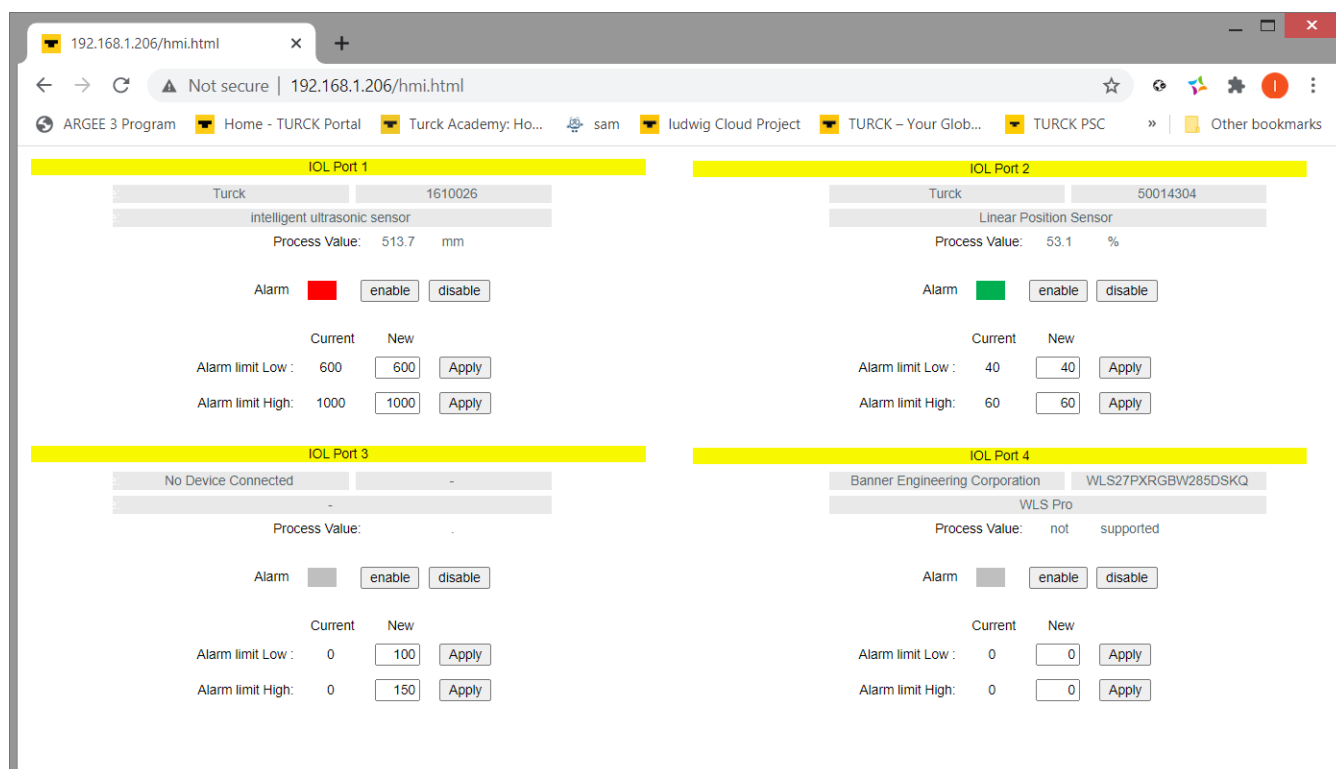# IO Link Sensors ARGEE program

Purpose

The program recognizes the IO link device connected. For selected devices, a process value is calculated and displayed in human readable format on the HMI.

Hardware

The ARGEE program runs on a TBEN-S2-4IOL block. The current version supports process values for :

- Q4X laser distance sensor (Except 600 mm version)
- RU130U ultrasonic sensor
- BI*-IOL inductive sensors
- TTM(S) temperature sensors
- LI100P0-Q25 linear position sensor
- FS100 flow sensors
- PS510-16V-03-LI2UPN8-H1141 pressure sensor in default profile mode

Other IO Link devices are recognized, but no process values are calculated.

Function

When an IO link device is connected to the port, it shows the vendor name, the device type and the device description as stored in the device.

If the device ID corresponds to one of the supported devices, a relevant process value and unit is displayed on the next line.

Alarm

When Process values are calculated, an alarm can be disabled (default) or enabled. The Alarm status is shown with a colored indicator (Grey: disabled, red: alarm, green: OK). If the alarm state is ON, the corresponding DXP output is switched on. Note however that this function may interfere with a digital output on the device. To assure correct operation a splitter (e.g. YB2-FSM5-2FKM5.4) is required.

Enter the high and low alarm limits on the HMI. The limits are stored in retain memory. When a device is disconnected, the alarm is disabled and the limits are set to zero. If a device with the same device ID is reconnected to the port, the alarm is reactivated with the stored limits. If another device is connected, the Alarm remains disabled and the stored limits are deleted.

Communication to PLC

The calculated process values and the alarm limits are rounded to the full decimal and communicated via the ARGEE-to-PLC registers.

- Reg0 : Process value port1
- Reg1 : Low limit port 1
- Reg2 : High limit port 1
- Reg3 : Process value port 2
- Reg4 : Low limit port 2
- Reg5 : High limit port 2
- Reg6 : Process value port 3
- Reg7 : Low limit port 3
- Reg8 : High limit port 3
- Reg9 : Process value port 4
- Reg10 : Low limit port 4
- Reg11 : High limit port