



SIG200-0A0412200

SIG200

NETWORK DEVICES

SICK
Sensor Intelligence.



Ordering information

Type	part no.
SIG200-0A0412200	1089794

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	SIG200-0A0412200, 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)
Power voltage supply	
Supply voltage	10 V DC ... 30 V DC ¹⁾

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.

Current consumption	≤ 175 mA, ≤ 3,000 mA, At supply voltage 24 V DC ^{2) 3)}
Optical indicators	4 LED green (To the IO-Link ports, Pin4 (C/DI/DO)) 4 LED yellow (To the IO-Link ports, Pin2 (DI)) 2 LED green (To the Ethernet ports) 1 LED green (For the Power Port) 2 LED dual-color (for bus error and system error communication)
Input/output characteristics	
S1-S4 pin 1 voltage supply	≤ 500 mA ($V_H \geq V_{US} - 3 \text{ V}$) 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

¹⁾ 10 - 30 V DC without IO-Link, 18 - 30 V DC with IO-Link.

²⁾ Without sensors, outputs switched off.

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⁴⁾ Pin 4 configured as digital output. The maximum output current does not depend on the voltage supply at pin 1 of S1-S4.

Interfaces

Communication interface	IO-Link, USB, Ethernet, PROFINET, 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)
Conformities	Conformance Class B
Network load class	III
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).

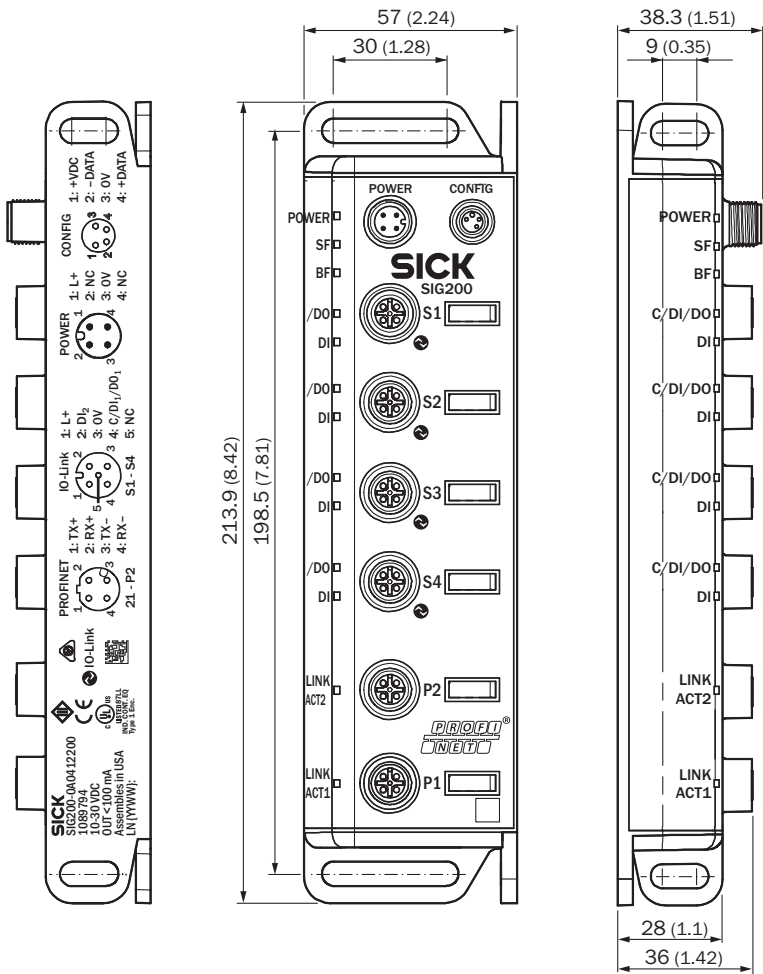
Certificates

EU declaration of conformity	✓
UK declaration of conformity	✓
ACMA declaration of conformity	✓
Moroccan declaration of conformity	✓
China RoHS	✓
cULus certificate	✓
IO-Link certificate	✓
Profinet certificate	✓

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

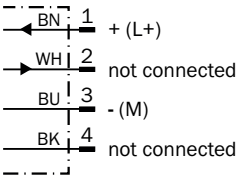
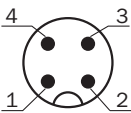
Dimensional drawing



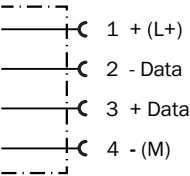
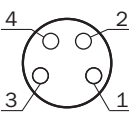
Dimensions in mm (inch)

Connection diagram Cd-430

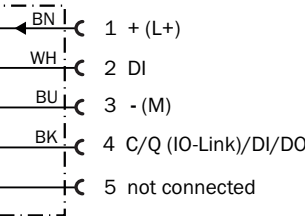
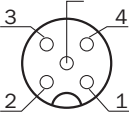
POWER/C



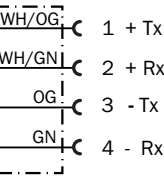
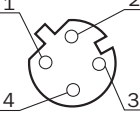
CONFIG



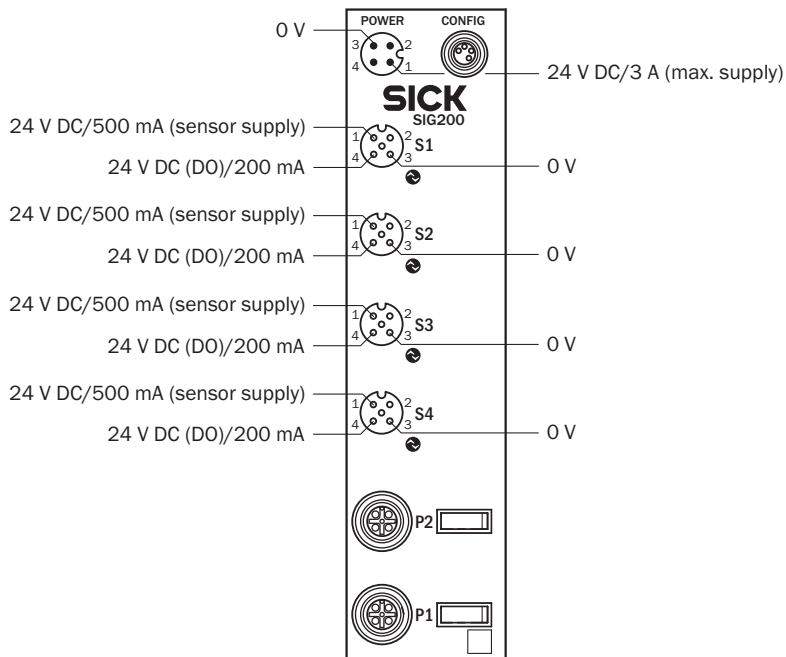
S1-S4



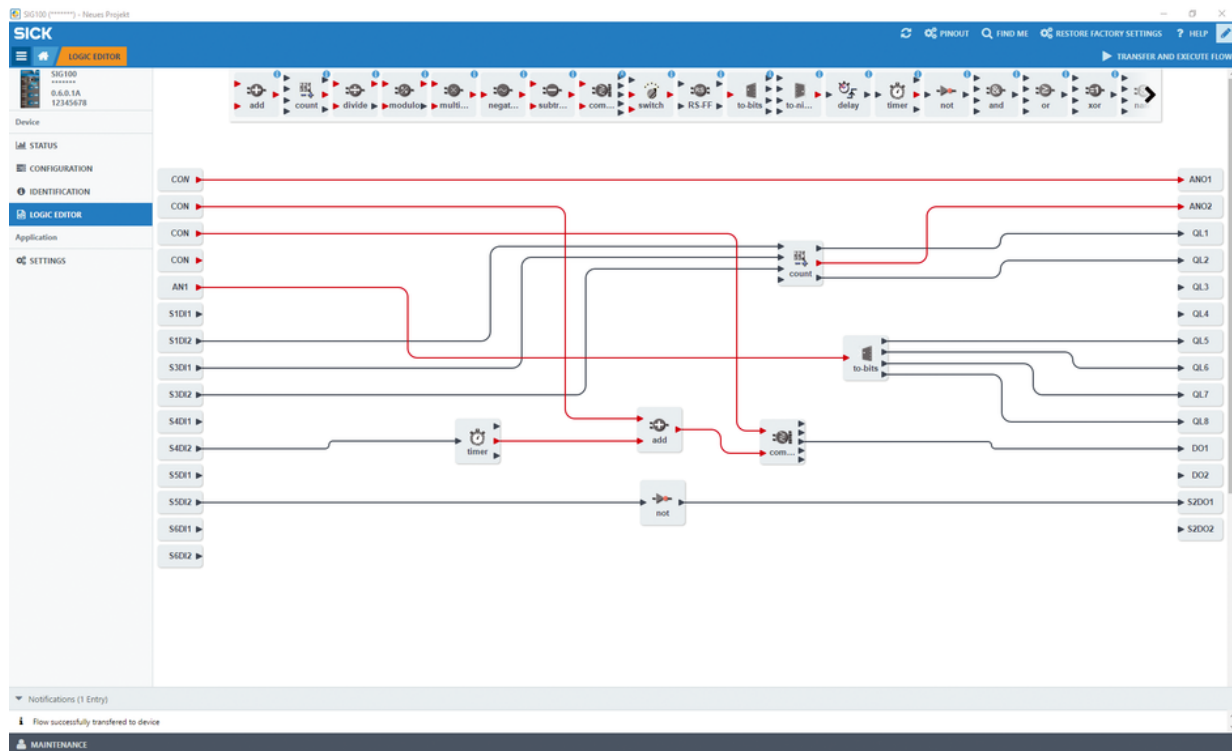
LINK ACT/1 +
LINK ACT/2



PIN assignment







Adjustment possible Logic editor



Recommended accessories

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

	Brief description	Type	part no.
connectors and cables			
	<ul style="list-style-type: none"> 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
	<ul style="list-style-type: none"> 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
	<ul style="list-style-type: none"> 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, shielded, PROFINET Application: Drag chain operation, Zones with oils and lubricants 	YM2D24-020P-N1MRJA4	2106182
network devices			
		SIG100-0A0111100	1089792

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:

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