3rd Party PLCs and ULK Series quick guide

Using Unitronics PLCs with ULK masters and hubs is recommended for the easy to use and "plug and play" user experience, however ULK series can be used by any PLC brand that support Ethernet/IP protocol.

EDS files for the ULK-EIP masters can be downloaded from Unitronics Website►

https://downloads.unitronicsplc.com/Sites/plc/Technical_Library/IOandCOMUnistream/IO-Link/Unitronics%20IO-Link%20masters%20EDS-1.zip

IODD files for the ULK hubs (Digital and analog) can be download►

https://downloads.unitronicsplc.com/Sites/plc/Technical_Library/IOandCOMUnistream/IO-Link/IODD%20files%20for%20hubs.zip

IO-LINK devices parameters configuration via Unitronics Masters

In addition to the cyclic data (PDOs) that the PLC reads during the standard communication method, there are additional "settings parameters" for the IO-Link sensor/device that are defined in the IODD file and can be set Using our IO-Link masters via "IO-Link control tool" software.

Using this tool is not mandatory for the IO-Link device/sensor unless you would like to change the "settings parameters" of the sensor (Changing mode of operation and etc.)

The data from the devices to the master's will have to be "parsed" by the user manually on the 3rd party PLC side in order to read them clearly (Bytes structure Input/Output described on the EDS/ULK-EIP manuals)


Procedure►

Unitronics IO-Link masters (ULK-EIP-8AP6, ULK-EIP-4A4BP6 & ULK-EIP-4AP6) has a default IP address 192.168.1.200

In case you wish to change the master IP use ULK_IP_TOOL (procedure on Unlogic help file under IO-Link topic)
https://downloads.unitronicsplc.com/Download/SoftwareVersions/UniLogic/ULK_IP_Tool.zip

- Set your PC network card to be in the same master IP family (for example 192.168.1.100)
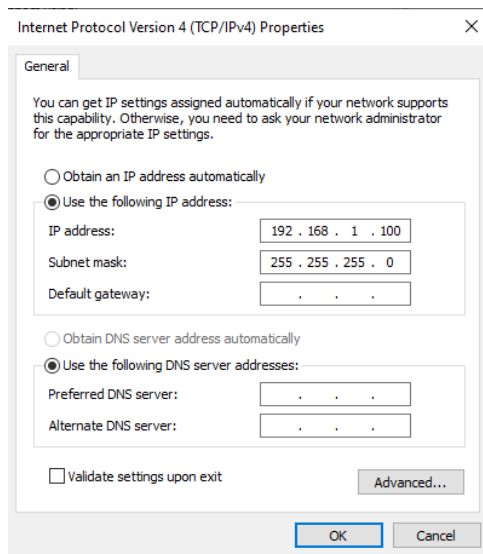

- Connect the Master ethernet cable port to the PC network port (direct connection) And power on the IO-Link master. And connect the IO-Link device that needs to be configured to the X1-X4/X1-X8 (depends on master model) port.

- Open the software (IO-Link control tool)
  https://downloads.unitronicsplc.com/Sites/plc/Technical_Library/IOandCOMUnistream/IO-Link/ADP-ULKCFG-configuration-tool.zip
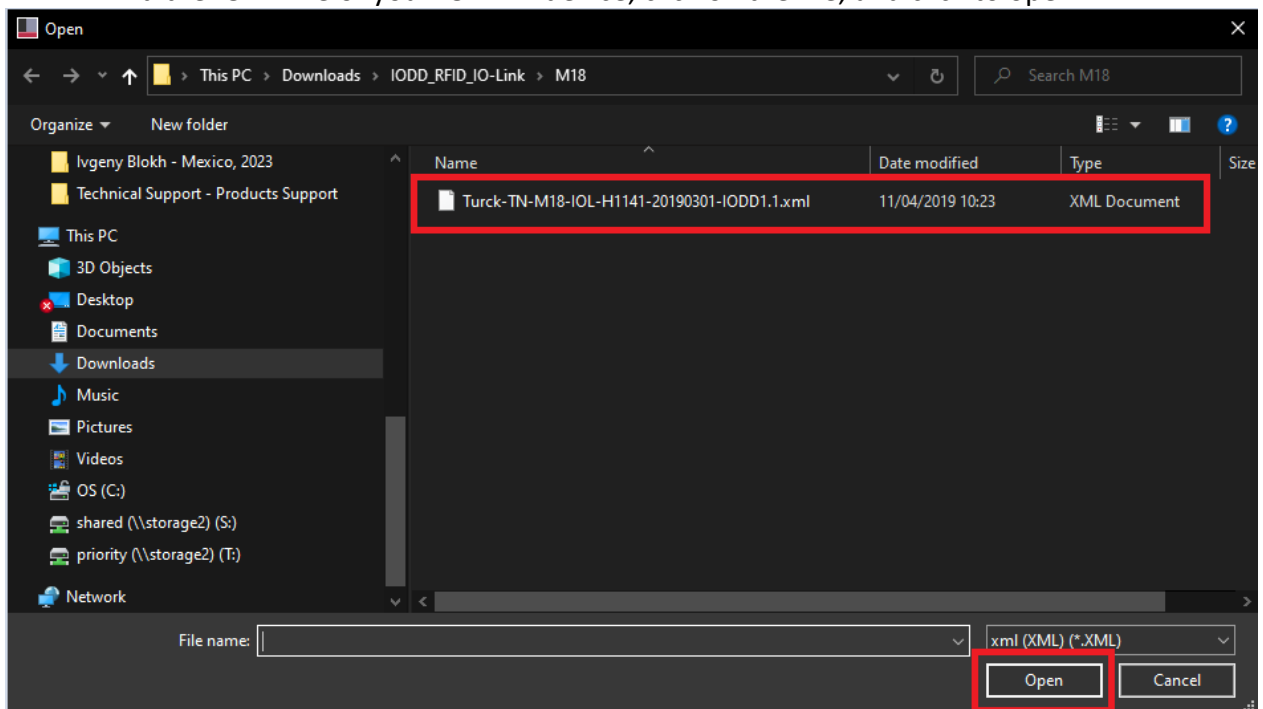
  select "Tools" in the menu bar, and click the "IODD Catalog" button.
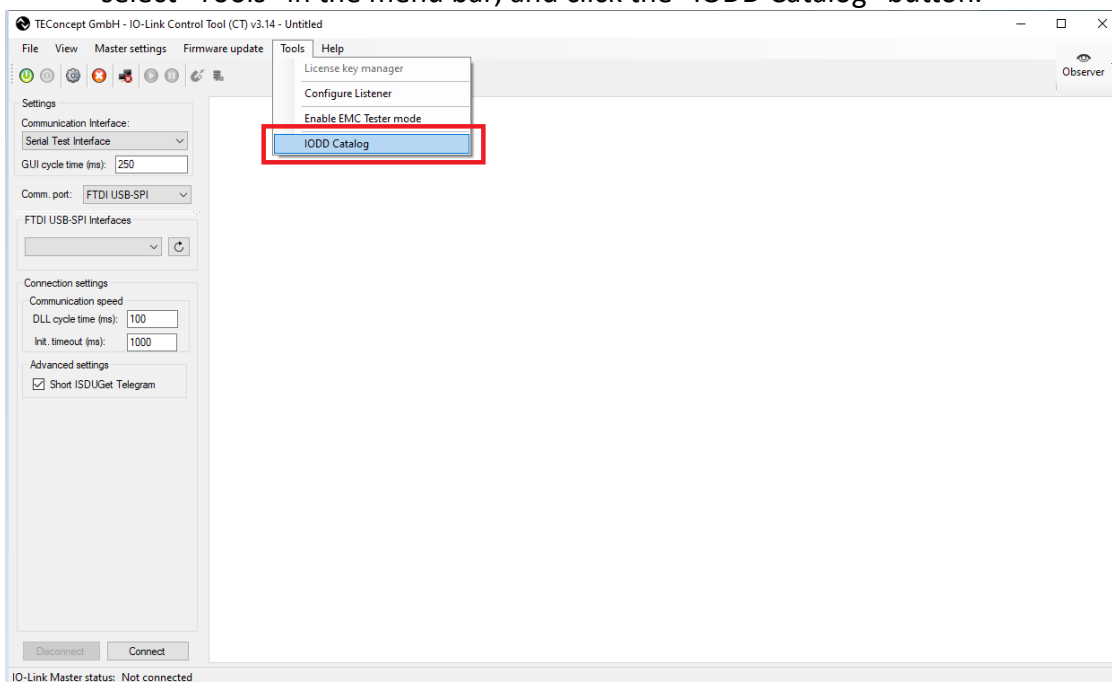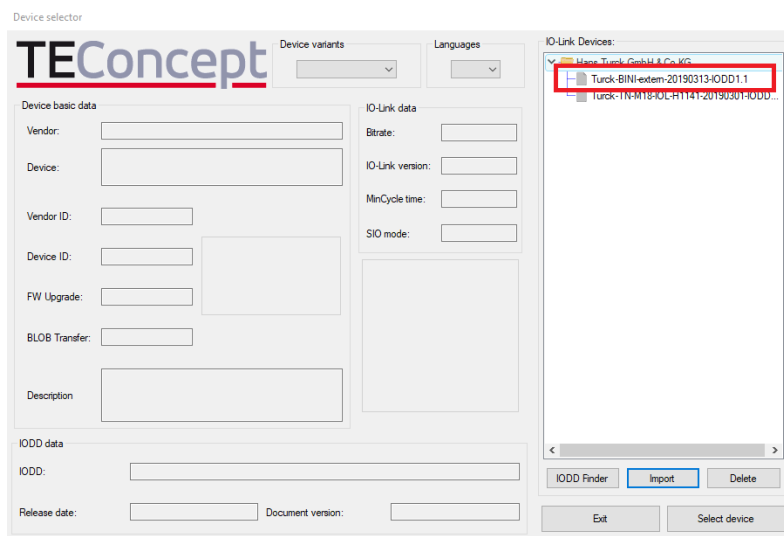
- Enter the Device selector interface and click the "Import" button.
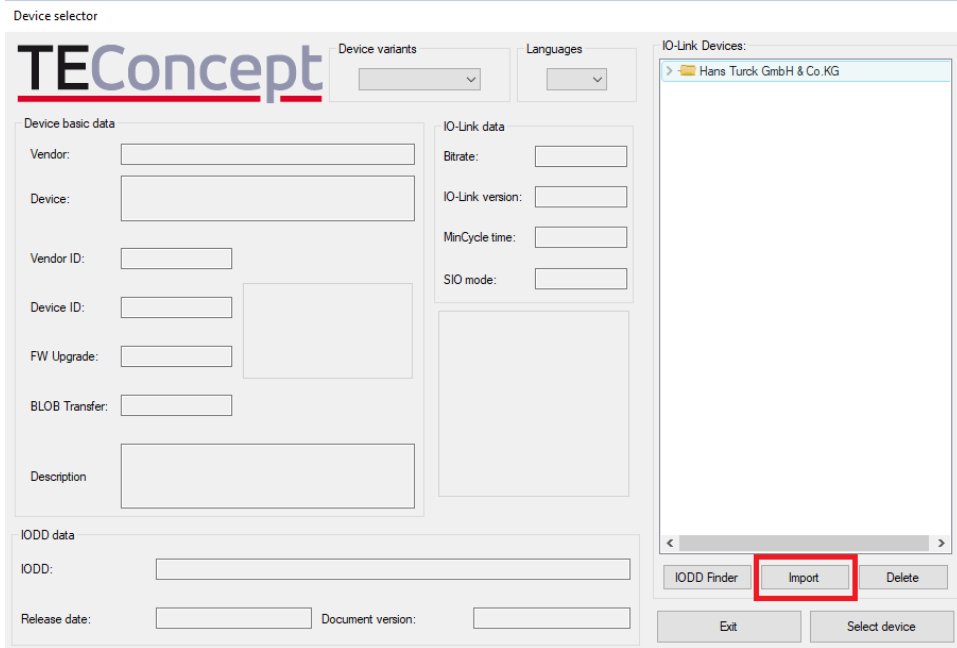
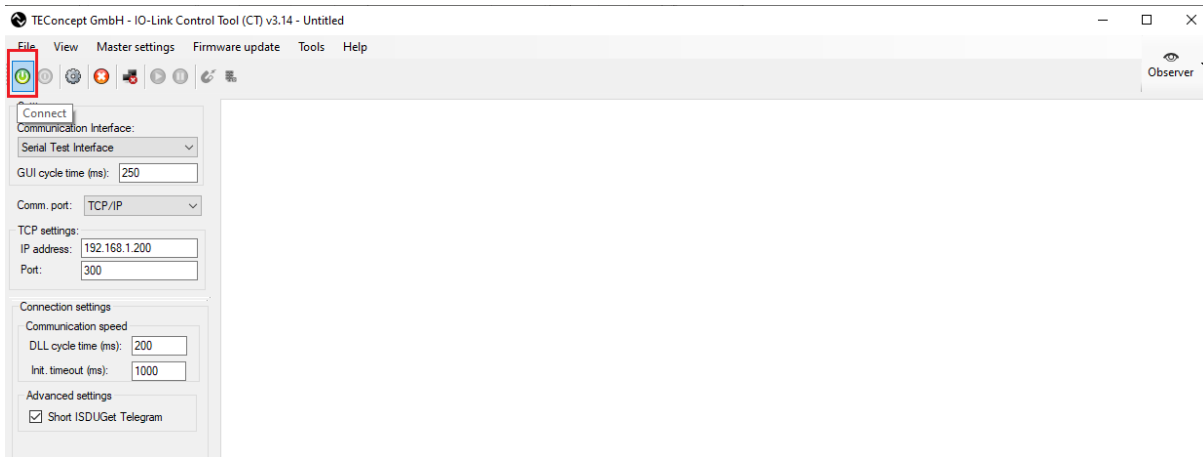- Find the IODD file of your IO-LINK device, click on the file, and click to open.

- Now you can see the device added to the list.

- Select TCP/IP for the comm port.
- Insert the Master IP address.
- For the port► choose the master port your device is connected to.
  300= X1-X4 master port
 **301**= X5-X8 master port (only on 8 port masters)
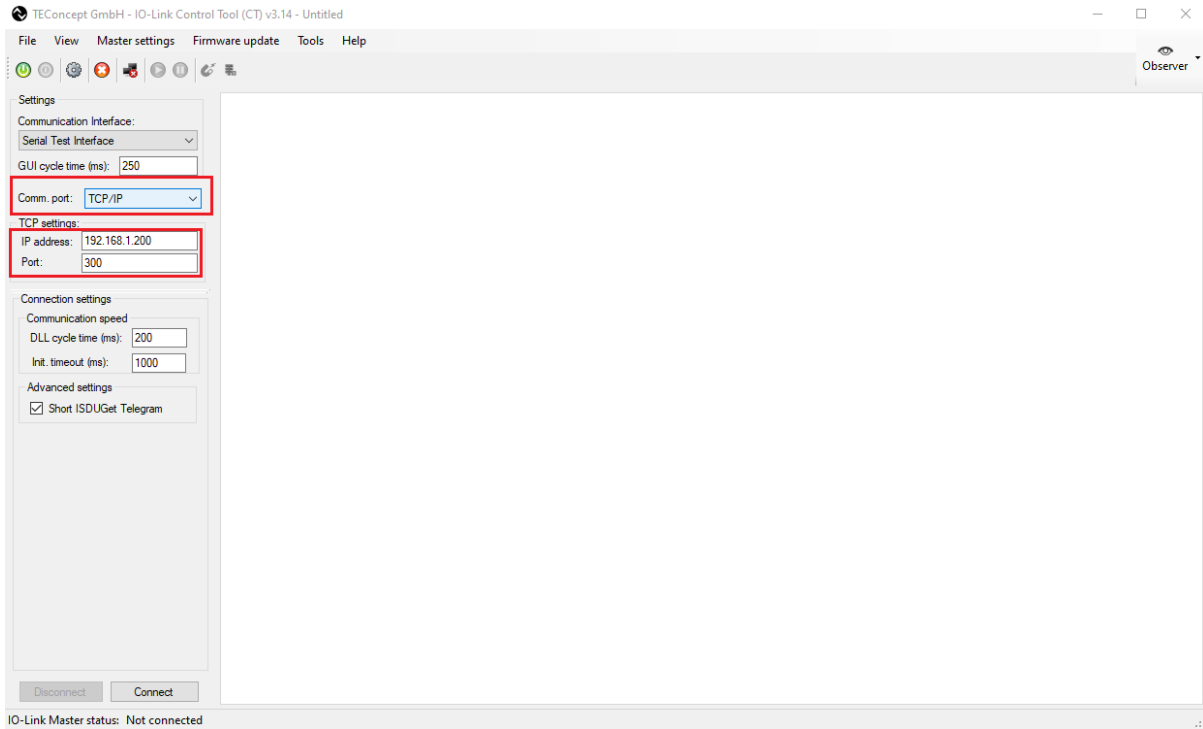

- Click the connect button to connect.

- Make sure your IO-Link device is connected to Master port.
- Select Used Port (1-8)
- Click on the select device button and choose your device IODD file.
- If connection is achieved, you will get the statuses as in the below right picture.
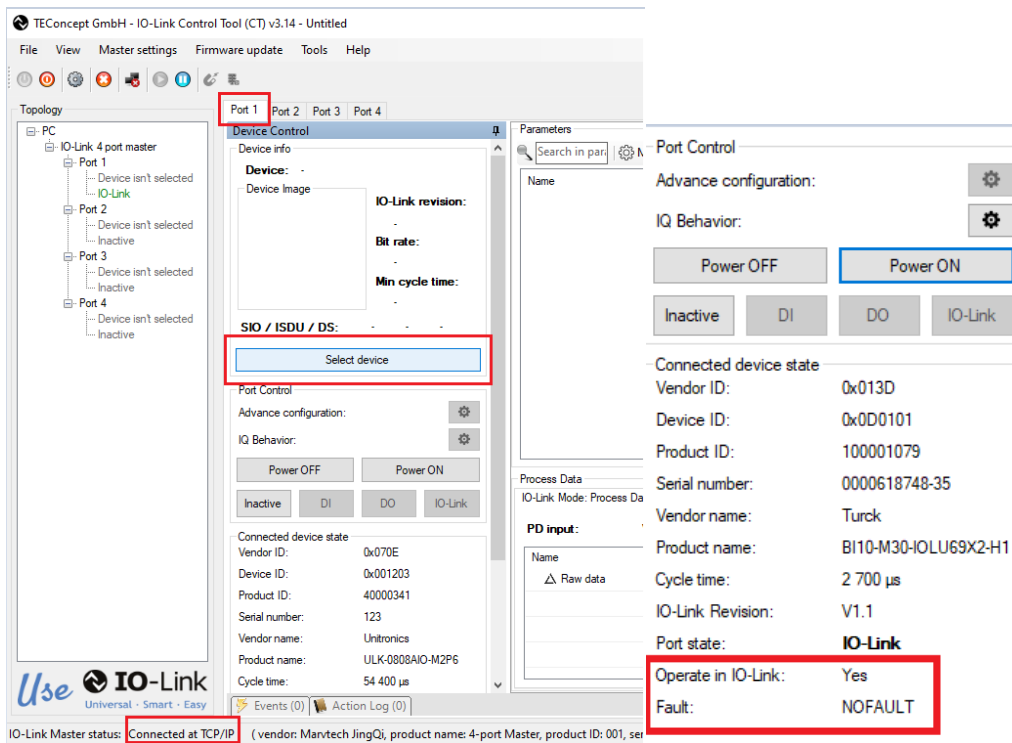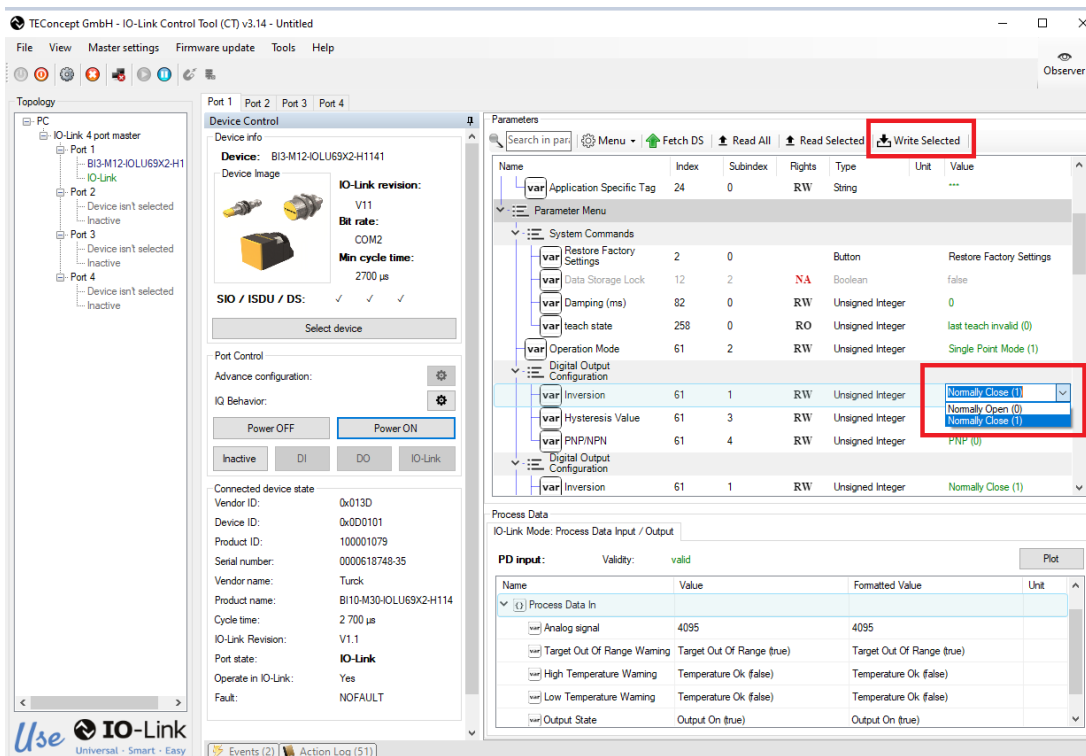
- Click the Read All button to upload all parameters to the software
- Uploaded parameters include identification data, and parameter data
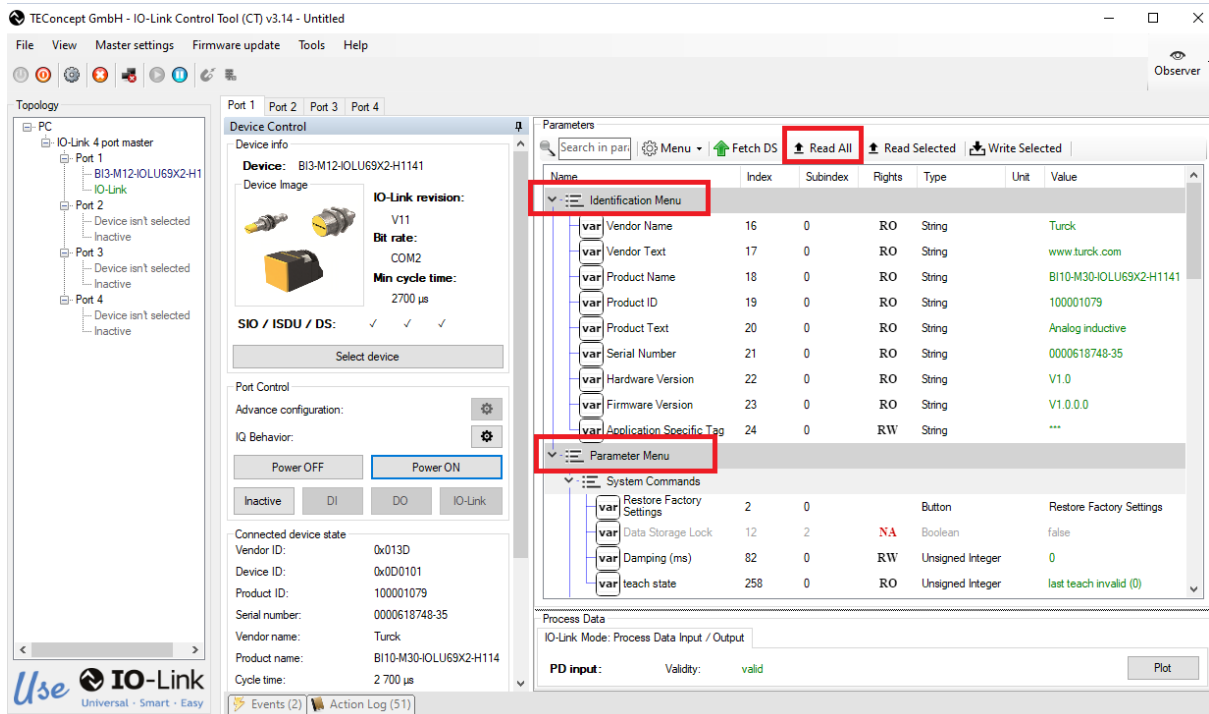
The status and output values can be monitored in real-time below (PDOs cyclic data)
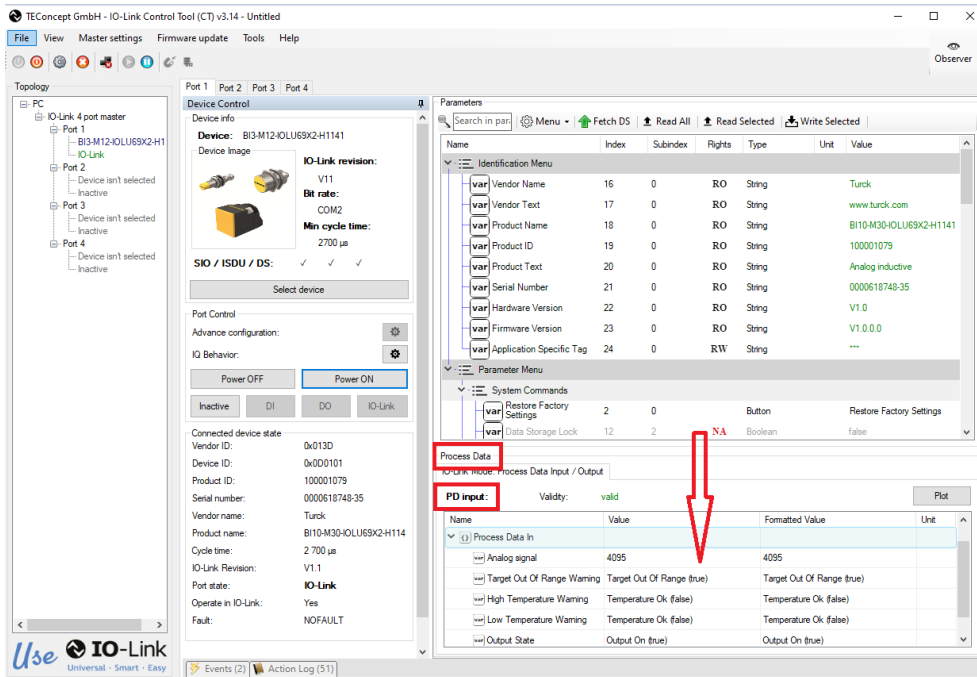
You can change the parameter values as you need and write them to the sensor, those parameters are "settings parameters" and not PDOs that are used in a standard cyclic communication phase with the PLC.

END.