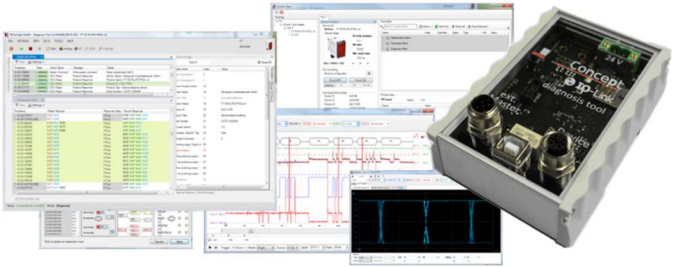
TEConcept

Use IO-Link

Universal · Smart · Easy

Diagnosis Tool



Overview

The IO-Link Diagnosis Tool analyzes the IO-Link signal both electrically and logically. It is an essential tool for engineers and users of IO-Link technology to identify any kind of issues in the IO-Link connection.

Functional Description

The Diagnosis Tool is based on a high-speed multi-channel A/D converter that measures voltages and currents on both the C/Q and the L+ line. The measured data are transferred via USB to a software application running on a Windows PC.

The IO-Link communication can be analyzed seamlessly at byte-level, at M-sequence level, at protocol level and even at application level. In the latter case, the IO-Link communication is visible in clear text. Folding, filtering and search functions simplify issue identification.

It is also possible to visualize sections as waveforms, and even eye-diagrams for Master and Device signals can be extracted.

Typically, the Diagnosis Tool is inserted between Master and Device. However, an **integrated Master** allows checking of Devices without an external Master. The tracked communication is shown and recorded directly on a PC.

Diagnosis Tool Features

- Timing accurate IO-Link signal analysis
- High speed, IO-Link synchronized ADC
- Timing precise software UART decoding
- Optional hardware signal direction detection
- Byte-, frame-, protocol- or IODD-based decoding
- Sophisticated filtering and search features
- Device image collection of all data sent
- Data storage image collection
- Recording of IO-Link byte stream to PC/SD-card
- Analog signal view for UL+, IL+, UCQ, ICQ
- Serial decoding in analogue waveform view
- Eye diagram view separated for Device/Master
- Interactive rulers for analogue measurements
- Trigger-Out connector
- User calibration support
- Integrated Master

Advantages

- Fast and easy IO-Link issue analysis
- Logical and electrical issue detection
- Suitable for development and application

Deliverables

- IO-Link Diagnosis Tool
- 24V power supply, USB cable
- Windows-based graphical user interface