SICK IO-Link Master Starter Kit

THE EASY START WITH IO-LINK

SICK
Sensor Intelligence.

What is a Sensor Integration Gateway (SIG)?

- SIG = Sensor Integration Gateway
- Main function of a SIG: Multiple sensor signals are collected and/or converted into a different protocol and forwarded to a higher-level system
- Connectivity and communication solutions all in a single box

Intuitive configuration with SOPAS ET. Also use the embedded IODD interpreter to configure the connected IO-Link devices.

Get ready for Industry 4.0 with the REST API

Easy fieldbus integration

Save time & money during installation and monitoring

Reduce wiring effort with the SIG100 + SIG200. Up to 52 standard I/O signals can be collected.

Logic Editor – solve small applications without any additional control or PLC
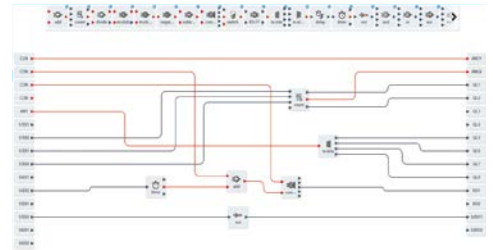
HOW TO CONNECT THE SIG200

Connect any IO-Link sensors to our new SIG200 IO-Link Master.

Connect the SIG200 to your computer via USB or Ethernet and start the engineering tool from SICK: SOPAS ET.

Configure your IO-Link sensors or use the embedded Logic Editor with SOPAS ET. The latest version of SOPAS ET Version (V2018.4 or higher) must be installed!

SOPAS ET

A powerful logic editor integrated into SOPAS ET enables the creation of unique sensor systems. Visualize all connected signals and solve your application tasks quickly and easily with predefined logic gates, e.g., AND/OR gates, an inverter, time delays or a counter. Simply drag and drop logic blocks and connection points to create your system. Access is established via the USB port on the device combined with the SOPAS ET software or alternatively via a webserver.

FieldEcho®

FieldEcho® allows for the parameterization and monitoring of all IO-Link devices in a plant throughout the whole life cycle, regardless of the PLC, fieldbus, or IO-Link master used. FieldEcho® communicates with a PLC through OPC UA. Using the SICK generic function block, FieldEcho® provides access to the IO-Link device process and service data. FieldEcho® consists of a server that is responsible for communication. It can read and write IO-Link device data as well as provide it for the FieldEcho front end. Due to its REST API, this data is also accessible for any third-party application. Its front end interprets IODDs and provides a graphical user interface for the whole system as well as for any single IO-Link device.
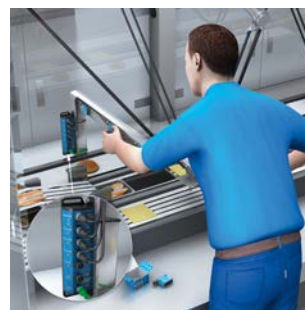
Application examples

Collect standard I/O signals with a SIG100. Convert IO-Link signals to a fieldbus message with the SIG200.

Smart sensors like IMC and the new IO-Link Master SIG200 are a perfect combination for solving smart tasks.

Easy device replacement due to automated device identification: No specially trained personnel, additional auxiliary aids or instructions are required in order to reliably replace sensors when using IO-Link devices together with the IO-Link Master SIG200.

The SIG200 minimizes the risk of failures and optimizes maintenance and servicing periods. Detection and rectification of critical sensor states is done by service technicians before failure.

STEP-BY-STEP

1 **First commissioning & hardware wiring**

Power up the SIG 200 with the help of the provided power supply. Now connect the IMC inductive proximity sensor to port S1 on the SIG200 using the short sensor cable. Use the other sensor cable for the WLG16 photoelectric sensor and connect that sensor with port number S2 to the SIG200. Put the reflector next to the WLG16 sensor.

2 **Preparing the configuration**

Set up one of the three possible channels for configuring the SIG200:
• M8 to USB
• Ethernet
• FieldEcho
For a quick start, we recommend using one of the first two channels.

3 **Basic configuration**

Start up SOPAS ET and browse through the identification, configuration and IO-Link devices page. On the identification page, you will find which device-specific data is illustrated. The configuration page will provide you with options for logging into different user profiles and subsequently manage the available four ports as well as the IODDs of the connected IO-Link devices. Please note that we have already uploaded the necessary IODDs for the two provided SICK sensors. Once you have entered the IO-Link devices page, you can change parameters of the sensors and read out their process and service data. You can connect and configure any IO-Link device with port class A via the related IODD file, which can be uploaded to the SIG200.

4 **Advanced configuration**

The built-in logic editor of SOPAS ET will then allow you to individually define logic functions for the available input signals. Thanks to the simple drag & drop mechanism, you can experiment with different input-output combinations and integrate various logic blocks to create an application that works just the way you want.

5 **Execute**

Once you are finished with your configuration, roll it out by clicking on the "transfer and execute flow" button.

Further sources of information

Along with this guide, there are other sources that will provide you with an in-depth impression of how to get started with the SIG200 and effectively use it for solving Industry 4.0 applications.

SIG200 SOPAS ET Video Tutorial
➜ www.sick.com/SIG200

SIG200 Manual
➜ www.sick.com/SIG200

CONTENT & ORDER INFORMATION FOR THE SIG200 STARTER KIT

Part number: 1100608
T code: SIG200-0A041220P01

Product type	Items included in the delivery scope	Type code	Part number	Image
–	SIG200*	SIG200-0A041220S01	1100615	
Sensors	IMC	IMC18-12NPPVC0SA00	1079295	
	WLG16	WLG16P-24162120A00	1218661	
Accessories	Reflector	P250F	5308843	
	2 x Sensor cable	YF2A14-C60VB3M2A14	2096248	
	Ethernet cable	SSL-2J04-G02ME	6034414	
	USB cable	YM8UA4-015VG3MUSA4	6051163	
	Power supply	–	2079609	
Software	SOPAS ET**	–	–	
	FieldEcho®***	–	1612993	

*A special version of the SIG200, which already has the IODDs of the included sensors on board
SOPAS ET can be downloaded free of charge at ➜ **www.sick.com
***The FieldEcho software version for 4 ports can be downloaded free of charge at ➜ **www.sick.com**

SICK
Sensor Intelligence.