuration of module connected
5	COM port setting	Pulldown	Selection of COM port
6	Units	Radio buttons	Selection of unit for pulse value
7	Perform	Execute button	Write data into module connected

2.2.2 Field Description

2.2.2.1 Watermeter

Required to select type of water meter connected and in that way define range limits. Below table contains a cross reference between field value (i.e. nominal flow or DN size) and suitable OS-Numbers. Only the last four digits of the OS-Number are given. Example: Value "JS 1,6" is suitable for OS-Numbers EW1100AC<u>0600</u> and EW1101AC<u>0600</u>.
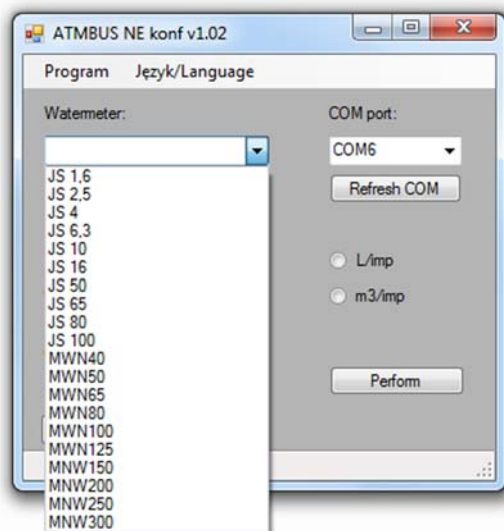
Table 6. Overview of fields

Figure 7. Pulldown of field "Watermeter"

Select:	For EW110 Series meters ending:
JS 1,6	0600 (for example EW<u>110</u>0AC<u>0600</u>)
JS 2,5	1100, 1200 or 1400
JS 4	2000
JS 6,3	2800
JS 10	3900
JS 16	4600
Select:	**For EW171 Series meters ending:**
MWN50	5000 (for example EW<u>171</u>0AC<u>5000</u>)
MWN65	5600
MWN80	6500
MWN100	7300
MWN125	8100
MNW150	8500
MNW200	8900
MNW250	9100
MNW300	9200

2.2.2.2 Range and Unit

Allows selection of pulse value within a given range based on meter size (see field Watermeter above). Acceptable ranges are:

Table 7. Pulse value ranges and increments

OS-No.	For DN sizes	Pulse value range	Increment
EWA110C1520-PO	15…20	1…255 litres	1 litre
EWA110C2540-PO	25…40	100…25,500 litres	100 litres

OS-No.	For DN sizes	Pulse value range	Increment
EWA171C-PO	50…125	100…25,500 litres	100 litres
EWA171C-PO	150…300	1…255 m³	1 m³

The unit can be selected independently by pressing the radio button for litres per pulse ("L/imp") or the button for cubic metre per pulse (m³/imp).

2.2.2.3 Output 1 and Output 2

Defines type of output for pulse output 1 and pulse output 2. Both pulse outputs can be programmed with any value. Available values are:

Table 8. Output pulse types

Value	Function
IB – Balance impulse	Only forward flow pulses are sent. Backward flow pulses are compensated by suspending forward flow pulses of same value.
WP – Forward flow impulse	Only forward flow pulses are sent.
WS – Backward flow impulse	Only backward flow pulses are sent.
PR – Flow impulse	Any flow pulse is sent, regardless of direction.
PT – Forward and backward flow impulse	Only backward flow pulses are sent. Forward flow pulses are compensated by suspending backward flow pulses of same value.
SK – direction state	A pulse is sent at change of flow direction.
AW – failure state	A pulse is sent when a failure is detected.

2.2.2.4 Read configuration

Current configuration of the pulse out module is read and shown on the display in a separate window.
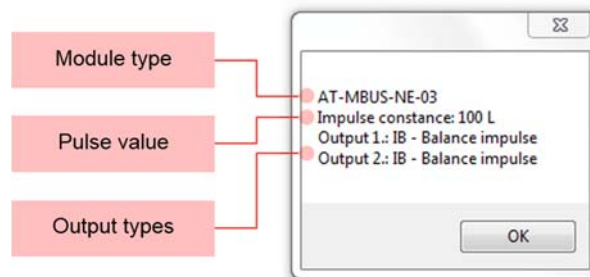

Figure 8. Window with configuration information

It may take several retries until the configuration window appears. The reason is that the module only checks once per minute if it is connected to a programming interface. Retries are done automatically, standard value is 20 retries, with 5,000 ms time between each retry.

2.2.2.5 COM Port

Allows to select the COM port to which the programmer is connected. (Also see chapter 0 above.) Press "Refresh COM" button in case COM port used is not shown in drop down list.

2.2.2.6 Perform

When all inputs have been done the data is written onto the module by pressing the "Perform" button.