



# SIG350

The universal IO-Link master with IIoT competence

**SICK**  
Sensor Intelligence.

## Advantages



### Innovative IO-Link ports for maximum efficiency and flexibility

The SIG350 Sensor Integration Gateway makes it easy to reduce installation effort, space and costs: The innovative IO-Link ports offer maximum flexibility in application, as they can be freely configured as Class A or Class B. One IO-Link device or one digital standard sensor can be connected to each of the 8 ports. When using the Class A configuration, an additional digital signal can be connected to pin 2. When combined with upstream IO-Link hubs such as the SIG100, the number of digital signals that can be processed with just one master can be significantly increased. The Class B configuration can also be used to connect energy-intensive IO-Link devices with current requirements of up to 4 A. This makes it possible to control complex systems consisting of sensors and actuators. The advantage: There is no need to define the port type in advance. This increases flexibility and reduces inventory costs, as you do not have to stock different IO-Link masters.



Can be expanded flexibly: With 8 ports and the option of processing up to 104 signals, the SIG350 bundles sensor and actuator information in a highly efficient manner.



Maximum power: The compact M12 voltage supply is particularly powerful with 16 A each for  $U_S$  and  $U_A$ . In addition, the voltage supply can be looped through across several masters (daisy chaining), thereby reducing the required number of cable paths.



Very powerful: Devices with increased power requirements, such as electric motors or valve terminals, can be connected via configured Class B ports up to a maximum current of  $2 \times 2$  A.



**More design freedom: Assigning pin 2 means that either an additional I/O can be provided at the port or a device with increased power requirements can be connected. This means that the SIG350 can be adapted to the application and its requirements with maximum flexibility.**



## Future-proof communication from the sensor to the cloud

The market share of Industrial Ethernet networks has doubled in the last five years, and the trend is growing. That is why the SIG350 is available with the three leading Industrial Ethernet protocols PROFINET, EtherNet/IP or EtherCAT. The protocols network industrial systems reliably and efficiently and ensure future-proof data exchange in real time. Combined with the available IIoT interfaces, the SIG350 is suitable for a wide range of automation tasks in the fully automated industrial environment of tomorrow. All in the spirit of Industry 4.0.



Integrated web server for optimal configuration: The integrated web server makes extensive information, diagnostics and configuration options available. The web server also provides all current live data (e.g. current, voltage and temperature values) as well as diagnostics.



The SIG350 is optimized for IIoT applications and features a variety of interfaces: REST API JSON and MQTT JSON according to the JSON integration for IO-Link of the IO-Link community as well as integrated OPC UA server according to the OPC UA for IO-Link Companion specification.



The SIG350 enables two parallel communication channels – communication to the control (via the fieldbus) and to cloud applications (via IIoT interfaces). That's what we call "Dual Talk".



**Simple and seamless integration, both today and tomorrow: With the SIG350, feeding sensor data into modern industrial networks is simple. The data can also be transmitted to cloud applications at the same time. Thanks to Dual Talk, the right data can always be made available exactly where it is needed.**



## Technical data overview

<b>Supported products</b>	IO-Link Devices Binary switching sensors Binary actuators
<b>IO-Link</b>	✓
<b>Ethernet</b>	✓
<b>PROFINET</b>	✓
<b>REST API</b>	✓
<b>MQTT</b>	✓
<b>OPC UA</b>	✓
<b>EtherNet/IP™</b>	✓
<b>EtherCAT</b>	✓
<b>Enclosure rating</b>	IP67 In fastened condition

## Product description

The SIG350 Sensor Integration Gateway is an IO-Link master that bundles and controls sensor communication via 8 IO-Link ports. The SIG350 allows for seamless integration and loss-free data transmission from the sensor to the cloud – and with reduced cabling work. The ports can be loaded with a maximum of 4 A in order to be able to integrate actuators with higher power requirements. The PROFINET, EtherNet/IP and EtherCAT industrial protocols are available for network communication. Thanks to IO-Link even during operation, an integrated web server allows for intuitive configuration of the IO-Link master as well as the connected sensors. Data exchange with cloud solutions is possible via the REST API, MQTT and OPC UA IIoT interfaces.

## At a glance

- 8 IO-Link ports (M12; 5-pin; A-coded; Class A/B)
- Current carrying capacity of up to 16 A at max. 4 A per port for  $U_S$  and  $U_A$
- Rugged IP67 housing
- Operating temperature  $-30\text{ °C} \dots +70\text{ °C}$
- PROFINET, EtherNet/IP and EtherCAT available
- REST API, MQTT and OPC UA IIoT protocols can be used
- Rotary encoding switch for IP addressing

## Your benefits

- Enables loss-free communication between a large number of sensors or actuators and the higher-level plant controller
- Simple and transparent data integration thanks to uniform wiring concept with IO-Link
- Innovative IO-Link ports that can be freely configured as Class A or Class B ports.
- Quick and innovative commissioning and parameterization via integrated web server
- INDUSTRIE 4.0 READY thanks to IIoT connection via REST API, MQTT and OPC UA

## Fields of application

- Integration of IO-Link devices and digital switching signals in all areas of factory, logistics, and process automation
- Areas where sensors or actuators require class B ports
- Direct integration of IO-Link sensor and actuator data in IIoT landscapes

## Ordering information

Other models and accessories → [www.sick.com/SIG350](http://www.sick.com/SIG350)

- **Further functions:** Web server integrated, IIoT interface available (dual talk)
- **Product category:** IO-Link Master

Communication interface	Type	Part no.
IO-Link, Ethernet, EtherCAT <sup>®</sup> , REST API, MQTT, OPC UA	SIG350-0006AP100	6076924
IO-Link, Ethernet, EtherNet/IP <sup>™</sup> , REST API, MQTT, OPC UA	SIG350-0005AP100	6076923
IO-Link, Ethernet, PROFINET, REST API, MQTT, OPC UA	SIG350-0004AP100	6076871

## 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)