



Overview

The IO-Link specification includes well-defined procedures for testing the EMC robustness of IO-Link devices.

Some tests check the sensitivity of the IO-Link communication of IO-Link devices under EMC conditions.

This requires a robust master that is much less sensitive to EMC noise than the device under test.

This is achieved by separating the IO-Link master into two parts: part 1 contains the sensitive digital logic (μ C-box), part 2 contains the IO-Link transceiver (PHY-box).

Both parts are separated by an optical connection with a length of up to 10m.

Deliverables

- 2 EMC test boxes (Controller-box and PHY-box)
- 6 Optical cables (10m)
- 2 connectors for 24V supply
- EMC Test Graphical User Interface
- PC based IO-Link control tool

EMC Test Master Features

- Complies to IO-Link interface specification V1.1.2, V1.1.3 and V1.1.4 and the current IO-Link test specification V1.1.4.
- Error and Signal output
- 4 electrical IO-Link port configurations
 - COM1/2 speed port (good signal)
 - COM1/2 speed port (bad signal)
 - COM3 speed port (good signal)
 - COM3 speed port (bad signal)

- RS232 and USB interfaces
- Terminal based control command set
- Additional EMC test and control software with graphical user interface
- Test report generation in PDF Format
- Can be configured to operate as standard "USB IO-Link Master"
- Firmware update supported

Advantages

- Sensitive Parts are located outside EMC chamber
- EMC robustness