Product data sheet

SIG200-0A0G12200

SIG200

SICK
Sensor Intelligence.

Ordering information

Type	Part no.
SIG200-0A0G12200	1102605

Other models and accessories ➜ www.sick.com/SIG200

Detailed technical data

Features

Product category	IO-Link Master
Supported products	IO-Link Devices Binary actuators Binary switching sensors
Further functions	Web server integrated USB connection for easy configuration of the SIG200 Sensor Integration Gateway with SOPAS ET, the engineering tool from SICK Logic editor is available for easy configuration of logic functions
Items supplied	SIG200-0A0G12200, 4x blind plugs (M12) on port S2, S3, S4, P2, 1x blind plug (M8) on port CONFIG, Marking labels, quickstart

Mechanics/electronics

Connections	
IO-Link	4 x M12, 5-pin female connector, A-coded
Power	1 x M12, 4-pin plug, A-coded
CONFIG	1 x M8, 4-pin female connector, USB 2.0 (USB-A)
Ethernet	2 x M12, 4-pin female connector, D-coded
	1 x M8, 4-pin female connector, USB 2.0 (USB-A)
	2 x M12, 4-pin female connector, D-coded
Power voltage supply	
Supply voltage	10 V DC ... 30 V DC [1]
Current consumption	≤ 175 mA, ≤ 3,000 mA (At supply voltage 24 V DC) [2] [3]
Optical indicators	4, 4, 2, 1, 1 LED green, LED yellow, LED green, LED green, LED green (To the IO-Link ports, Pin4 (C/DI/DO), To the IO-Link ports, Pin2 (DI), To the Ethernet ports, For the Power Port)

[1] 10 - 30 V DC without IO-Link, 18 - 30 V DC with IO-Link.
[2] Without sensors, outputs switched off.
[3] The sum of all outputs, including the digital outputs, must not exceed the maximum current consumption of the device. The current consumption must be limited.
[4] Pin 4 configured as digital output. The maximum output current does not depend on the voltage supply at pin 1 of S1-S4.

Input/output characteristics	
S1-S4 pin 1 voltage supply	≤ 500 mA ($V_H \geq V_{US}$ - 3 V) [4]
S1-S4 pin 4 output current	≤ 200 mA (Type 3 IEC 61131-2) [4]
Power Port pin 4 output voltage HIGH	Type 1 IEC 61131-2
S1-S4 pin 2 input voltage	Type 3 IEC 61131-2
S1-S4 pin 4 input voltage	Type 1 IEC 61131-2
Enclosure rating	IP67
Protection class	III
Housing material	Zinc
Housing color	Light blue/Black
Weight	520 g
Dimensions (L x W x H)	213.9 mm x 57 mm x 38.3 mm
UL File No.	E497722

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Interfaces

Communication interface	IO-Link, USB, Ethernet, REST API, USB, Ethernet, REST API
Logic editor	✓
Web server	✓
IO-Link Master	
Function	The SIG200 Sensor Integration Gateway is an IO-Link master with 4 configurable ports to which IO-Link device as well as binary switching sensors and actuators can be connected. The gateway data is made available to a PLC or cloud application via the REST API. SIG200 can also be operated as a standalone system by directly configuring simple logic functions across several connected devices via the SOPAS ET user interface.
IO-Link version	V1.1, V1.0
Port Class	A
Number of IO-Link ports	4
Transmission type	COM1, COM2, COM3
Operator interfaces	SOPAS ET, the engineering tool for configuration via USB, Additionally, the SIG200 can be configured via the integrated webserver. Default IP adress: 192.168.0.1
MAC address	See product label
Number of inputs	Max. 8 x PNP, type 1 or 4 x IO-Link
Number of outputs	Max. 4 x PNP
Max. Output frequency	50 Hz
Inputs/outputs	
S1-S4	4 configurable ports Pin4 can be used in one of the available port modes: IO-Link, digital input or digital output. An additional digital input signal can be connected using Pin2. (SOPAS ET can be downloaded for free from www.sick.com)
LINK/ACT 1 & 2	Two Ethernet ports are provided for the network connection
CONFIG	Port for configuration via USB with SOPAS ET (SOPAS ET can be downloaded for free from www.sick.com)
Initialization time after switch on	60s (plus additional time for IODD installation)

Ambient data

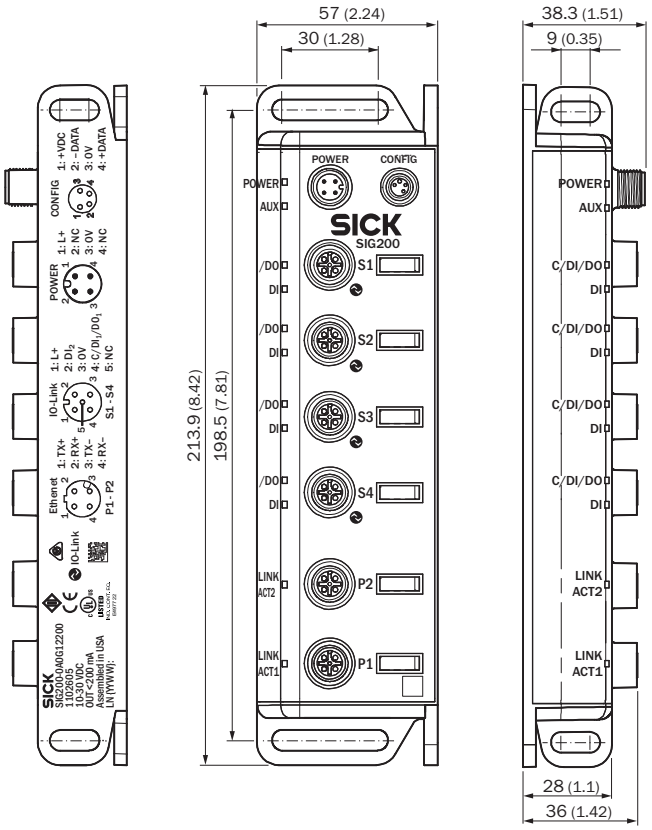
Ambient operating temperature	–40 °C ... +55 °C [1]
Ambient temperature, storage	–40 °C ... +75 °C [1]
Electromagnetic compatibility (EMC)	EN 61000-6-2:2005-08, EN 61000-6-3:2007-01
Shock load	EN 60068-2-6

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

Classifications

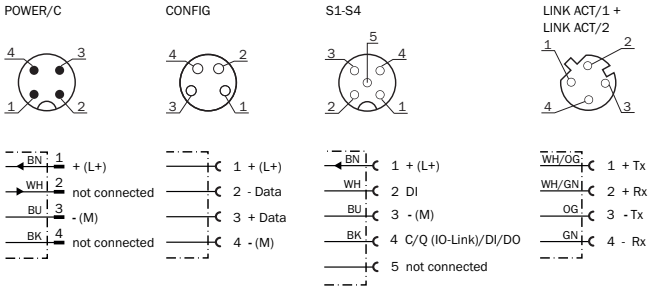
ECLASS 5.0	27242208
ECLASS 5.1.4	27242608
ECLASS 6.0	27242608
ECLASS 6.2	27242608
ECLASS 7.0	27242608
ECLASS 8.0	27242608
ECLASS 8.1	27242608
ECLASS 9.0	27242608
ECLASS 10.0	27242608
ECLASS 11.0	27242608
ECLASS 12.0	27242608
ETIM 5.0	EC001604
ETIM 6.0	EC001604
ETIM 7.0	EC001604
ETIM 8.0	EC001604
UNSPSC 16.0901	32151705

Dimensional drawing (Dimensions in mm (inch))

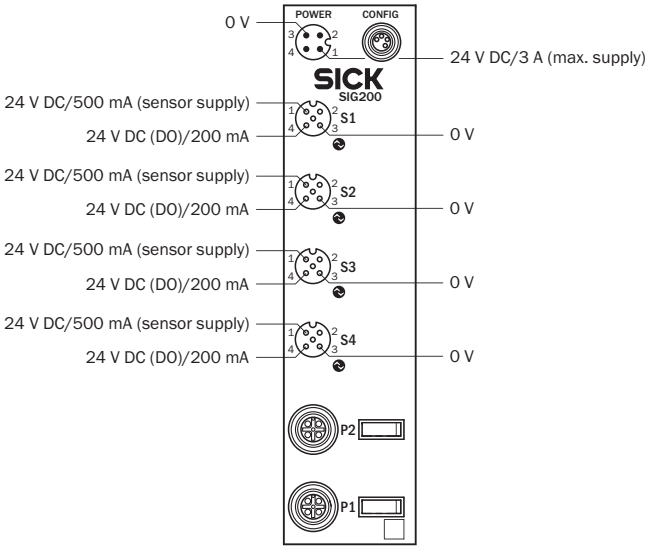


Connection diagram

Cd-430

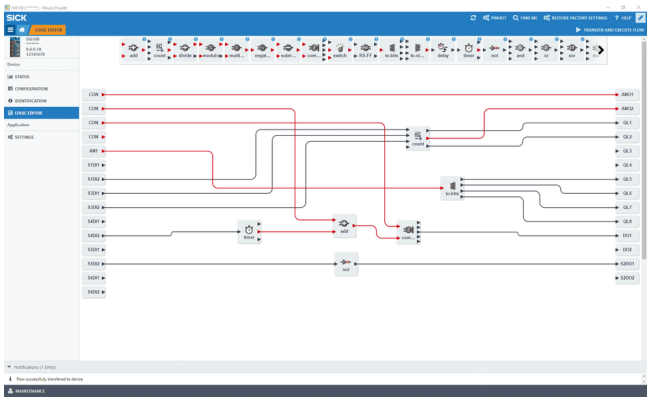


PIN assignment



Adjustment possible

Logic editor



Recommended accessories

Other models and accessories ➜ www.sick.com/SIG200

	Brief description	Type	Part no.
Others			
	• **Product family:** Protective caps and hoods • **Description:** Protective cap for M12 socket or unused ports	DOS-12SK	5309189

	Brief description	Type	Part no.
	• **Connection type head A:** Male connector, M12, 4-pin, straight, D-coded • **Connection type head B:** Male connector, RJ45, 8-pin, straight • **Signal type:** Ethernet • **Cable:** 2 m, 4-wire, CAT5, CAT5e, PUR, halogen-free • **Description:** Ethernet, shielded, Head A: male connector, M12, 4-pin, straight, D coded Head B: male connector, RJ45, 8-pin, straight Cable: PUR, halogen-free, shielded, 2 x 2 x 0.14 mm², Ø 6.4 mm	SSL-2J04-G02ME60	6047916
	• **Connection type head A:** Male connector, M8, 4-pin, straight • **Connection type head B:** Male connector, USB-A, 4-pin, straight • **Signal type:** USB 2.0 • **Cable:** 1.5 m, 4-wire, PVC • **Description:** USB 2.0, shielded	YM8U24-015VG3MUSA	6051163
	• **Connection type head A:** Female connector, M12, 4-pin, straight, A-coded • **Connection type head B:** Male connector, M12, 4-pin, straight, A-coded • **Signal type:** Sensor/actuator cable • **Cable:** 1 m, 4-wire, PUR, halogen-free • **Description:** Sensor/actuator cable, unshielded • **Application:** Uncontaminated zones, Zones with oils and lubricants, Robot, Drag chain operation	YF2A14-010UB3M2A14	2095997
	• **Connection type head A:** Male connector, M12, 4-pin, straight, D-coded • **Connection type head B:** Male connector, RJ45, 4-pin, straight • **Signal type:** Ethernet, PROFINET • **Cable:** 2 m, 4-wire, PUR, halogen-free • **Description:** Ethernet, PROFINET, shielded • **Application:** Drag chain operation, Zones with oils and lubricants	YM2D24-020PN1MRJA4	2106182
Sensor Integration Gateway			
	• **Further functions:** USB connection for easy configuration of the SIG100 Sensor Integration Gateway with SOPAS ET, the engineering tool from SICK, logic editor is available for easy configuration of logic functions • **I/O connection:** 6 x M12, 5-pin female connector, A-coded • **Connection CONFIG:** 1 x M8, 4-pin female connector, USB 2.0 (USB-A) • **Logic editor:** yes • **Communication interface:** USB, IO-Link • **Product category:** IO-Link Hub	SIG100-0A0111100	1089792

Recommended services

Additional services ➜ www.sick.com/SIG200

	Type	Part no.
Function Block Factory		
• **Description:** The Function Block Factory is an engineering tool for creating device and environment-specific function blocks that enable IO-Link sensors to be integrated into programmable logic controllers. The Function Block Factory supports common programmable logic controllers (PLCs) of various manufacturers such as Siemens, Beckhoff, Rockwell Automation B&R and more. More information on the FBF can be found here . • **Provision:** Customers can obtain access to the Function Block Factory and the license via https://fbf.cloud.sick.com.	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.”

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