codewerk

IO-LINK
INTELLIGENT COMMUNICATION STANDARD

IO-Link is a point-to-point communication protocol that allows the integration of intelligent sensors and actuators into automation systems. It simplifies the engineering and commissioning, provides diagnostic messages to the control and monitoring system and forwards the process data of the IO-Link devices to the application program. The IO-Link Master is the counter part to the devices acting as an interface that controls the communication.

One advantage of IO-Link is the use of 3-wire cables which are also used for conventional sensors. Devices in an existing system can therefore be replaced by IO-Link sensors without having to change the wiring.

Use
IO-Link
Universal · Smart · Easy

IO-LINK FOR SIMATIC PCS 7
ADD-ON MODULE DRIVER LIBRARY

In order to use the IO-Link technology in process control systems, seamless integration as well as effective and consistent engineering are essential. The IO-Link library for SIMATIC PCS 7 from Codewerk closes this gap.

The IO-Link technology is already widespread in the manufacturing industry. It offers advantages during installation, commissioning as well as operation.

Infrastructure, integration, automation – we make tomorrow's systems interact.

FUNCTIONALITIES

- **Engineering**
  – Use of the SIMATIC PCS 7 module driver wizard to generate diagnostic function blocks
  – Automatic connection of the channel drivers based on the logical address
- **Runtime**
  – Support for standardized IO-Link profiles (e. g. Smart Sensor Profile)
  – Signal processing for analog values
  – Signal status (quality code) for the process values
  – Simulation function for channel drivers
  – Read and write acyclic IO-Link parameters
  – Integrated rack, module and channel / port diagnosis
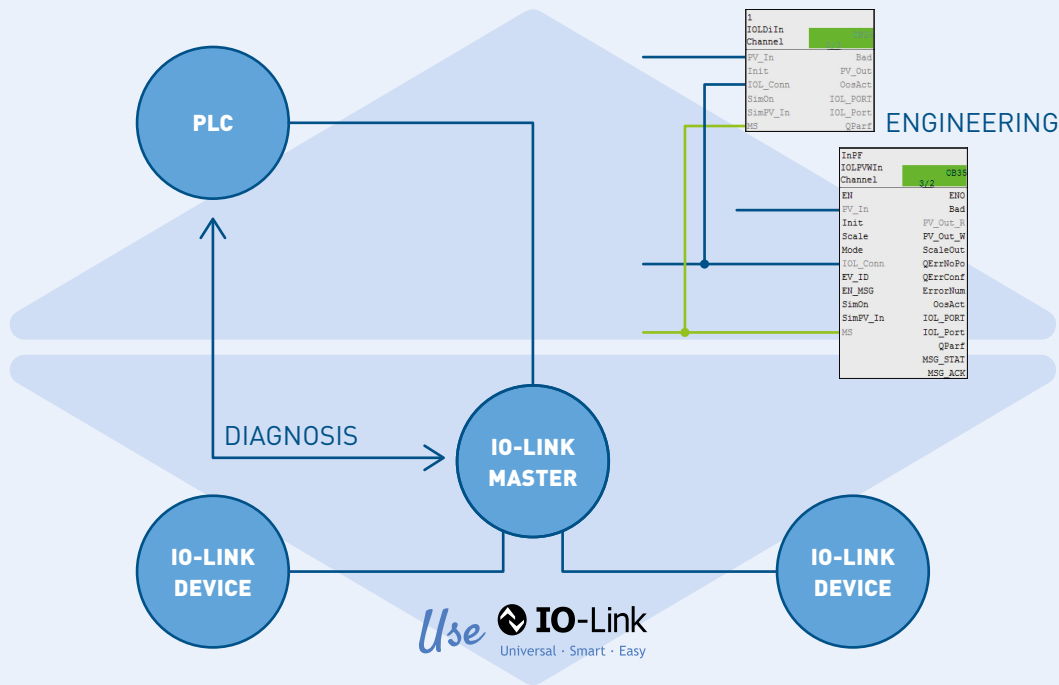
BENEFITS AND OBJECTIVES

- Simple and **system-compliant integration** of IO-Link devices into the process control system
- Use of the existing infrastructure for engineering and diagnosis

Currently supported IO-Link Masters
- Balluff
- ifm electronic
- Pepperl+Fuchs
- Siemens
- Turck
- etc.

Other masters will be integrated free of charge upon request.

ENGINEERING

PLC

DIAGNOSIS

IO-LINK MASTER

IO-LINK DEVICE

IO-LINK DEVICE

Use **IO-Link**
Universal · Smart · Easy

Input and output signals are automatically assigned
to the corresponding device in engineering and diagnostic data is integrated in the signal's accompanying value.

Codewerk has released an official SIMATIC PCS 7 Add-on
for the integration of IO-Link devices.

COST EFFICIENT SOLUTION FOR YOUR PROJECTS

You purchase a license for the SIMATIC PCS 7 IO-Link
library that is valid for several controllers of a plant.*
The cost of a license for each project is € 2,450.

By releasing the library as an official add-on
for SIMATIC PCS 7 we guarantee long-term
support and regular upgrades to new system
versions.

*License terms and conditions on request

Use in the pharmaceutical company CSL Behring
Around 5,000 valve units from GEMÜ are hereby integrated via IO-Link. Engineering is automated via so-called CMTs (Control Module Types), from which all of the components in the system can be derived and/or instantiated. The function blocks of the IO-Link library are integrated into the CMTs and can be used without any restrictions for mass engineering in SIMATIC PCS 7.
A specific function block for the GEMÜ device that supports the acyclic IO-Link parameters and APL visualization simplifies diagnosis and maintenance at CSL Behring.

Depending on specific customer or project requirements, the IO-Link library will be constantly expanded.

Driver modules for IO-Link devices with optional visualization complement the integration. We will be pleased to offer these for specific projects.

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codewerker – ALWAYS AT THE FOREFRONT
OF DEVELOPMENT: SOFTWARE SOLUTIONS FOR
INDUSTRY | ENERGY | RAIL

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