

FREQUENTLY ASKED QUESTIONS

Flowmeter - MAGX1

QUESTION *What is the maximum frequency provided by the BIN output, is it possible to set up the pulse width and what is the BIN module accuracy.*

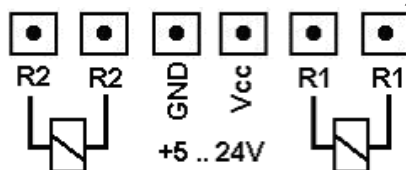
ANSWER BIN module has a fixed pulse width setting of 1sec.
 BIN module display resolution is also 1sec.
 Max BIN module failure is flow/1s.
 E.g. if generating a pulse once per 100s – max failure is 1%.
 Presently we have been working on improving the BIN module technical parameters.
 A new version of the BIN module may include a relay – according to requirements.

QUESTION *In the User Settings menu there is setting Relay1 and Relay 2. What module should I buy?*

ANSWER Relay1 and Relay 2 settings take control of the same BIN module.
 BIN module has two outputs, to which it is possible to connect a relay.
 That is why we use mark Relay1 and Relay2 in the menu.

QUESTION *How to connect a relay to the BIN module?*

ANSWER



Relay is added to the connectors R1 x R1 or R2 x R2.
 To make the relay switch, it is necessary to connect the power supply + 5..24VDC to the connectors Vcc a GND.
 Connector description is in the manual.

QUESTION *Is it possible to supply the device by using solar cells and batteries?*

ANSWER It is possible to supply the device by solar energy. However, the device requires a high power supply. Average stable current on 24VDC can reach up to 500mA.

QUESTION *Is it possible to connect more devices of the MagX1 by using module USB to one PC?*

ANSWER Yes, USB module allows connection up to 127 devices to one PC. The device you want to communicate with is being recognized, according to the flowmeter serial number with MODBUS versions, the devices are being recognized according to the address in Modbus Slave ID.

QUESTION *Is it possible to export the flow statistics?*

ANSWER Yes, it is possible to export particular statistics by SW for CD`s. The format, to which the file is exported is CSV.

QUESTION *Is it possible to communicate with the device MODBUS protocol via TCP/IP?*

ANSWER Yes TCP/IP module is able to communicate via MODBUS protocol. This connection type is often identified as „MODBUS over TCP/IP“. We support MODBUS protocol from firmware 1.10 version.

QUESTION *What type of MODBUS protocol does the device use (ASCII/RTU)?*

ANSWER The device is able to communicate via MODBUS RTU protocol. We do not support MODBUS ASCII protocol. We support MODBUS protocol from firmware 1.10 version.

QUESTION

Connector for connecting the sensor to the transmitter side is not suitable.

ANSWER

We have got several different connectors for connecting the sensor with the new Transmitter version.

QUESTION

Does the device ZigBee support the communication via RS232?

ANSWER

Unfortunately ZigBee does not support communication via RS232.

Currently there is development in progress based on a similar wireless communication Blue Tooth.

QUESTION

Is it possible to change the digital flow settings at the Flow Range item?

ANSWER

Unfortunately it is not possible to change digit setting of flow or volume.

It is possible to change the digit only at the imaging current flow and at the volume counter.

QUESTION

Why does it show Error 002 when I want to set up date or time?

ANSWER

It is probably because you have not installed the module RTC in the Transmitter.

QUESTION

How do I correctly set up the module I-OUT in menu?

ANSWER

It is necessary to decide what you want to observe with the I-OUT module.

If you want to observe e.g. indication of positive flow, set up Settings Signal to Flow +.

If you set up Setting Signal to Flow + Direct Driving will automatically turn off.

Direct Driving is turned off if the Flow Min and Flow Max is set up on the same value.

However, if you want to observe independent of output flow (mA) on the current flow, you must set it up in Direct Driving menu.

In Direct Driving menu you must set up Flow Min. Max and Current Min. and Max.

After setting confirmation in Direct Driving, the Settings Signal will automatically set up on OFF.

QUESTION
ANSWER

Why is the ring sign shown on the display?

The ring sign is shown on the display in case of Empty Pipe state.

QUESTION

Why is the ring sign shown on the display, even though the pipeline is totally filled?

ANSWER

It can be caused by low media conductivity in the pipeline. If the customer is sure that he has a full pipe, then it can be easily compensated by increasing the constant in the Air Constant menu.

Air Constant must be set up for the right value, to avoid the situation that there will be a ring sign even if the pipe is full. The customer must subsequently increase the value in the Air Constant up to the stage when the ring sign will disappear. Then it means that this is the correct value. The customer must make sure that he does not have too high a value, otherwise the electronics would not evaluate an Empty Pipe status, even if the pipe is empty. Note: if the value is too high than the evaluation of empty pipe can take a long time.

QUESTION
ANSWER

What is the default value of constant Air Constant?

The default value of Air Constant for correct detection of Empty Pipe is 0,554.

This is the value that had been found out by a number of tests on normal water.

QUESTION

Why does the display sometimes show temperature of 165°C?

ANSWER

This state can happen immediately after the device is switched on.

This state can also happen when the pipeline is suddenly emptied.

It doesn't mean any defect on the device.

It is caused by quick electrical change on the measuring electrodes in the sensor.

QUESTION

Why can't I get to the Service Settings, even though I enter the right password from the manual?

ANSWER

That is because, the password in the manual for the Service Settings menu is not correct.
This mistake has been solved in the latest version of manual.

QUESTION

Do you offer Wireless Interface connected to the RS232 port?

ANSWER

Currently we only offer Wireless Interface connected to the USB port.
if there is a high interest we would be able to connect in to the RS232.

QUESTION

Does the Wireless module support the communication by MODBUS protocol?

ANSWER

Yes, Wireless module is able to communicate by MODBUS RTU protocol from firmware 1.10 version.

QUESTION

Does RS232 module support communication by MODBUS protocol?

ANSWER

Yes, module RS232 is able to communicate by MODBUS RTU protocol from firmware 1.10 version.

QUESTION

Does RS485 module support communication by MODBUS protocol?

ANSWER

Yes, module RS485 is able to communicate by MODBUS RTU protocol from firmware 1.10 version.

QUESTION

Does the device support the communication by industry bus Profibus?

ANSWER

Unfortunately the device is not able to communicate by Profibus.
Instead of the Profibus the device supports open MODBUS protocol.
It is possible to solve this problem by purchasing Profibus – Modbus Converter.

QUESTION

Does the device support automatic calibration of zero point?

ANSWER

Yes, there is an item Zero Flow in the Factory Settings menu this function is used only in cases of a shift value of zero flow.

With confirmation of this option, the calibration curve shifts automatically about the value of zero flow.

QUESTION

What should I do, if the device shows some flow, even though the current flow is zero?

ANSWER

Either the empty pipe value changes or the value stays constant and then the solution is as follows:

For such cases there is an automatic calibration function of zero point.

The function is in Factory Settings menu, item is called Zero Flow.

With confirmation of this option, the zero point of the calibration curve shifts automatically about the value of zero flow.

QUESTION

Are the analogue outputs galvanically isolated?

ANSWER

Yes, all the analogue outputs are galvanically isolated (ano, veškeré analogové výstupy jsou galvanicky odděleny optočleny a DC/DC měniči)

QUESTION

What should I do if the measurement is not accurate?

ANSWER

Check the correct sensor earthing.

If you have been using plastic pipe, we recommend the use of earthing rings.

Check medium, ensure there are no bubbles.

Check if you have used the correct cable for connecting the sensor to the Transmitter (Remote version).

Check if the electrodes in the sensor are clean.

Make sure if the sensor was watered properly.

Check the real flow value in the sensor.

Check if there is some source (Frequency Variation, Water Pump...) close to the sensor or cable to the sensor that could cause any interruption.

QUESTION
ANSWER

Does the device fulfil Low Voltage Directive?

Yes, the device fulfils EMC and security tests
it means that it fulfils also Low Voltage Directive

QUESTION

What should I do if the device show Error 003 all the time?

ANSWER

When data from sensor is not received by the Transmitter, the error 003 comes on.

It can also be caused by incorrect sensor connection to the Transmitter (loose wire from connector, connector is not plugged in).

QUESTION

What should I do, if I extended the cable (Remote version) and the device started to show error 003?

ANSWER

You are probably using incorrect interconnecting cable.

If the cable is correct, it can be caused by unsuitable or missing conformity at the end of the cable.

With the new sensor version (7) it is not necessary to do conformity at the end of the cable.

The conformity is done by a ceramic condenser connected on the sensor side.

QUESTION
ANSWER

Does the device support the upgrade firmware?

Currently no version supports update firmware.

There is a firmware version being developed, from which the update will be possible.

QUESTION
ANSWER

What should I do If I have Air Bubbles in the pipeline?

Air bubbles are unwelcome in the pipeline of course.

The negative influence of bubbles could be partly compensated by setting a higher value in Samples per Average.

The new sensor version (7) will be an amount of samples increased severalfold.

QUESTION

Does the device make it possible to transfer output value I-OUT module (4-20mA) by MOBDUS and by others analogue outputs?

ANSWER

No, the device does not make it possible.
It is possible to transfer current flow and volume values by MOBDUS.
Transceiver can re-count the data e.g. on flow value (I-OUT 4-20mA).

QUESTION

Does the device have self-cleaning electrodes?

ANSWER

Unfortunately the device does not have self-cleaning electrodes currently but is in development.

QUESTION

What self-cleaning electrodes does the F-OUT module have? Is it possible to set it up anyhow?

ANSWER

Self-cleaning electrodes of output F-OUT module is set up fixed 1:1 and it is not possible to change it.

QUESTION

What max resolution does the I-OUT module have?

ANSWER

In I-OUT module we use a 2-bit D/A convertor that is why max resolution is 3,9□A.

QUESTION

How to calibrate I-OUT module?

ANSWER

We do not calibrate I-OUT module.
We have been using accurate questions.
We will complete this possibility with higher interest for the calibration I-OUT module.

QUESTION

What max resolution does the V-OUT module have?

ANSWER

We have been using 12-bit D/A convertor in V-OUT module that is why the max resolution is 2,44Mv.

QUESTION

Is MODBUS protocol able to compensate the original communicative protocol or will they run at the same time?

ANSWER

MODBUS will fully compensate the original communicative protocol.

QUESTION

Do you use „K-Factor“ for flowmeter calibration?

ANSWER

We use calibration points, that compensates the K-Factor

K-Factor is used by other producers of flowmeters

Calibration points are saved directly into the sensor during calibration.

Calibration points are saved into the external file because of calibration data backup.

QUESTION

Why does it show error min>0 in statistics, even though the device has not been in erroneous state?

ANSWER

It can be caused by setting a very small value in Air Constant in this case we recomend to increase the constant about 15-30%.

QUESTION

In SW there is at 5 min statistics showing 0, but at 5min statistics there is another value.

ANSWER

This kind of problem was solved by issuing new SW version.

You can download the last SW version from our web side.