

# FORK LIGHT BARRIERS OGU

WITH IO-LINK

 **di-soric**

# FORK LIGHT BARRIERS WITH IO-LINK: OGU

**MORE FLEXIBLE, FASTER, MORE PRECISE, SIMPLER AND  
EVEN MORE RUGGED - WITH THE EXACT SAME SIZE.**

For decades, di-soric has been developing fork light barriers that set new standards. We are now offering the fork light barrier 4.0 with an innovative dual operation concept, either over IO-Link with the configuration of all sensor functions including 4 selectable sensor modes or through easy manual switching point adjustment with a potentiometer.

## Very easy operation

Adjustment of the switching point and NO/NC changeover using a potentiometer

## Fully backward compatible

with previous di-soric OGU models in terms of design and M8 connection

## Even more rugged design

in a powder-coated metal housing with full encapsulation and IP67, compatible with all OGU and standard mounting options

## Push-pull output

pnp or npn function in one device

## Ready-to-run: 4 preconfigured sensor modes

- Standard
- High Resolution
- Power
- Speed

## Fork widths of 30 - 250 mm\*

for a wide variety of applications

## IO-Link

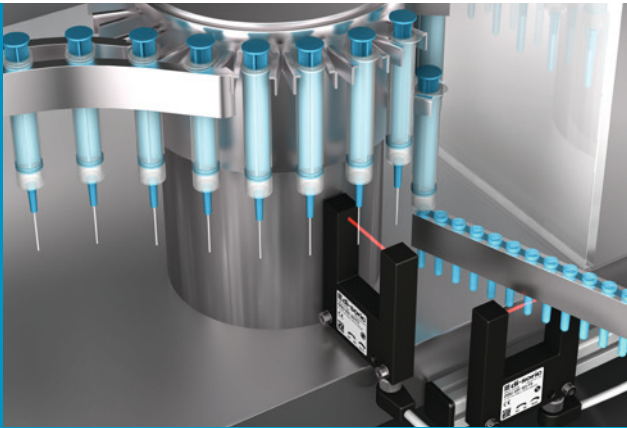
Selection of the sensor mode or teach-in over IO-Link



# THE EVOLUTION: FORK LIGHT BARRIER 4.0

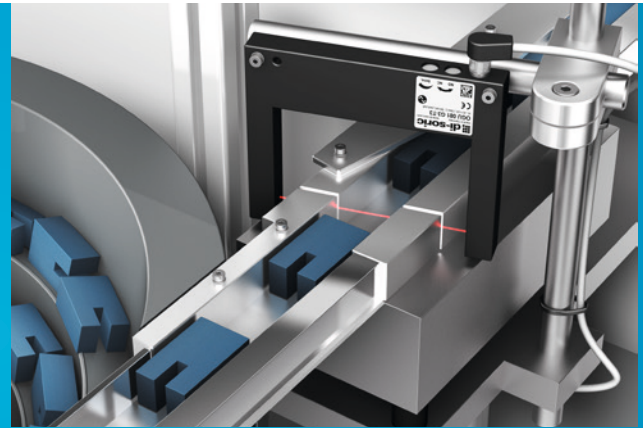
## APPLICATION-SPECIFIC CONFIGURATION INSTEAD OF SPECIFIC HARDWARE.

Instead of keeping various forks on hand for different applications, you can save the application-specific configuration, load it into the fork as needed or select the necessary operation mode and get started right away. Device swapping works just as easily.



### CANNULA MONITORING OGU 031 G3-T3

The High Resolution sensor mode even enables detection of small parts with diameters down to 0.2 mm. di-soric fork light barriers use an LED light source to achieve a level of performance close to that of laser light barriers.



### ACCUMULATION MONITORING OGU 081 G3-T3

The Power sensor mode reduces cleaning cycles to a minimum.

## RELIABLE, HIGH-PERFORMANCE APPLICATIONS USING OGU WITH IO-LINK.

### 4 SENSOR MODES



#### Standard

- Switching frequency: 5000 Hz
- Reproducibility: 0.02 mm

#### High Resolution

- Resolution for small parts detection improved by 30%

#### Power

- Increased transmitting power and thus increased function reserve with reduced sensitivity to dirt

#### Speed

- Fast operation at 8000 Hz switching frequency



### DIAGNOSTICS

Qualitative and quantitative diagnostics:

- Analysis of process stability and teach-in quality (qualitative)
- Min/max, teaching and threshold measured values (quantitative)



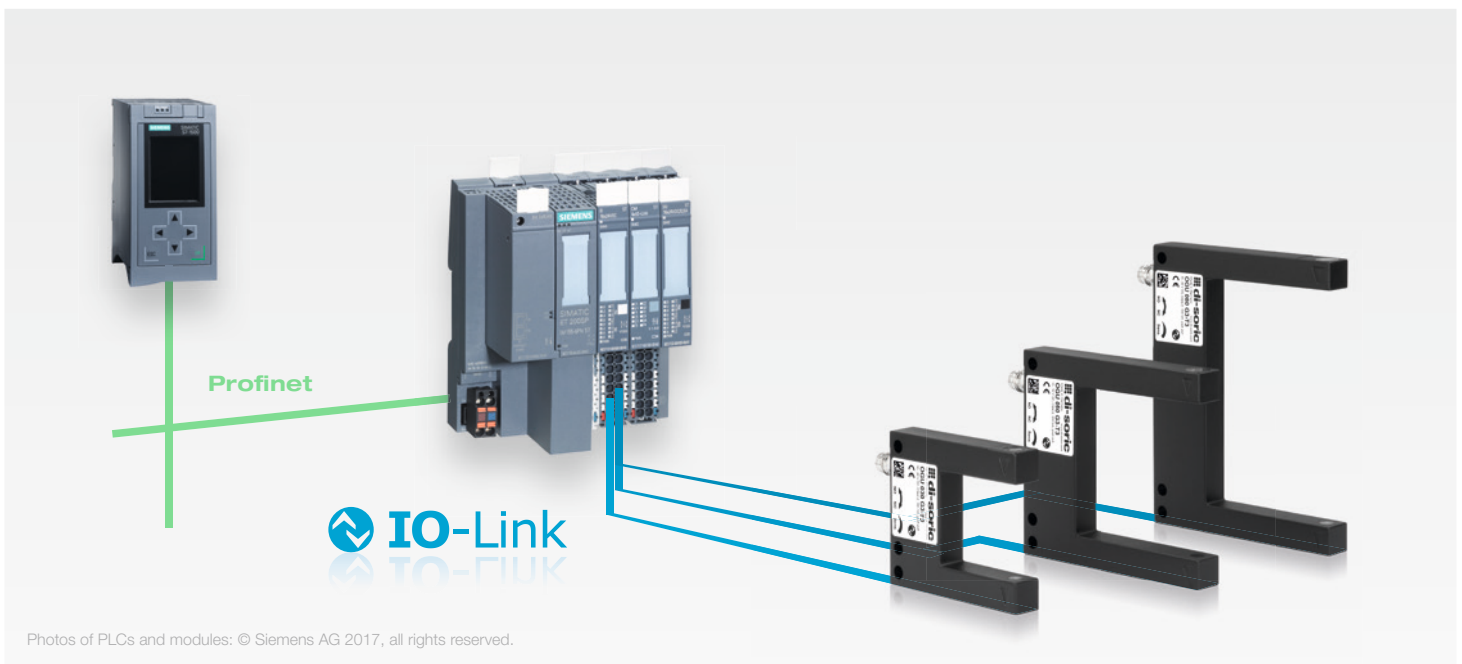
### EASY MAINTENANCE

- Device swapping without manual intervention or specialized knowledge thanks to IO-Link 1.1 with data storage in the master
- Smart Sensor Profile – fully compliant with standards

# SMART THANKS TO IO-LINK. SAVE TIME AND MONEY.

## GET STRAIGHT TO THE POINT.

IO-Link provides a point-to-point connection within any network, fieldbus or backplane bus. The IO-Link master can be installed either directly in the field or in the control cabinet. The international IO-Link standard (in accordance with IEC 61131-9) is now regarded as an "enabler for Industry 4.0"








## 5 REASONS TO CHOOSE OUR OGU WITH IO-LINK.

- 1 COST REDUCTION** thanks to reduced stockkeeping
  - One sensor can provide the solution for various applications by adjusting the configuration. Application-specific sensors are no longer necessary.
- 2 IMPLEMENTATION OF INNOVATIVE MACHINE CONCEPTS** thanks to consistent communication
  - Recipe management in the IO-Link master, remote maintenance, diagnostics, sensor-configuration in accordance with the standardized Smart Sensor Profile
- 3 REDUCTION OF COMMISSIONING TIMES** through standard cabling and data storage in the master
  - Standard plug connectors and push/pull outputs
  - The sensor can be configured directly over the IO-Link master and is saved in the master with IO-Link 1.1
- 4 INCREASED MACHINE PRODUCTIVITY** through configuration and identification
  - Additional functionality integrated directly into the sensor:  
Sensor modes, teach-in, evaluation of signal values, pulse extension, operation lock
- 5 REVOLUTIONIZING MAINTENANCE** through self-diagnostics and data storage
  - Process stability diagnostics (e.g. function reserve)
  - Easy device swapping without manual intervention or specialized knowledge thanks to data storage in IO-Link 1.1 master

# TECHNICAL DATA

## OGU WITH IO-LINK

	OGU 03x G3-T3	OGU 05x G3-T3	OGU 08x G3-T3	OGU 12x G3-T3
				
Housing dimensions H/W/D	50 / 60 / 10 mm	70 / 80 / 10 mm	100 / 80 / 10 mm	144 / 90 / 12 mm
Fork width (mm)	30 mm	50 mm	80 mm	120 mm
Red light, 660 nm, clocked	<b>OGU 031 G3-T3</b>	<b>OGU 051 G3-T3</b>	<b>OGU 081 G3-T3</b>	<b>OGU 121 G3-T3</b>
Infrared light 880 nm	<b>OGU 030 G3-T3</b>	<b>OGU 050 G3-T3</b>	<b>OGU 080 G3-T3</b>	<b>OGU 120 G3-T3</b>
Resolution (smallest detectable part)	Ø 0.3 mm (min. Ø 0.2 mm) <sup>1</sup>	Ø 0.3 mm (min. Ø 0.2 mm) <sup>1</sup>	Ø 0.3 mm (min. Ø 0.2 mm) <sup>1</sup>	Ø 0.5 mm (min. Ø 0.3 mm) <sup>1</sup>
Reproducibility	0.02 mm	0.02 mm	0.02 mm	0.02 mm
Adjustable switching frequency	5 000 Hz (max. 8 000 Hz) <sup>2</sup>	5 000 Hz (max. 8 000 Hz) <sup>2</sup>	5 000 Hz (max. 8 000 Hz) <sup>2</sup>	5 000 Hz (max. 8 000 Hz) <sup>2</sup>
Switching output	Push-pull/pnp/npn adjustable via IO-Link, 100 mA, NO/NC (switchable via potentiometer or IO-Link)			
Interface	<b>IO-Link V1.1</b> <b>Smart Sensor Profile</b>			
Sensitivity adjustment	Using potentiometer or IO-Link			
Sensor modes	<b>Standard</b> – General applications <b>High Resolution</b> – For detection of the smallest objects <b>Power</b> – Increased function reserve <b>Speed</b> – Safe detection of fast-moving parts			
Protection type / protection class	IP67 / III			
Connector	M8, 3-pin			
Connection cable	TK ...			
	<sup>1</sup> in the <b>High Resolution</b> sensor mode			 -Approved as of the end of 2017
	<sup>2</sup> in the <b>Speed</b> sensor mode			

**SOLUTIONS. CLEVER. PRACTICAL.**

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