

# SIM1000-0P0B100

SIM10xx

**SENSOR INTEGRATION MACHINE** 





# Ordering information

Туре	Part no.
SIM1000-0P0B100	1097816

You can find additional information on the device and firmware releases in the <a href=""https://supportportal.sick.com/products/integration-products/sensor-integration-machine/sim4x00/">SICK Support Portal. A complete overview of the connecting cables for SIMxxxxx is also available in the Support Portal. You must register before logging in.

Other models and accessories → www.sick.com/SIM10xx



# Detailed technical data

#### **Features**

Product category	Programmable devices
Task	Data recording, evaluation, and archiving
Supported products	2D and 3D LiDAR sensors pico- und midiCam series Incremental and absolute encoders Image-based code readers Fixed mount barcode scanners RFID read/write device Displacement measurement sensors Photoelectric sensors
Processor	Dual-core ARM Cortex-A9 CPU with NEON accelerator
Random Access Memory	1 GB
Flash memory	256 MB in total, 30 MB of which available for applications
Application development kit	SICK AppStudio Can be programmed within the SICK AppSpace environment
Toolkit	SICK algorithm API
Further functions	FPGA for I/O handling

# Mechanics/electronics

Connections	
Terminal block 1-4	Spring terminal
Ethernet	RJ45
Supply voltage	24 V DC, $\pm$ 25 $\%$
Operating current	To be protected with 2 A
Power consumption	≤ 10.5 W, without connected sensor
Power output	≤ 9 W, total, all connections
Output current	
IY2	≤ 100 mA
L+	200 mA (400 mA possible briefly when switching on)

Enclosure rating	IP20 as per EN 60529:1991-10 + A1:2000-02 + A2:2013-10
Protection class	III (EN 61140:2016-05)
Housing material	Polycarbonate
Housing color	Light gray (RAL 7035)
Weight	430 g, with spring terminals
Dimensions (L x W x H)	67.5 mm x 96.5 mm x 120.6 mm

# Interfaces

Ethernet	✓, TCP/IP, FTP, OPC UA, MQTT	
Remark	Not yet compatible with the GigE machine vision standard. Connecting the picoCam2 and midiCam2 is therefore not yet possible.	
Function	Data output, Configuration, firmware update	
Data transmission rate	2 x 10/100/1.000 Mbit/s, 2 x 10/100 Mbit/s	
IO-Link	<b>√</b> , IO-Link V1.1	
Function	IO-Link Master	
Data transmission rate	≤ 230 kBaud	
Serial	<b>√</b> , RS-422, RS-485	
Remark	Can also be configured as an encoder interface, max. frequency 2 MHz	
Data transmission rate	2 MBaud	
CAN	<b>√</b>	
Function	${\tt SICK\ CAN\ sensor\ network\ CSN\ (CAN\ controller/CAN\ device,\ multiplexer/server),\ termination\ resistor\ can\ be\ controlled\ using\ app}$	
Data transmission rate	20 kbit/s 1 Mbit/s	
USB	<b>√</b> , USB 2.0	
Function	Configuration, diagnosis, firmware update	
Operator interfaces	Web server (GUI), SICK AppStudio (programming), SICK AppManager (app installation, firmware update)	
Data storage and retrieval	Image and data logging via optional microSD memory card, internal RAM and external FTP	
Memory card(s)	Industry-grade microSD memory card (flash card), 1 GB	
Digital inputs/outputs		
IY1	Digital input (Max. frequency: 30 kHz)	
IY2	Digital inputs/outputs (can be configured) (Max. frequency: 30 kHz)	
Optical indicators	7 red/green (front film status displays) 4 Green (front film status displays) 4 orange/green (ethernet status displays)	

# Ambient data

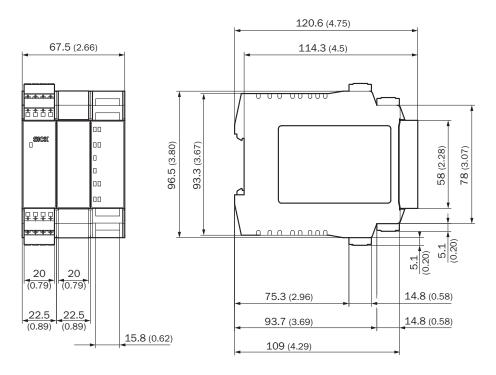
Electromagnetic compatibility (EMC)	EN 61000-6-2:2005-08 EN 61000-6-4:2007+A1:2011
Shock load	EN 60068-2-27:2009-05 EN 61131-2:2007-09
Vibration resistance	EN 60068-2-6:2008-02 EN 61131-2:2007-09
Ambient operating temperature	-25 °C +55 °C <sup>1)</sup>
Ambient temperature, storage	-25 °C +70 °C <sup>1)</sup>

 $<sup>^{1)}</sup>$  Permissible relative air humidity: 0  $\% \dots$  90 % (non-condensing).

#### Classifications

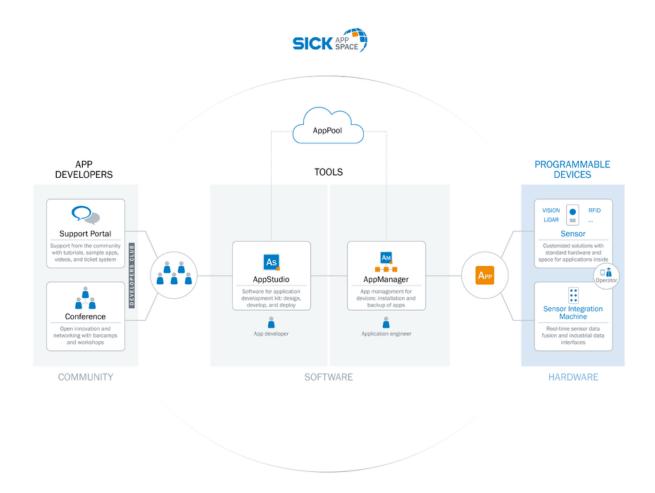
eCI@ss 5.0	27242208
eCl@ss 5.1.4	27242608
eCl@ss 6.0	27242608
eCl@ss 6.2	27242608
eCl@ss 7.0	27242608
eCl@ss 8.0	27242608
eCl@ss 8.1	27242608
eCl@ss 9.0	27242608
eCl@ss 10.0	27242608
eCl@ss 12.0	27242608
ETIM 5.0	EC001604
ETIM 6.0	EC001604
ETIM 7.0	EC001604
ETIM 8.0	EC001604
UNSPSC 16.0901	32151705

# Dimensional drawing (Dimensions in mm (inch))



#### Overview

SICK AppSpace



#### Recommended services

Additional services → www.sick.com/SIM10xx

	Туре	Part no.
Function Block Factory		
<ul> <li>Description: The Function Block Factory supports common programmable logic controllers (PLCs) from various manufacturers, such as Siemens, Beckhoff, Rockwell Automation and B&amp;R. More information on the FBF can be found <a href="https://fbf.cloud.sick.com" target="_blank"> here</a>.</li> <li>Note: You can configure your function block at <a href="https://fbf.cloud.sick.com" target="_blank"> Function Block Factory.</a> As a login please use your SICK ID.</li> </ul>	Function Block Factory	On request

# 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

