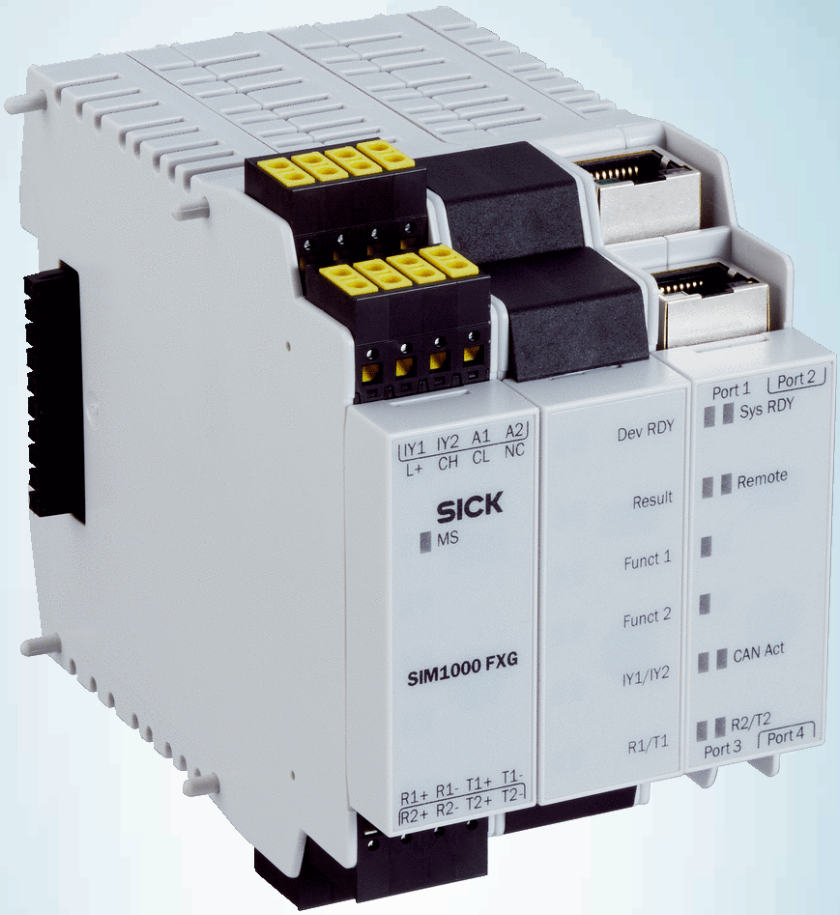
Data sheet

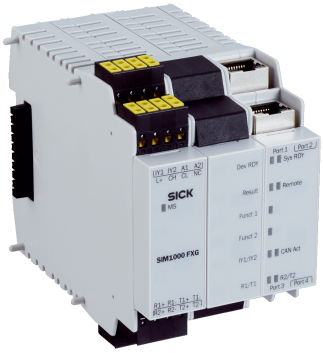


SIM1000-0P0B110

SIM10xx

EDGE COMPUTING DEVICES

SICK
Sensor Intelligence.



Ordering information

Type	part no.
SIM1000-0P0B110	1097817

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

Detailed technical data

Features

Product category	Programmable devices
Task	Data recording, evaluation, and archiving For integration into a Flexi Soft system
Supported products	2D and 3D LiDAR sensors Incremental and absolute encoders Image-based code readers Fixed mount barcode scanners RFID read/write device Displacement measurement sensors Photoelectric sensors Flexi Soft main module
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
FLEXBUS+	10-pin male connector
Supply voltage	24 V DC, ± 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 (400 mA possible briefly when switching on)
L+	200 mA
Enclosure rating	IP20 as per EN 60529:1991-10 + A1:2000-02 + A2:2013-10
Enclosure rating	IP20

Protection class	III (EN 61140:2016-05)
Housing material	Polycarbonate
Housing color	Light gray (RAL 7035)
Weight	445 g, with spring terminals
Dimensions (L x W x H)	73.5 mm x 120.6 mm x 106.7 mm

Interfaces

Ethernet	✓ , TCP/IP, RS-485
Remark	Not yet compatible with the GigE machine vision standard. Connecting the picoCam2 and midiCam2 is therefore not yet possible.
Function	Data interface (read result output), Service interface, FTP (image transmission)
Data transmission rate	2 MBaud ... 230 kBaud, 2 x 10/100/1.000 Mbit/s, 2 x 10/100 Mbit/s
IO-Link	✓ , IO-Link V1.1
Remark	Can also be configured as an encoder interface, max. frequency 2 MHz
Function	IO-Link Master, termination resistor can be controlled using app
Data transmission rate	20 kbit/s ... 2 MBaud
Serial	✓ , RS-422
Function	SICK CAN sensor network CSN (CAN controller/CAN device, multiplexer/server)
Data transmission rate	≤ 1 Mbit/s
CAN	✓
Function	Internal safety bus
FI	✓
Function	Internal safety bus
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, 4, 4 red/green, Green, orange/green (front film status displays, front film status displays, ethernet status displays) 7, 4, 4, red/green, Green, orange/green, front film status displays, front film status displays, ethernet status displays
Inputs/outputs	
IY1	Digital input (Max. frequency: 30 kHz)
IY2	Digital inputs/outputs (can be configured) (Max. frequency: 30 kHz)

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 [1]

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

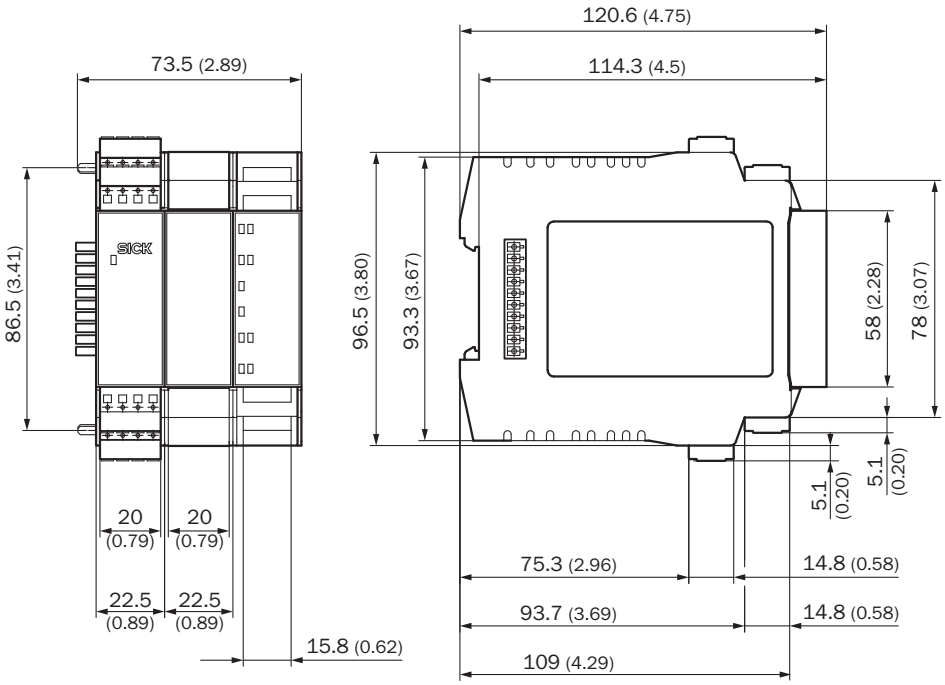
Ambient temperature, storage	–25 °C ... +70 °C [1]

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

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
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

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