Data sheet

HERMES

SIM1012-0AXG200 HERMES SMEMA

SIM10xx

EDGE COMPUTING DEVICES

SICK
Sensor Intelligence.

Ordering information

Type	part no.
SIM1012-0AXG200 HERMES SMEMA	1125640

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

Detailed technical data

Features

Product category	Programmable, configurable
Task	Conversion of SMEMA N+1 and SMEMA N-1 signals according to IPC-SMEMA-9851 to IPC-Hermes-9852 upstream and downstream messages.
SensorApp	Hermes SMEMA Connect
License type	The software is provided as a device license. A license is bound to a specific hardware ID.
License period	The license is issued without a time limit.
Language	English
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	
Power	1 (M12, 4-pin male connector, T-coded)
Incremental	6 (M12, 8-pin female connector, A-coded)
Serial	2 (M12, 5-pin female connector, A-coded)
CAN	M12, 8-pin female connector, X-coded
Supply voltage	24 V DC, ± 10 % [1]
Operating current	To be protected with 12 A
Power consumption	≤ 15 W, without connected sensor
Power output	≤ 270 W, total, all connections

[1] SELV as per EN 60950-1.
[2] With functional earth.

Output current	
Serial voltage supply	≤ 1 A
Incremental voltage supply	≤ 0.5 A
CAN voltage supply	≤ 3.2 A
S1-S6	≤ 100 mA
Enclosure rating	IP65
Protection class	III [2)]
Housing material	Aluminum
Housing color	Light blue (RAL 5012), gray-white front film (RAL 9002)
Weight	876 g, including connection plugs
Dimensions (L x W x H)	86.5 mm x 45.8 mm x 265.5 mm

[1)] SELV as per EN 60950-1.
[2)] With functional earth.

Interfaces

Ethernet	✓ , TCP/IP, FTP, OPC UA, MQTT
Remark	Can also be configured as an RS-422 interface, max. frequency 2 MHz
Function	Data output, Configuration, firmware update
Data transmission rate	20 kbit/s ... 230 kBaud, 2 x 10/100/1.000 Mbit/s
Incremental	IO-Link V1.1, RS-422, RS-485
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	≤ 1 Mbit/s, RS-232: 115,2 kBaud, RS-422/RS-485: 2 MBaud
IO-Link	RS-232
Function	SICK CAN sensor network CSN (CAN controller/CAN device, multiplexer/server), diagnosis
Serial	USB 2.0
Function	Configuration
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	
S1-S6	In each case 1 input, in each case 1 input/output (can be configured) (Max. frequency: 30 kHz)
Optical indicators	7 red/green (status displays) 2 Green (Link displays) 11 blue (status displays for power, CAN, sensor, incremental, serial) 1 (CAN)

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
Vibration resistance	EN 60068-2-6:2008-02
Ambient operating temperature	0 °C ... +50 °C [1)]

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

Ambient temperature, storage	–20 °C ... +70 °C [1]

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

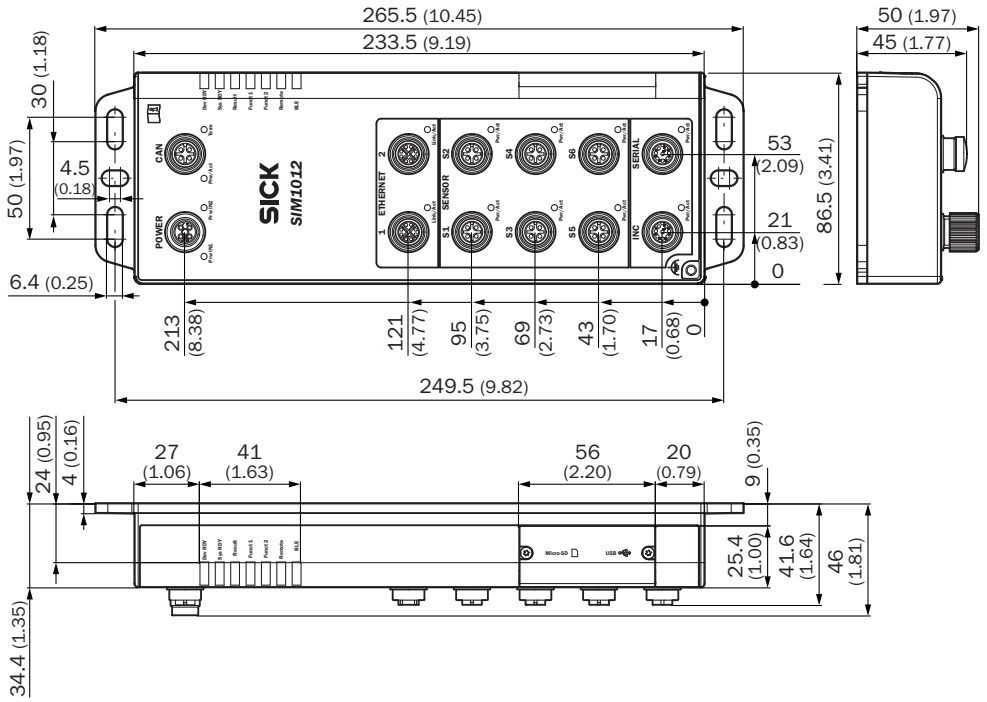
Certificates

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

Classifications

ECLASS 5.0	27242208
ECLASS 5.1.4	27242208
ECLASS 6.0	27242208
ECLASS 6.2	27242208
ECLASS 7.0	27242208
ECLASS 8.0	27242208
ECLASS 8.1	27242208
ECLASS 9.0	27242208
ECLASS 10.0	27242208
ECLASS 12.0	27242208
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