



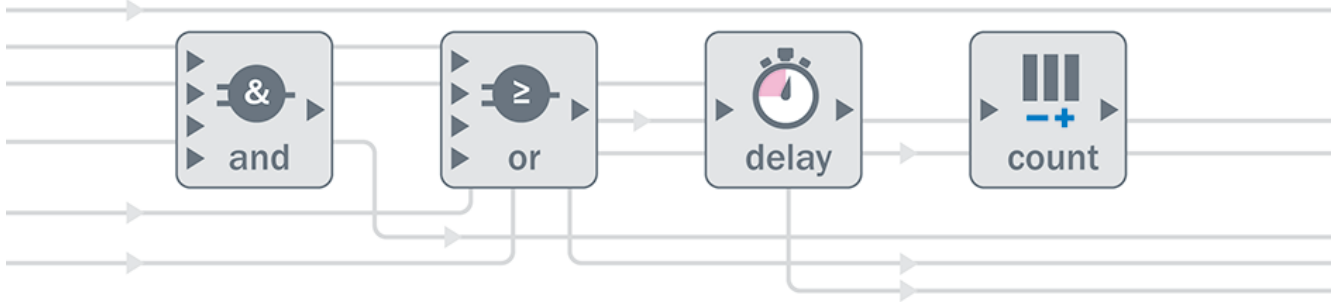
# SIG200

More than just an IO-Link master

**SENSOR INTEGRATION GATEWAY**

**SICK**  
Sensor Intelligence.

### Advantages

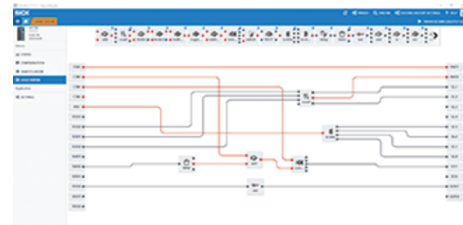


### Drag & drop logic

A powerful logic editor integrated into SOPAS ET enables the creation of unique sensor systems. Visualize all linked signals and solve your application tasks quickly and easily with pre-defined logic gates (e.g. AND gates, OR gates), a negation module, time delays or a counter. Simply drag and drop logic modules and connection points to create your system. Access is established via the USB or Ethernet connection of the SIG200 using the SOPAS ET software. Alternatively, the integrated web server can be used.



Solve simple application tasks using binary switching signals or measured values from your sensors or actuators without an additional controller.



Logic editor: A graphical configuration environment to easily combine inputs (left side) via a logic function (top bar) with outputs (right side).



**With the SIG200, the connected sensor and actuator signals and measured values can be efficiently combined and aggregated via the drag-and-drop function of the logic editor. This is easy and problem-free without special software knowledge, which considerably reduces programming effort, therefore saving time.**



# IO-Link

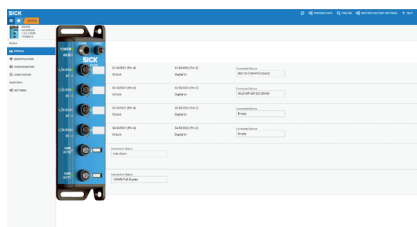
## Take advantage of advantages and extended functions - using Smart Sensors and IO-Link

The SIG200 Sensor Integration Gateway is an IO-Link master. It can be connected to various types of controls to access information of connected IO-Link devices and the aggregated system information created in the logic editor. IO-Link offers countless benefits, e.g. the automated storage of device parameters and unique device identification. An IO-Link device can be identified automatically via the device- and manufacturer-specific ID. This identification is used to ensure that the right device is used for device exchange. For quick and error-free commissioning, the device parameter of a certain sensor is automatically transmitted to a replacement device so that the correct parameterization is available after exchange.

As co-founder of IO-Link, SICK offers one of the broadest IO-Link portfolios on the market for numerous sensor types with all kinds of detection technologies. The SIG200 gateway enables the quick and easy connection of IO-Link signals, binary sensors and the construction of complex sensor-actuator systems. Utilize SICK's extensive experience regarding a wide range of sensor principles as well as IO-Link technology.



Easy device exchange due to automated device identification: When using IO-Link devices in connection with the SIG200 IO-Link master, neither specially-trained staff nor additional aids or instructions are needed to reliably replace sensors.



Visualization and parameterization of sensors and Sensor Integration Gateways via SOPAS ET. In addition to the USB configuration channel, the SIG200 offers an integrated web server for easy access to the user interface via Ethernet.



As co-founder of IO-Link, SICK offers one of the broadest IO-Link portfolios on the market. Smart Sensors with IO-Link generate and receive data and information which goes beyond conventional switching signals or measured process parameters. This allows them to create substantial increases in efficiency, more flexibility, and better planning security for predictive maintenance of machines and systems. Use SICK's extensive experience regarding a wide range of sensor principles and with the SIG100 and SIG200 Sensor Integration Gateways.



**An IO-Link is a point-to-point communication protocol for connecting intelligent sensors and actuators to an automation network via an IO-Link master, e.g. SIG200. It allows central access to information which was previously only available within the connected devices. The visualization and configuration of IO-Link devices is made much easier with the SIG200 and SOPAS ET - the configuration software from SICK.**

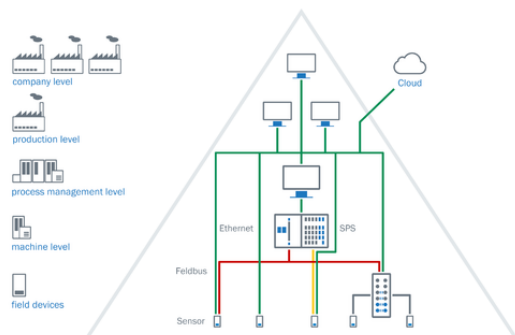


## Industry 4.0 – “Dual Talk”

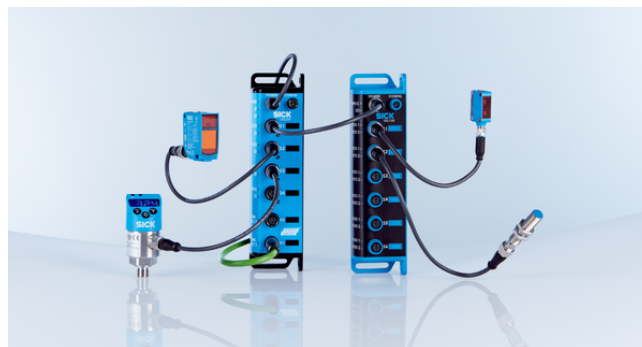
The SIG200 enables two parallel communication channels: One to the PLC and one to the cloud. That’s what we call “Dual Talk”.

The edge computing channel is used for the fieldbus communication (e.g. PROFINET) with the PLC. The cloud computing channel is used for data transmission via EST-API (JSON) to the cloud or any other Industry 4.0 application.

This enables real-time communication with the PLC parallel to the communication with the cloud, e.g. for condition monitoring or predictive maintenance. Industry 4.0 is happening now.



The SIG200 enables two parallel communication channels: One for edge computing for the PLC and one for cloud computing for Industry 4.0 applications. That’s what we call “Dual Talk”.



With IO-Link technology and the Sensor Integration Gateways from SICK, a simple and efficient wiring concept for Industry 4.0 applications with full data transparency down to the last I/O signal is possible.



**„Dual Talk“ enables two parallel communication channels – communication to the control (via the fieldbus) and to cloud applications (via REST-API).**



### Technical data overview

<b>Supported products</b>	IO-Link Devices Binary actuators Binary switching sensors						
<b>IO-Link</b>							
<b>USB</b>							
<b>Ethernet</b>							
<b>EtherNet/IP™</b>							
<b>REST API</b>							
<b>PROFINET</b>							
<b>Inputs/outputs</b>	<table border="0"> <tr> <td style="text-align: right;">S1-S4</td> <td>4 configurable ports Pin4 can be used in one of the available port modes: IO-Link, digital input or digital output. An additional digital input signal can be connected using Pin2.</td> </tr> <tr> <td style="text-align: right;">LINK/ACT 1 &amp; 2</td> <td>Two Ethernet ports are provided for the network connection</td> </tr> <tr> <td style="text-align: right;">CONFIG</td> <td>Port for configuration via USB with SOPAS ET (SOPAS ET can be downloaded for free from <a href="http://www.sick.com">www.sick.com</a>)</td> </tr> </table>	S1-S4	4 configurable ports Pin4 can be used in one of the available port modes: IO-Link, digital input or digital output. An additional digital input signal can be connected using Pin2.	LINK/ACT 1 & 2	Two Ethernet ports are provided for the network connection	CONFIG	Port for configuration via USB with SOPAS ET (SOPAS ET can be downloaded for free from <a href="http://www.sick.com">www.sick.com</a> )
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CONFIG	Port for configuration via USB with SOPAS ET (SOPAS ET can be downloaded for free from <a href="http://www.sick.com">www.sick.com</a> )						
<b>Enclosure rating</b>	IP67						

### Product description

The SIG200 Sensor Integration Gateway is an IO-Link master for integrating IO-Link devices into common PLC environments and enterprise level systems. With the SIG200, digital inputs, digital outputs or IO-Link signals of several devices can be detected, combined, evaluated and transmitted via various fieldbus protocols. A second data channel is also available for higher-level processing via a REST-API. Parameterization is done via a web server or the SOPAS ET configuration software from SICK. Among other things, SOPAS ET contains a powerful logic editor. It creates unique logic combinations for the respective application - regardless of the programmable logic controller.

### At a glance

- 4 configurable IO-Link master ports (standard I/O or IO-Link)
- Easy parameterization via USB or Ethernet thanks to intuitive SOPAS ET user interface
- “Dual Talk”: Access to sensor data from the company level and in parallel via industrial Ethernet
- Solution of complex application tasks with the logic editor

### Your benefits

- The IO-Link master technology enables seamless integration and data transparency from the sensor to the PLC systems
- Economical entry into IO-Link technology
- Intuitive parameterization and setup with access to all parameters of IO-Link devices thanks to the simple download of IODD files
- Pre-process data directly where it is created
- INDUSTRY 4.0 READY - access to sensor data from the company level
- 

### Fields of application

- IO-Link master for connecting IO-Link devices and digital switching signals in all areas of factory and logistics automation
- Creation of autonomous sensor systems consisting of IO-Link sensors and actuators via drag & drop in the logic editor without an additional controller

### Ordering information

Other models and accessories → [www.sick.com/SIG200](http://www.sick.com/SIG200)

- **Logic editor:** ✓
- **Product category:** IO-Link Master

Description	Further functions	Connection CONFIG	Communication interface	Type	Part no.
–	USB connection for easy configuration of the SIG200 Sensor Integration Gateway with SOPAS ET, the engineering tool from SICK, logic editor is available for easy configuration of logic functions	1 x M8, 4-pin female connector, USB 2.0 (USB-A)	IO-Link, USB, Ethernet, PROFINET, REST API	SIG200-0A0412200	1089794
			IO-Link, USB, Ethernet, REST API	SIG200-0A0G12200	1102605
The IO-Link Master starter kit is suitable for simulating a variety of SIG200 applications. It is pre-configured for plug and play use and is excellently suited for getting familiar with the functional scope of the SIG200.	–	–	PROFINET, REST API	SIG200-0A041220P01	1100608
The SIG200 Sensor Integration Gateway is an IO-Link master with 4 configurable ports through which the IO-Link devices or standard inputs or standard outputs can be connected to a PLC or cloud application using the REST API.	USB connection for easy configuration of the SIG200 Sensor Integration Gateway with SOPAS ET, the engineering tool from SICK, logic editor is available for easy configuration of logic functions	1 x M8, 4-pin female connector, USB 2.0 (USB-A)	IO-Link, USB, Ethernet, EtherNet/IP™, REST API	SIG200-0A0512200	1089796

## SICK AT A GLANCE

SICK is one of the leading manufacturers of intelligent sensors and sensor solutions for industrial applications. A unique range of products and services creates the perfect basis for controlling processes securely and efficiently, protecting individuals from accidents and preventing damage to the environment.

We have extensive experience in a wide range of industries and understand their processes and requirements. With intelligent sensors, we can deliver exactly what our customers need. In application centers in Europe, Asia and North America, system solutions are tested and optimized in accordance with customer specifications. All this makes us a reliable supplier and development partner.

Comprehensive services complete our offering: SICK LifeTime Services provide support throughout the machine life cycle and ensure safety and productivity.

For us, that is “Sensor Intelligence.”

## WORLDWIDE PRESENCE:

Contacts and other locations –[www.sick.com](http://www.sick.com)