



SIM4000-0P03G10

SIM4x00

EDGE COMPUTING DEVICES

SICK
Sensor Intelligence.



Ordering information

Type	part no.
SIM4000-0P03G10	1078787

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 (Lighting switched via voltage supply)
Serial	≤ 1 A (Illumination switched via digital output)
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
S5-S8	≤ 2.5 A
Enclosure rating	IP65
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
Remark	Under preparation
Function	Data output, Configuration, firmware update
Data transmission rate	20 kbit/s ... 230 kBaud, 6 x 10/100/1.000 Mbit/s, 2 x 10.000 Mbit/s, Input/output for the encoder, max 2 MHz
PROFINET	✓ , IO-Link V1.1, RS-422, RS-485
Remark	Also configurable as an encoder port. RS-232, RS-422 configurable via termination resistor which can be activated.
Function	PROFINET Dual Port, diagnosis, firmware update
Data transmission rate	≤ 1 Mbit/s, 10/100 MBit/s
EtherNet/IP™	✓ , RS-232
Remark	CSN (SICK CAN Sensor Network)
Function	EtherNet/IP™ Dual Port
Data transmission rate	10/100 MBit/s
EtherCAT®	✓ , USB 2.0
Function	IO-Link Master
Data transmission rate	RS-232: 115,2 kBaud, RS-422/RS-485: 2 MBaud
IO-Link	✓
Function	SICK CAN sensor network CSN (CAN controller/CAN device, multiplexer/server) with activatable termination resistor
Serial	✓
Function	Configuration
CAN	✓ (2)
USB	✓
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, 6, 8, 10, 12, 2 red/green, red/green, Orange, Green, red/green, blue (status displays, PoE displays, Activity displays, Link displays, Device status displays, scheduling display) 15, 6, 8, 10, 12, 2, red/green, red/green, Orange, Green, red/green, blue, status displays, PoE displays, Activity displays, Link displays, Device status displays, scheduling display
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)

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 humidity: 0% ... 90% (non-condensing).

General notes

Description	Sensor Integration Machine Application\ Development Kit: SICK AppStudio Communication interfaces: Ethernet, PROFINET, EtherNet/IP™, EtherCAT®, IO-Link, Serial, CAN, USB
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Certificates

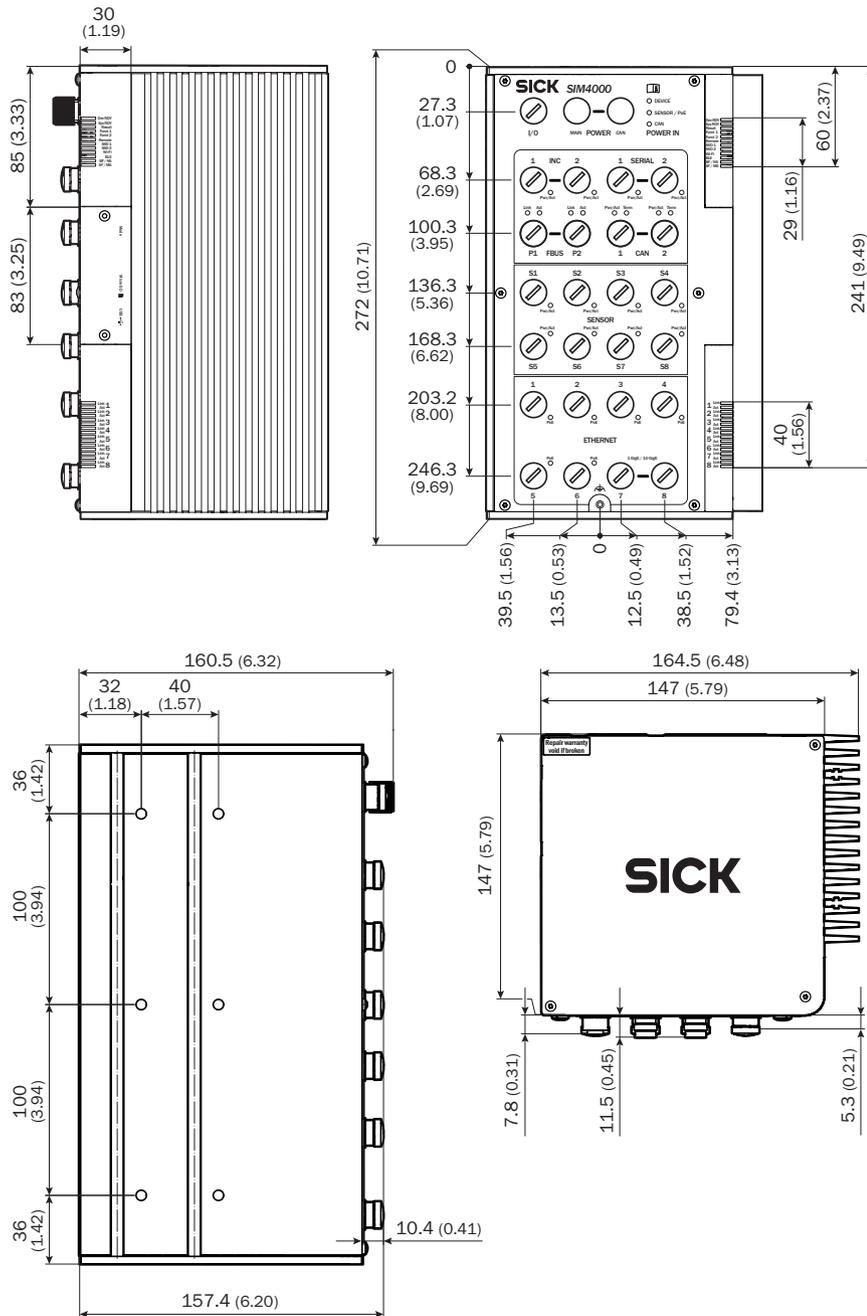
EU declaration of conformity	✓
UK declaration of conformity	✓
ACMA declaration of conformity	✓
China RoHS	✓

Classifications

ECLASS 5.0	27242208
ECLASS 5.1.4	27242608
ECLASS 6.0	27242608
ECLASS 6.2	27242608
ECLASS 7.0	27242608
ECLASS 8.0	27242608
ECLASS 8.1	27242608
ECLASS 9.0	27242608
ECLASS 10.0	27242608
ECLASS 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 systems			
	<ul style="list-style-type: none"> Description: Adapter plate for SIM4000 Items supplied: Mounting hardware included 	Adapter plate	2083419
	<ul style="list-style-type: none"> Description: Cable tie for Clone Plug/Host-Guest Plug Packing unit: 30 pieces 	Cable marker	2086696
	<ul style="list-style-type: none"> Description: For loosening and tightening M12 plug connectors to the system plug with defined torque (0,4 Nm) 	Torque screwdriver with attachment for M12 plug connector	2081618

	Brief description	Type	part no.
connectors and cables			
	<ul style="list-style-type: none">• Description: Sensor/actuator cable, unshielded• Connection type head A: Female connector, M12, 4-pin, straight, T-coded• Connection type head B: Flying leads• Signal type: Sensor/actuator cable• Cable: 1.5 m, 4-wire• Application: Zones with oils and lubricants	DOL-1204-G1M5C	6059939

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