

# IO-Link @ SensoPart

Basis for industry 4.0



# IO-Link @ SensoPart

Utmost process security thanks to smart sensor technology



## Absolute adjustable switching point

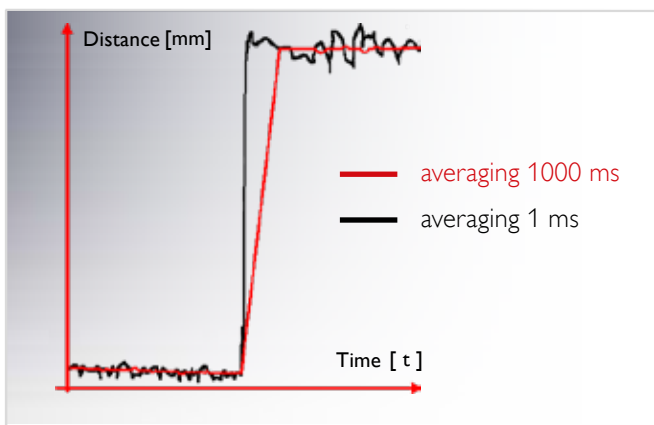
- Precise setting of switching points and measuring areas in mm, directly on the PC
- Fast and easy set-up as sensors can be pre-configured directly with information from the installation diagram
- High precision settings thanks to factory-calibrated switching points
- Applies to all measuring and BGS-IO-Link sensors from SensoPart

## Output of RGB color values

- Output of RGB values with color sensors via process data
- Virtually any number of colors can be detected via the control system
- Applies to the color sensor FT 55-CM



Modern sensors are not just distinguished by high-performance hardware but also by a sophisticated software, which can at last exploit the full potential of the sensors' technical characteristics. These functions can solve common tasks with absolute process reliability or open up new fields of application.

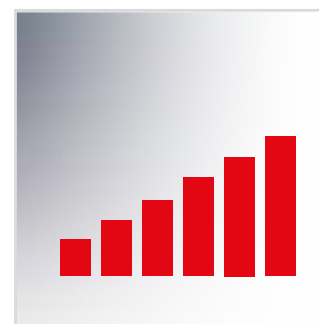


#### Adjustable mean value filter

- Arithmetic mean value for smoothing signal path
- Reduced signal noise and improved repeatability
- For slow processes with high precision demands, a high mean value filter can be set and repeatability improved
- Applies to all measuring IO-Link sensors from SensoPart

#### Signal quality

- Cyclic or acyclic output of signal quality
- Immediate feedback for correct sensor alignment
- Detection of contamination on sensor and early information to service team. This reduces downtime and increases productivity.
- Applies to all measuring and BGS-IO-Link sensors from SensoPart



Efficient, communicative, scalable

### Automated communication

When data storage is enabled, the master saves the settings and transfers them to the new sensor. All IO-Link sensors from SensoPart support this function.

### Simple

Use of existing unshielded IO cables, up to 20 m in length for IO-Link sensors.

### Cost-saving

Fast installation through simple, decentralised cabling. Less cables = less effort.

### Transparency

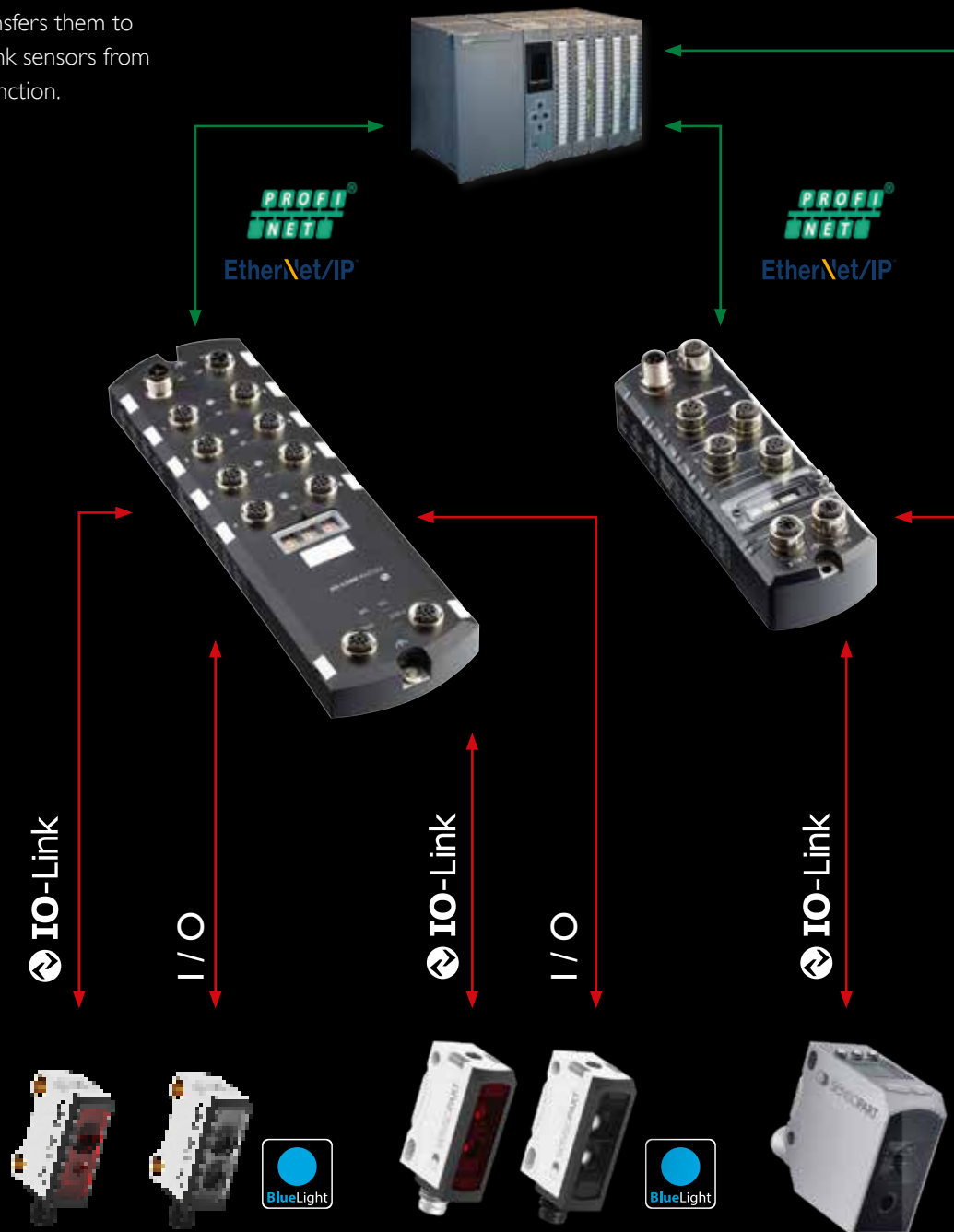
Two-way communication up to the lowest field level, allowing greater transparency. Availability of a large amount of relevant data, e.g. for condition monitoring.

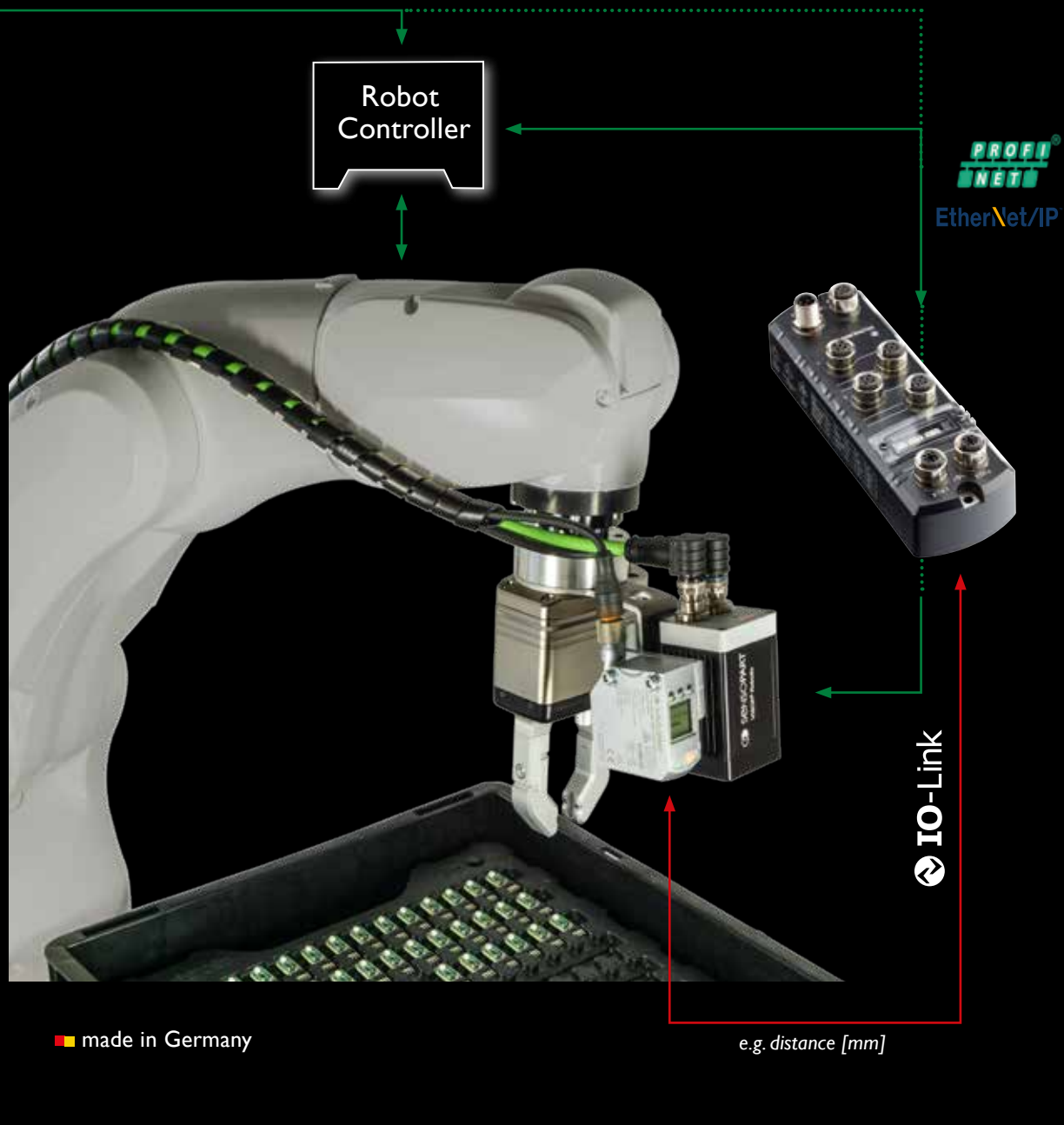
### Versatility

Combined use of IO-Link and binary sensors is easily possible on the IO-Link Master. All IO-Link sensors from SensoPart can also be operated in standard binary mode.

### Functionality

Example FT55-CM: output of color values via IO-Link, additional functions (e.g. smart functions) are directly in the sensor.





**Precision**

The digital transfer of previously analogue measurement values avoids cable-related transmission errors and the general limitations of analogue measuring technology. This enables considerably higher transmission accuracy.

**Compatibility**

The cascability of the IO-Link Master allows combinations with other Profinet / EthernetIP devices. For example, in robotics applications, the X and Y value and also rotation can be detected with the VISOR® and the Z value with a distance sensor. This architecture also reduces cabling work.

# SensoVisualize – Software for parameter settings & visualisation

Quick and intuitive to use



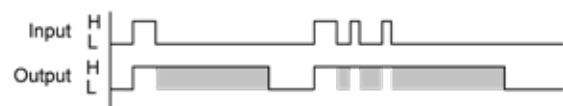
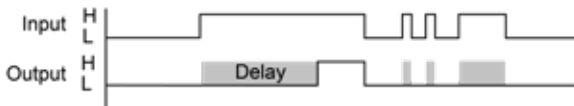
SensoVisualize is a software that can be used to set parameters on sensors and visualise process data, and can be utilised with all sensors with an integrated IO-Link interface. The interface is designed so that functions are read from the device description file (IODD). For example, switching points can be set centrally without having to carry out adjustments on the sensor itself.

## TYPICAL SENSOVISUALIZE

- Software tool for sensor parameter settings and the visualisation of process data over time
- Touch control possible
- Creation and management of jobs, e.g. for batch changes



## Stable processes through intelligent sensors



### Delay functions – stable detection even with difficult objects and external influence

- When detecting objects through scanning, faulty switching can be caused by interfering particles such as sparks, sawdust or dust particles.
- A start-up delay ignores these interferences and only switches when an adjustable time signal X is received.
- A switch-off delay suppresses, for example, the glare from a shiny object – and emits a stable switching signal.








### Counter – counting objects


















- The counter function is often used with secondary packaging.
- The sensor only switches once all of the parts have been inserted.

# Product overview optical sensors with IO-Link

Product family Dimensions (H x W x D)		Distance sensors	Color (C) and contrast (K) sensors
<b>F 10</b> 21.1 x 14.6 x 8 mm 		FT 10-RLA   70 mm   	
<b>F 25</b> 34 x 20 x 12 mm 		FT 25-RLA   100 mm   	FT 25-RL   250 mm   K   
		FT 25-RA   200 mm  	FT 25-W   12 mm   K  
			FT 25-RGB   12 mm   K  
			FT 25-C   12 mm   C  
<b>F 55</b> <b>Metal</b> 50 x 50 x 25 mm <b>Plastic</b> 50 x 50 x 23 mm 		FT 55-RLAP   5 m   	FT 55-CM   150 mm   
		FR 55-RLAP   70 m   	
		FT 55-RLAP2   5 m   	
		FT 55-RLAM   1 m    	

-  = Display   
  = Potentiometer   
  = Teach-in  
 = BlueLight   
  = IO-Link



Photoelectric diffuse sensors	Photoelectric diffuse sensors with background suppression (BGS)	Photoelectric retro-reflective sensors	Photoelectric through-beam sensors
	FT 10-RLH   70 mm  FT 10-RH   70 mm 		
FT 25-RL   250 mm  FT 25-R   800 mm 	FT 25-RLH   150 mm  FT 25-RH   200 mm  FT 25-RHD   400 mm  FT 25-RF   60/80 mm  FT 25-BH   200 mm 	FR 25-RL   13 m  FR 25-R   6 m  FR 25-RGO   2 m  FR 25-RLO   4 m 	FS/FE 25-RL   18 m  FS/FE 25-R   13 m 
	FT 55-RLHP2   5 m  FT 55-RLHM   1 m 		

**SensoPart** is one of the leading manufacturers of photoelectric sensors and image processing vision sensors for factory automation. We also offer inductive and ultrasonic sensors, thereby covering a wide spectrum of industrial automation tasks. Our products are used in countless applications and sectors today – from automotive construction and mechanical engineering to electronics manufacturing and the solar industry, as well as the food sector and pharmaceutical industry.



## SensoPart Worldwide

### Germany

SensoPart  
Industriesensorik GmbH  
Nägelseestraße 16  
79288 Gottenheim  
Tel. +49 7665 94769-0  
info@sensopart.de

### France

SensoPart France Sarl  
662, rue des Jonchères – Bât. A  
F-69730 GENAY  
Tel. +33 164 730061  
info@sensopart.fr

### United Kingdom

SensoPart UK Limited  
Pera Business Park, Nottingham Road  
Melton Mowbray, Leicestershire  
LE13 0PB  
Tel. +44 1664 561539  
info@sensopart.co.uk

### USA

SensoPart Inc.  
30600 Telegraph Rd.  
Suite 2345  
Bingham Farms, MI, 48025  
Tel. +1 866 2827610  
usa@sensopart.com

### China

SensoPart China  
202, No. 35, Lane 1555  
West Jinshajiang Road  
Jiading District  
201803 Shanghai  
Tel. +86 21 69017660  
china@sensopart.cn

Find your local supplier at: <https://www.sensopart.com/en/company/contact/>