



# SIM10xx

Compact. Flexible. Intelligent.

SENSOR INTEGRATION MACHINE

**SICK**  
Sensor Intelligence.



### Product description

As part of the SICK AppSpace eco-system, the programmable SIM10xx Sensor Integration Machines offer multiple sensor data acquisition and fusion processes, thereby providing space for new application solutions. The acquired data is processed and visualized for important information, for example quality control or process analysis. In addition, the IoT gateway functions enable connection from the edge to the cloud via the Internet in the context of Industry 4.0. The SIM10xx products feature a powerful processor and Ethernet interfaces for cameras and LiDAR sensors. Other sensors can be integrated via IO-Link, for instance for distance and height measuring purposes.

### At a glance

- Interfaces for the cloud and cameras, illumination, LiDAR scanners, (IO-Link) sensors and encoders
- Up to 4 Ethernet ports
- SICK Interface & Algorithm API for image and sensor data processing
- Enclosure rating IP65 or IP20 (depending on type)
- Design without fans
- Flexible in use, e.g., with the Flexi Soft safety controller

### Your benefits

- Easy development of customized data applications with graphical application modeling in SICK AppSpace
- Processing of sensor and camera data as well as IoT gateway functions in one device
- Configurable firewall for a high level of data security
- One-box solution: Complete hardware system for a quick project start without a complex search for SW drivers, components and cables
- Diverse image/scan processing options for all industrial fields of application
- Flexible and compact housing concept for mounting directly on the system or in the control cabinet

### Fields of application

- Recording, presentation, processing and archiving of data, e.g. for material management, quality control, process analysis and predictive maintenance in the context of Industry 4.0
- Multi-sensor or image-based inspection, measurement, and identification of objects and devices in all areas of industrial automation

## Ordering information

Other models and accessories → [www.sick.com/SIM10xx](http://www.sick.com/SIM10xx)

- **Sub product family:** SIM1004
- **Enclosure rating:** IP65
- **Connections:** Ethernet PoE In, Ethernet PoE Out, SENSOR, IO-Link master
- **Further functions:** FPGA for I/O handling

Product category	Supported products	Processor	Toolkit	Type	Part no.
Programmable devices	2D and 3D LiDAR sensors, pico- und midiCam series, Image-based code readers, Fixed mount bar code scanners, RFID read/write device, displacement measurement sensors, Photoelectric sensors	Dual-core ARM Cortex-A9 CPU with NEON accelerator	SICK algorithm API	SIM1004-OP0G311	1098148

- **Sub product family:** SIM1012
- **Enclosure rating:** IP65
- **Connections:** Power, Incremental, serial, CAN, S1-S6, IO-Link Master, Ethernet
- **Further functions:** FPGA for I/O handling

Product category	Supported products	Processor	Toolkit	Type	Part no.
Programmable devices	2D and 3D LiDAR sensors, pico- und midiCam series, incremental and absolute encoders, Image-based code readers, Fixed mount bar code scanners, RFID read/write device, displacement measurement sensors, Photoelectric sensors	Dual-core ARM Cortex-A9 CPU with NEON accelerator	SICK algorithm API	SIM1012-OP0G200	1098146

- **Sub product family:** SIM1000 FX
- **Enclosure rating:** IP20
- **Further functions:** FPGA for I/O handling
- **Product category:** programmable devices
- **Processor:** dual-core ARM Cortex-A9 CPU with NEON accelerator
- **Toolkit:** SICK algorithm API

Connections	Supported products	Type	Part no.
Terminal block 1-4, Ethernet	2D and 3D LiDAR sensors, pico- und midiCam series, incremental and absolute encoders, Image-based code readers, Fixed mount bar code scanners, RFID read/write device, displacement measurement sensors, Photoelectric sensors	SIM1000-OP0B100	1097816
Terminal block 1-4, Ethernet, FLEXBUS+	2D and 3D LiDAR sensors, pico- und midiCam series, incremental and absolute encoders, Image-based code readers, Fixed mount bar code scanners, RFID read/write device, displacement measurement sensors, Photoelectric sensors, Flexi Soft main module	SIM1000-OP0B110	1097817

## 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)