

ifm IO-Link: Implementing a Smart Wiring Solution Wednesday 29 July



Questions & Answers

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In your Allen Bradley sample, as I understand it, you use a block for each sensor? so if factory is full of IO-Link you can have 100s of blocks in PLC?

The blocks are there to be used for convenience of bringing all the information to a central point in your PLC code for each sensor. You can however, choose to use only the relevant input variable for the specific value from a sensor you want to use in your code, just like you would do with standard 4...20mA signals.

Can I connect the LR device anywhere on the bus? Should it be connected after the first master?

The PC running LR Device software just has to be connected anywhere to the field, as long as you can ping the device on the network, the software should be able to detect the masters.

Is it possible to perform commissioning in bulk instead of doing one at a time? For instance, assigning instrument names/tags

Yes it is possible to copy and apply settings from one sensor to other identical sensors and download the settings to all these sensors with on click.

How strict is the separation between the fieldbus and the IT/IOT network? What security standard does this comply with?

The IOT port and the fieldbus ports are physically two different Ethernet adapters. The IOT port only has access to the operating system of the master and there is no access to the fieldbus network on a hardware and software level.

Can I change parameters from the PLC?

Yes, all parameters are accessible from the PLC, this is done by using acyclic function blocks depending on the fieldbus and PLC being used. The startup packages will include instructions and examples of how this is done.

How much is the Start-Up Kit?

Prices vary based on the type of fieldbus and sensors, please have a look at the ifm website for accurate price details: https://www.ifm.com/za/en/category/055/055_090 /055_090_010. Prices vary between R4800 to R7600.

We will be launching a Webinar special offer soon on our Webinar Page - Watch this space!









Q & A

Could you connect the IO-Link masters to an AS-I system?

There are AS-i modules that can communicate with IO-Link sensor available, however this is limited in terms of using LR device software as it is not Ethernet based.

Does the IO-Link system cater for zoned areas like zone 21 or 22?

At the moment, there is no development for this that we know of, however, please keep an eye on the IO-Link.com website for news on developments as this might change in the future.

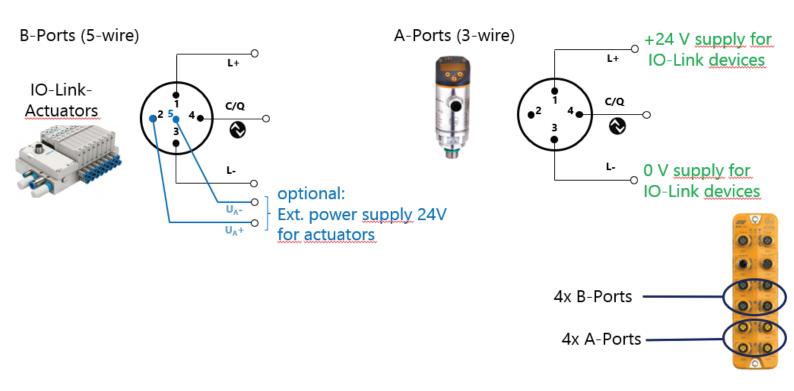
What about Siemens PLCs? Startup packages

The startup packages includes a lot of information and function blocks developed for Siemens as this is a popular PLC platform to integrate ifm IO-Link.

On the expansion master if using an analogue input signal with HART is there an option to allow you to read the primary, secondary, tertiary or quaternary values?

The expansion hubs only support standard 4..20mA or 0..10V signals, therefore, information via HART will not be accessible by the IO-Link system, only the analog value will be read.

Pin configuration of wiring of the power-line















Is IO-Link best implemented with digital devices (switch type) or even necessary?

IO-Link is also beneficial to use on digital switching devices like proximity sensors as you can get diagnostic information from the sensor to determine if it is in fact connected and functioning. For example, if a regular proximity device shows a low value of 0, how can you be sure that the value is really 0, because if there was a wire break or the device was faulty it would also indicate a value of 0.

You can also change the switch points of digital devices via IO-Link, which is beneficial if you have to adjust your production line for a different product which requires different switch points.

What does the future hold for intrinsic safe IO-Link?

Please keep an eye on the io-link.com website for updates on new developments. Currently there are no developments underway that we are aware of for intrinsic safety.

Your software: Is it limited to devices, like only Windows based laptop or will it run from IOS/Apple laptops/devices?

The software is currently only available on Windows operating systems, however, you could run the software within an emulator with Windows on Apple computer or you could use bootcamp to run a windows operating system on your IOS device.

The software can also be installed on a server running windows and you can access the software using the internet browser of you apple or IOS device, as the LR Device software interface is web based.

Is current and voltage monitoring possible?

Yes, on all master the total current and voltage supply to the master can be monitored. On the Performance line(powerline) master the current and voltage on each IO-Link port can also be monitored individually.

What about IO-Link for Safety devices?

There is a lot of development happening at the moment on safety devices and IFM has a safety DI/DO expansion hub that connects to the IO-Link master via IO-Link and then connects to the PLC using Profi-safe protocol.









Thank you for Participation in our Webinar

Do you have any questions about the products featured?



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