IPETRONIK
AUTOMOTIVE ENGINEERING

NEW FEATURES

M3 CAN-FD Support

- A M3-only system can be used with CAN-FD
- The M2 modules / X modules do not support CAN-FD and will cause interference in a mixed CAN / CAN-FD environment

M-FLOW Trigas FW-Versions INFO

- The Trigas FW version is now shown in the GUI
- Scaling is stored in the pickoff, in the customer's preferred unit

M-SENS 8 Wait time before sending 1st measurement data after startup on CAN-BUS

- Not all customers want to capture the initiation and settling of the input filters at power-up

Other changes / bug fixes

- IPEmotion 2023 R1 is required for all new features to be available
- X module channel settings (sampling rate, data output format, filter) are now preserved after deactivation
- PTP Synchronization of the X-modules via IPEmotionRT can now use the more precise two-step sync

M3 CAN-FD SUPPORT

Idea

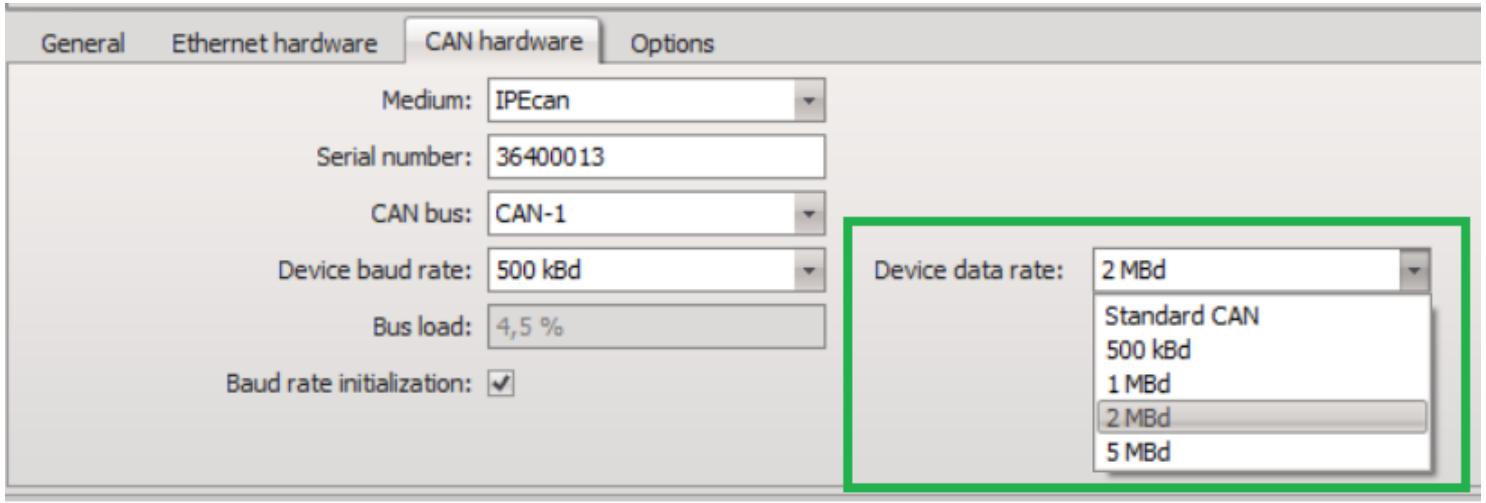
- CAN-FD support for faster data transfer and reduced bus load
- Transmit more signals to a measurement data bus through CAN-FD

Advantages

- Transfer more measurement signals on the bus compared to standard CAN
- Modern and technically advanced data interface
- Reduction of the number of CAN IDs per module, since one module can be covered by a single CAN ID, even including the internal signals

Implementation

- Firmware version 01.01.00 or higher required
- Only M3-devices support this function
- Possible data rates
  - 500 kBd
  - 1 MBd
  - 2 MBd
  - 5 MBd



M3 CAN-FD Support

M-FLOW

Idea

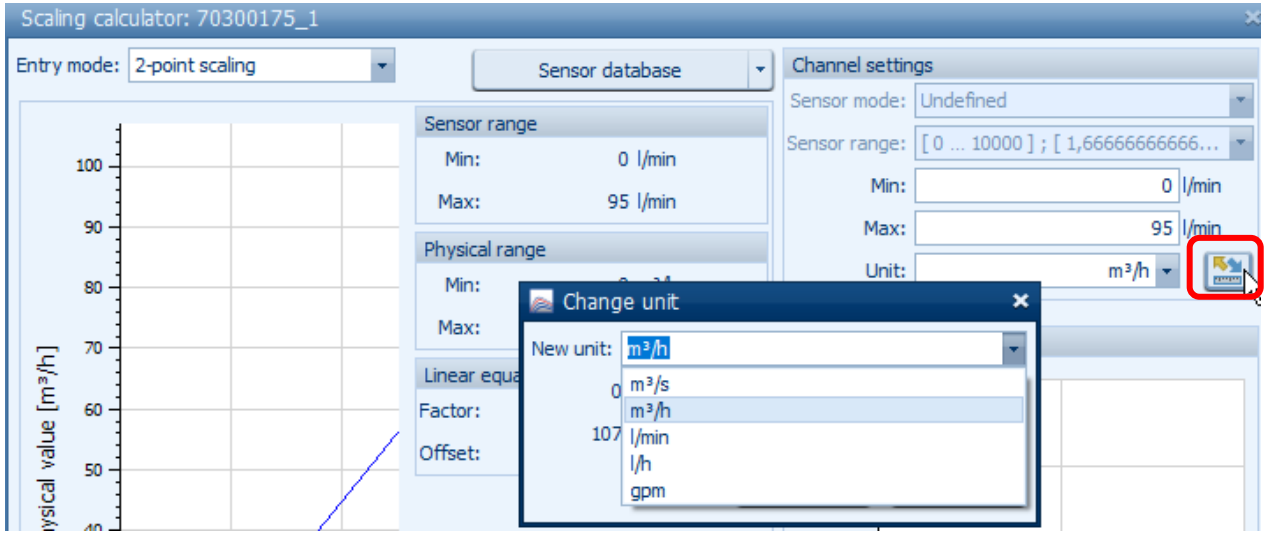
- Scale and unit of measurement stored in the pickoff to simplify use of M-FLOW
- Quick overview of the used hardware and firmware versions

Advantages

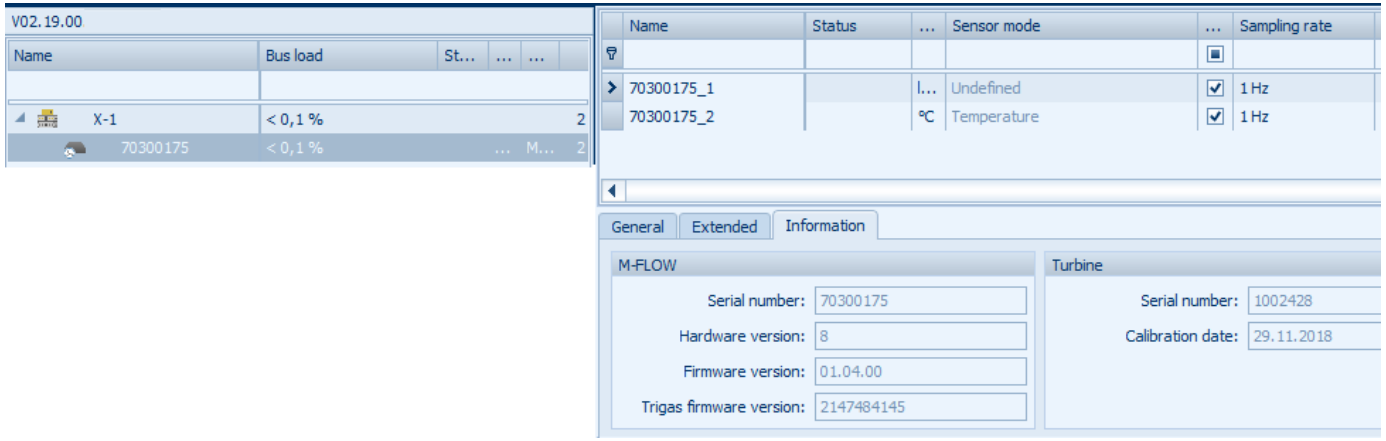
- Scaling is now stored in the pickoff not only in the SI unit, but also in the customer's preferred unit, if set by the user
- M-FLOW and Trigas firmware versions are shown in one place, together with the hardware version and serial numbers

Note

- Did you know, that changing the unit can be done very comfortably via the scaling calculator?



Scaling calculator: Changing Units



Version Information

M-SENS WAITING TIME

Idea

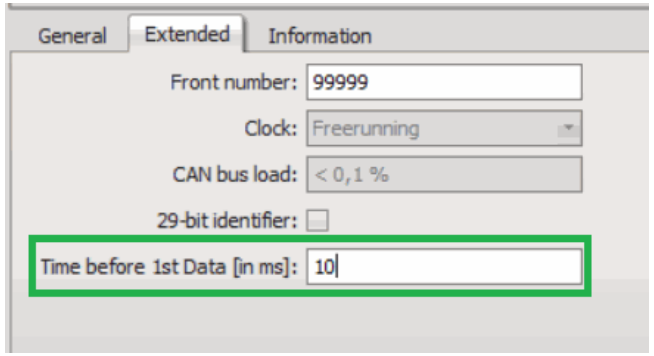
- The wait time for the output of measured values to the CAN bus has been introduced in order not to include possible settling of sensors/measured values in the measured data

Advantages

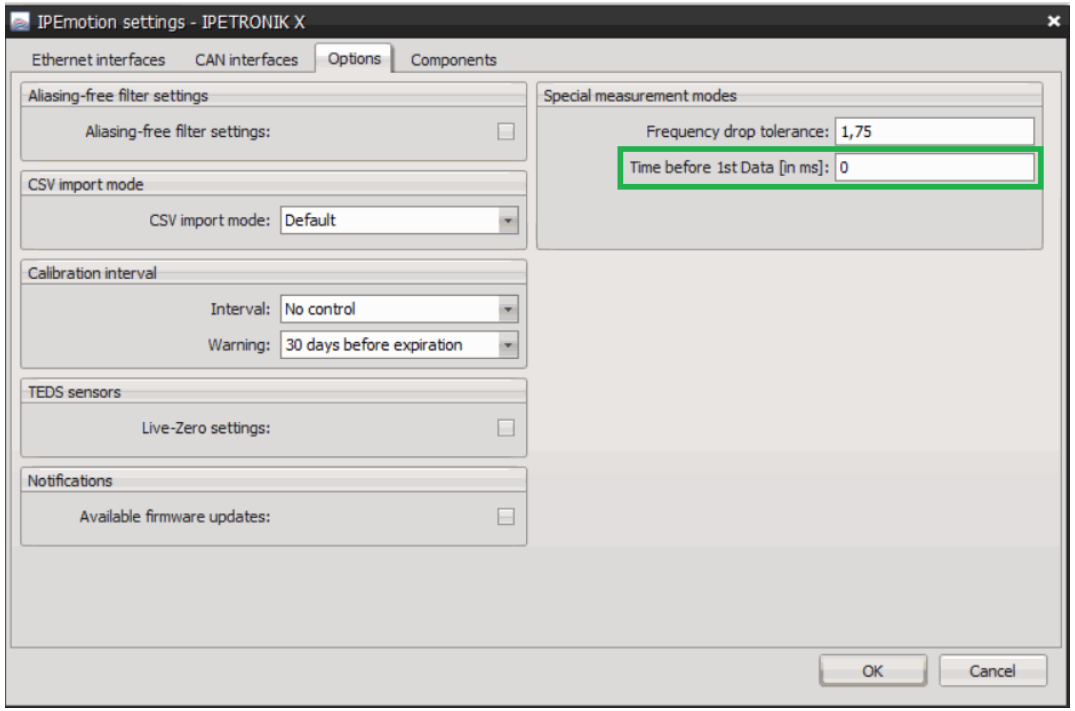
- Not for every application is the transient behavior of sensors or filters helpful. With this in mind, we have introduced an option for the M-SENS modules to output measured values to the CAN bus only after the transient period.

Implementation

- The wait time can be configured by the user either per module or generally for all M-SENS modules
- No wait time is the default (the same as the previous behavior)



Module: Waiting Time



General Options: Waiting time