



SIM4000-0P03G10

SIM4x00

SENSOR INTEGRATION MACHINE

SICK
Sensor Intelligence.



Ordering information

Type	Part no.
SIM4000-0P03G10	1078787

You can find additional information on the device and firmware releases in the [SICK Support Portal](https://supportportal.sick.com/products/integration-products/sensor-integration-machine/sim4x00/). A complete overview of the connecting cables for SIMxxx is also available in the Support Portal. You must register before logging in.

Other models and accessories → www.sick.com/SIM4x00



Detailed technical data

Features

Supported products	2D and 3D vision sensors Incremental and absolute encoders GigE Vision cameras Image-based code readers Fixed mount barcode scanners RFID read/write device 2D and 3D LiDAR sensors Displacement measurement sensors Photoelectric sensors
Application development kit	SICK AppStudio
Further functions	HALCON13 (image processing library) JPEG compression Rectification Image stitching

Mechanics/electronics

Connections	
I/O	1 x M12, 17-pin female connector, A-coded
Power main and CAN	2 x M12, 4-pin male connector, T-coded
Incremental	2 x M12, 8-pin female connector, A-coded
Serial	2 x M12, 8-pin female connector, A-coded
Fieldbus	2 x M12, 4-pin female connector, D-coded
CAN	2 x M12, 5-pin female connector, A-coded
S1-S4, IO-Link Master	4 x M12, 5-pin female connector, A-coded
S5-S8	4 x M12, 5-pin female connector, A-coded
GigE Ethernet with POE	6 x M12, 8-pin female connector, X-coded
Ethernet 10GigE	2 x M12, 8-pin female connector, X-coded
Supply voltage	24 V DC, ± 10 %
Power consumption	Typ. 60 W, without connected sensor
Power output	≤ 300 W, total, all connections

Output current	I/O voltage supply	≤ 0.5 A
	Serial	≤ 1 A
	Incremental	≤ 1 A
	CAN voltage supply	≤ 3.2 A
	S1-S8 and I/O digital outputs	≤ 100 mA
	S1-S4 Spannungsversorgung	≤ 1 A
	S5-S8	≤ 1 A (Lighting switched via voltage supply)
	S5-S8	≤ 2.5 A (Illumination switched via digital output)
Enclosure rating	IP65	
Protection class	II	
Housing material	Aluminum die cast	
Housing color	Light blue (RAL 5012)	
Weight	5.12 kg	
Dimensions (L x W x H)	147 mm x 164.5 mm x 272 mm	

Interfaces

Ethernet		✓, TCP/IP, FTP, OPC UA, MQTT
	Function	Data output, Configuration, firmware update
	Data transmission rate	6 x 10/100/1.000 Mbit/s, 2 x 10.000 Mbit/s
PROFINET		✓
	Function	PROFINET Dual Port
	Data transmission rate	10/100 MBit/s
EtherNet/IP™		✓
	Function	EtherNet/IP™ Dual Port
	Data transmission rate	10/100 MBit/s
EtherCAT		✓
	Remark	Under preparation
IO-Link		✓, IO-Link V1.1
	Function	IO-Link Master
	Data transmission rate	≤ 230 kBaud
Serial		✓, RS-232, RS-422, RS-485
	Remark	Also configurable as an encoder port. RS-232, RS-422 configurable via termination resistor which can be activated.
	Data transmission rate	RS-232: 115,2 kBaud, RS-422/RS-485: 2 MBaud, Input/output for the encoder, max 2 MHz
CAN		✓ (2)
	Remark	CSN (SICK CAN Sensor Network)
	Function	SICK CAN sensor network CSN (CAN controller/CAN device, multiplexer/server) with activatable termination resistor
	Data transmission rate	20 kbit/s ... 1 Mbit/s
USB		✓, 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), max. 16 GB
Digital inputs/outputs	
I/O	4 opto-decoupled inputs, 7 inputs/outputs (configurable)
S1-S4	In each case 1 input, in each case 1 input/output (configurable)
S5-S8	In each case 1 input, in each case 2 inputs/outputs (configurable)
Control elements	1 selector switch (under the servicing panel) 1 functional button (under the servicing panel)
Optical indicators	15 red/green (status displays) 6 red/green (PoE displays) 8 Orange (Activity displays) 10 Green (Link displays) 12 red/green (Device status displays) 2 blue (scheduling display)

Ambient data

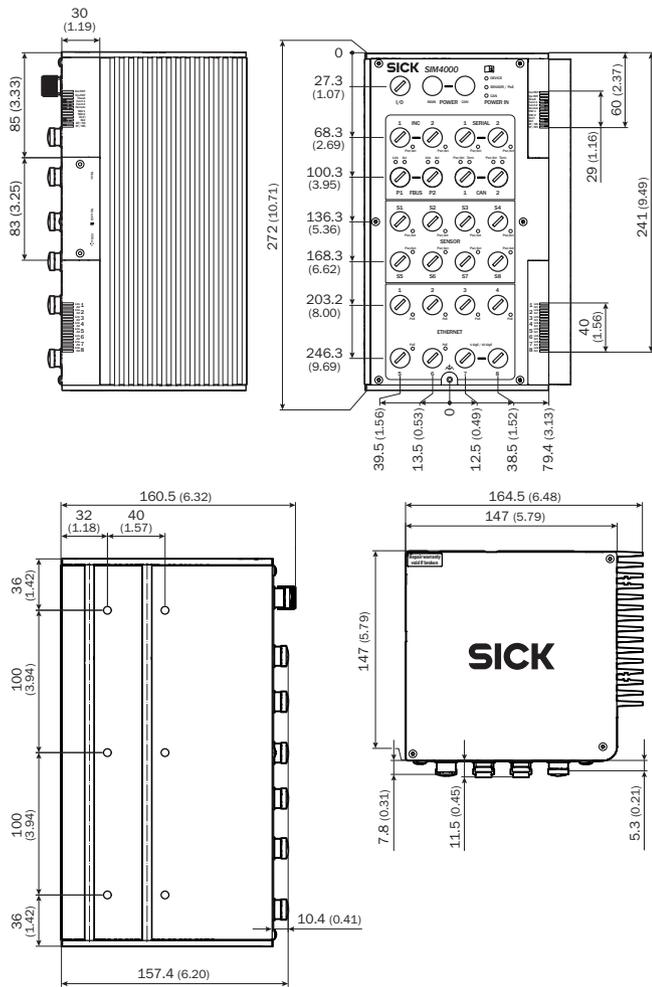
Electromagnetic compatibility (EMC)	EN 61000-6-2:2005-08, EN 61000-6-3 (2007-01)
Shock load	EN 60068-2-6
Ambient operating temperature	0 °C ... +50 °C ¹⁾
Ambient temperature, storage	-20 °C ... +70 °C ¹⁾

¹⁾ Permissible relative air humidity: 0 % ... 90 % (non-condensing).

Classifications

eCl@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))



Dimensions in mm (inch)

Overview

SICK AppSpace



Recommended accessories

Other models and accessories → www.sick.com/SIM4x00

	Brief description	Type	Part no.
Mounting brackets and plates			
	Adapter plate for SIM4000, mounting hardware included	Adapter plate	2083419
Other mounting accessories			
	30 pieces, Cable tie for Clone Plug/Host-Guest Plug	Cable marker	2086696
		Torque screwdriver with attachment for M12 plug connector	2081618

	Brief description	Type	Part no.
Plug connectors and cables			
		DOL-1204-G1M5C	6059939

Recommended services

Additional services → www.sick.com/SIM4x00

	Type	Part no.
Function Block Factory		
<ul style="list-style-type: none"> • Description: The Function Block Factory supports common programmable logic controllers (PLCs) from various manufacturers, such as Siemens, Beckhoff, Rockwell Automation and B&R. More information on the FBF can be found <a _blank"="" href="https://fbf.cloud.sick.com target=">here. • Note: You can configure your function block at <a _blank"="" href="https://fbf.cloud.sick.com target=">Function Block Factory. As a login please use your SICK ID. 	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