



LabVIEW Driver

Overview

Current sensors and actuators are equipped with small but powerful microprocessors that introduce advanced features like parameterization and diagnostics to these devices. However, those features are currently not visible to standardized project planning tools.

IO-Link™, the new bi-directional, digital, point-to-point communication standard (**IEC 61131-9**) offers now a standardized mapping of advanced sensor and actuator features into the automation tool environment.

TEConcept offers IO-Link Masters implementing the IO-Link Standard Test interface “STI”.

IO-Link Masters, supporting the STI can be controlled with Windows © PC’s using the High-Level IO-Link Master Access Module which is available in 32-bit or 64-bit DLLs or in source code format from TEConcept

In order to control the IO-Link Master from LabVIEW a mapping to that libraries required.

There are several LabVIEW .vi files that has been created in order to make the High-Level IO-Link Master Access module usable in LabVIEW.

Type definitions (structures, enumerations) from the C-implementation are in addition mapped to *.vi files with names starting with underscores.

Only (virtual) com port communication is supported to access an IO-Link Master.

The communication cycle time (between the IO-Link Master and the PC) can be adjusted between 1 ms and 400 ms.

Interleaved communication (between the IO-Link Master and the PC) can be used to make the Process Data transmission independent from the On-Request Data transmission (parameter reads / writes).



License model

- Royalty-free license
- One-year maintenance included

Deliverables

- Full source code of demo application
- *.vi files, *.ctl files for integration into LabVIEW
- LabVIEW Demo application with control tabs for
 - Master control
 - Port control
 - Process Data
 - Parameters
 - Port status
- High-Level IO-Link Master Access API documentation created with Doxygen

Required additional products

- IO-Link USB Master supporting TEConcept STI interface
- High-Level IO-Link Master Access DLL (32-bit or 64-bit depending on LabVIEW)